

2019 ANNUAL REPORT































BUILT TO SUCCEED

Now more than ever, we believe businesses and individuals need Pinnacle's unique model, our relentless focus on people and the service and advice that can help them thrive.

OUR COMMITMENT^{TO} **CORPORATE RESPONSIBILITY**

In 2000, we saw the impact a local bank could make on its community. We recognized and took seriously the responsibility that comes with leading a financial institution.

Today, the same is still true.

We built Pinnacle to be a good neighbor and good citizen. We wanted to help guide and grow our city by supporting the economy, investing in its success and lifting up those in need so we could all share its prosperity. We wanted to create a great place to work because associates deserve a place to learn, grow and prosper.

Today, the same is still true.

The word "responsibility" hardly does justice to the feeling we had when we founded Pinnacle. That implies that it's an obligation, a series of items you tick off of a list so you clear the bar of being a "good corporate citizen."

The items people often look for in good corporate citizens are mostly based on how you treat people and how you support your community. As we've made very clear, those are a fundamental part of who we are and why we exist. They are the reasons we started this bank.

Pinnacle was built to fill the hole that's left behind when banks become disconnected from the people and places they serve. We're built to help lift up communities, to remove barriers and to level the playing field so we all have the opportunity to be successful.

As we've grown and moved into other markets, we've taken that spirit with us. In 2019, we helped people realize the dream of home ownership across our footprint. We supported hundreds of causes that work toward improving economic development, education, health and human services and the arts. We continued to invest in programs important to our associates, like Rick Callicutt's passion for building affordable new homes to turn around blighted neighborhoods in his hometown of High Point, NC.

Now we are a top 50 bank in the country, and we recognize that our passion for service and leading by example doesn't stop at the borders of our markets. We can make a positive impact on an entire region or industry.

We were built with a commitment to service and to making a difference for people and whole communities.



This just skims the surface of the full impact we made on our stakeholders in 2019. To view our complete Corporate Social Responsibility Report, visit **PNFP.COM/CSR**.

INVESTOR RELATIONS

Shareholders and others seeking a copy of the Firm's public filings should visit the Investor Relations section of our website at www.pnfp.com or contact:

Chief Financial Officer Pinnacle Financial Partners, Inc. 150 Third Ave. South, Suite 900 Nashville, TN 37201 (615) 744-3742

GENERAL COUNSEL

Bass, Berry & Sims PLC Nashville, Tennessee

STOCK LISTING

The common stock of Pinnacle Financial Partners, Inc. is traded on the Nasdaq Global Select market under the trading symbol "PNFP."

SHAREHOLDER SERVICES

Shareholders desiring to change address or ownership of stock, report lost certificates or to consolidate accounts should contact:

Computershare Shareholder Services P.O. Box 30170 College Station, TX 77842-3170

ANNUAL MEETING OF SHAREHOLDERS

The Annual Meeting of Shareholders will convene at 11 a.m. CT on Tuesday, April 21, 2020. The meeting will be held at Pinnacle Financial Partners, Pinnacle at Symphony Place, 150 Third Ave. South, Nashville, TN. Further information regarding this meeting can be found in the firm's proxy statement for the 2020 Annual Meeting.

100%

OF NON-COMMISSIONED ASSOCIATES Participate in our annual cash incentive Program, aligning their goals with Long-term shareholder returns 21,435 ASSOCIATE VOLUNTEER HOURS TO 2,538 ORGANIZATIONS





PRIOR TO 2019, FEWER THAN 1% OF Associates Earned Less than this amount

3.84 MIL.

6,801 **AFFORDABLE** HOUSING UNITS

FINANCED THROUGH FREDDIE MAC SMALL BALANCE LOANS AND LIHTC LENDING AND INVESTMENTS





Learn more about our 2019 highlights and our commitment to associates, communities, clients and shareholders at **PNFP.COM/ANNUALREPORT**.



Part of our commitment to people is a belief that everyone deserves a great place to work. There's no disputing that we're a national leader in this area. With a positive and collaborative workplace, shared goals and incentives and a culture of fairness and transparency, we seek to make a difference with our associates.

empowered communities

Investing in people and communities is part of our DNA. We feel a sense of duty to remove barriers and level the playing field so we all have the opportunity to be successful. With our support for affordable housing, generous community investments and more than 21,000 volunteer hours, we seek to make a difference in our communities.

ENGAGED CLIENTS

Pinnacle was built with a commitment to service and to improving the quality of life for individuals and businesses in our markets. By delivering unmatched service, being responsive to their needs and providing opportunities for them to develop as leaders, we seek to make a difference for our clients.

AD ENRICHED SHAREHOLDERS

Pinnacle's commitment to doing the right thing and focus on people extends to our shareholders. We take seriously our responsibility to regularly communicate, engage and respond to shareholder needs. By engaging in two-way communication, governing responsibly and operating sustainably, we seek to make a difference for our shareholders.

DEAR FELLOW Shareholders,

As we reflect on our successes in 2019, we also look back to early 2000. Today's environment reminds us of Pinnacle's founding and how our model has endured.

TWENTY YEARS AGO WE AND MANY OF OUR COLLEAGUES FACED A GREAT DEAL

of uncertainty. First American National Bank, Nashville's largest locally headquartered bank and the one we had spent our careers helping to build, had just been bought. The city we called home was going to be dominated by out-of-state banks with operating models that required the most important banking decisions be made in Birmingham, Atlanta or Manhattan.

AmSouth's acquisition of Nashville's last large, locally headquartered bank provided the perfect recipe for a serious degradation in overall quality: bigger banks with weaker connections to the market and a motivation to cut costs in order to elevate earnings. Employees would suffer, client service would deteriorate and markets as a whole would be underserved.

As sophisticated as they had become, the megabanks and super regionals that had responsibility for more than half of the deposits in Nashville just couldn't deliver what we knew the business community really wanted. We knew we could do better. So together with our founding partner Hugh Queener, we sat down and drew a sketch on a blank sheet of paper of what would eventually become Pinnacle Financial Partners. We built a bank in direct response to the disruption and turmoil happening all around us. Pinnacle was founded to do the exact opposite of what the big banks were doing so we could attract their best people and clients. Every system and process was built to create a better experience for everyone.

Pinnacle was built for the business community we knew so well. People like Don Kennedy. Don was our very first client on October 27, 2000, and he felt the same way as the many others who followed. Take a look at what they say they want from a bank:



See what Don Kennedy and the clients who followed him say they want from their bank at PNFP.COM/EASY. We built the Pinnacle model with the intention of delivering on these requests. Our goal was—and still is—to meet all of a client's needs with a full suite of financial products and a focus on advice, not a sales culture. Hire the right people. Inspire them to love their work. Allow them to wow their clients with great service. Create outstanding shareholder returns. That was the model.



This is how we win. It's what we were built for.

Twenty years later, we believe Nashville is in much more stable hands. Its No. 1 bank by deposits is Pinnacle, which is locally headquartered and a key driver of the local economy. Our firm has expanded, first into every major urban market in Tennessee and then into six more of the highest growth communities in the Southeast.

However, the instability of the banking landscape in our region reminds us of 2000. Two of the biggest super regional banks have merged and left their hometowns. Tennessee's biggest homegrown bank just finished one major acquisition and moved straight into another, likely diluting its focus and damaging its local brand. Many of the megabanks face regulatory troubles, and all of them face increased competition from even *bigger* megabanks making an aggressive push into the Southeast. Add to all this the rise in impersonal technology that's replacing people instead of making things easier, and some might wonder where their favorite bank *and* their favorite banker have gone.

Thankfully, Pinnacle is still built for this – because our model has remained unchanged. We still hire the best. We still create the best place to work. Our associates still have the room and resources to wow their clients.

The latest research shows exactly what we knew 20 years ago when we created the model.

Greenwich Associates asked business leaders about the characteristics that are most important to their overall banking relationship.

- 87% Follow up promptly to requests I make
- **62%** Be an expert in the bank's processes and its products
- **47%** Have a solid understanding of/experience in the industry in which my company operates
- **40%** Come to me proactively with ideas on how to improve my business' financial dealings

They asked the same group what makes a positive impact on their perception of a banker who wants their business.

- **55%** Developed an understanding of my business
- **41%** Informed me about ways his/her bank could help me grow my business
- **25%** Brought industry information and perspectives
- 20% Brought me a new business idea

Tremendous service. Understanding their business. Listening to their needs. Fast turnaround. Experienced associates. Dependability.

Pinnacle was built to deliver on these needs. We were built to thrive when disruption rules the landscape and to give associates and clients what many of our peers cannot.

It's worked. The successes afforded by our model in 2019 are many.

ORGANIC GROWTH BY HIRING

We attracted 85 new revenue producers across the footprint, representing a broad cross section of the full-service capabilities we promise clients. We're still recruiting the best bankers, but we're also recruiting the best *leaders* of the best bankers. Put another way, we're recruiting great recruiters. Sam Belk, Joe Dillingham, Phillip May, Greg Winkler, Rob Garcia – these are market and regional bank leaders with vast networks of financial professionals who have worked for them previously.



We have grown to the point that we have the scale, name recognition and reputation to attract marquee bank leaders like these across the Southeast. That's a continuation of the same model that's always worked so well, but now it's ratcheted up to draw in whole teams of people.

RISING FINANCIALS ACROSS METRICS

As always, that hiring fueled the organic growth we saw in 2019. Loans, deposits and revenue all hit new record amounts:

- Loans grew to \$19.8 billion, up 11.7 percent
- Deposits hit \$20.2 billion, up 7.1 percent
- Revenue topped \$1 billion, with fee income as a whole growing by 33 percent and mortgage income alone growing by 67 percent

FORTRESS BALANCE SHEET

Credit remains at the forefront of our minds, and many of our already strong credit metrics got even better in 2019. Nonperforming assets as a percentage of total assets dropped by 18 basis points to 0.32 percent thanks to vigilance and strong teamwork from our lending and credit associates. Our hiring philosophy plays a key role in keeping our balance sheet strong, as new associates bring over their best clients and leave known troubled credits behind.

SUCCESS WITH ASSOCIATES

Our success depends on associates loving their work, and we posted fantastic results for our culture in 2019. Our internal annual work environment survey shows more than 93 percent of associates agree or strongly agree with 25 positive statements about their experience here. Those sentiments contributed to our 93 percent retention rate and multiple local and national workplace awards, like:

- No. 27 on 100 Best Companies to Work For, FORTUNE magazine
- No. 2 on Best Companies to Work For in Financial Services and Insurance, FORTUNE magazine

- No. 12 on Best Workplaces for Millennials, FORTUNE magazine
- No. 13 Best Banks to Work For, American Banker
- No. 1 Workplace in the Triad region of North Carolina
- No. 1 Workplace in Memphis, TN
- No. 2 Top Workplace in Knoxville, TN
- No. 5 Top Workplace in all of South Carolina
- No. 7 Top Workplace in Charlotte, NC

SUCCESS WITH CLIENTS

Associate satisfaction leads directly to client satisfaction, as our 20-year history has shown. Just a sampling of our annual client survey shows what clients think of their Pinnacle financial advisor:

- 93.6% Listens and understands their needs
- **93.9%** Demonstrates knowledge and experience necessary to meet my needs
- 91.5% Provides me with knowledge and creative insights that I would not have had otherwise
- 93.2% Provides timely responses to my requests

Those results are closely aligned with the Greenwich Associates research we cited - so much so that Greenwich Associates once again named Pinnacle a Best Brand for Ease of Doing Business and Trust. Ours is one of just 16 banks nationwide found to have a truly distinctive brand.

Pinnacle was built from the beginning to deliver results in

this environment. That was true yesterday, it's true today, and we believe it will be true tomorrow. We're built for what's to come.

We're poised to take the best advantage of what happens going forward. As Truist continues its transition into the nation's newest megabank, we are well positioned to take market share just as we did from SunTrust and BB&T individually. Our footprint overlaps with Truist's so closely that 91.5 percent of Pinnacle offices are located within two miles of one of theirs.

Hiring pipelines across our markets show strength and breadth, and the opportunities to recruit from our major competitors continue unabated. Our lauded common incentive plan, which



- NO. 27 ON 100 BEST **COMPANIES TO WORK FOR**
- NO. 2 ON BEST COMPANIES TO WORK FOR IN FINANCIAL SERVICES AND INSURANCE
- **NO. 12 ON BEST WORKPLACES** FOR MILLENNIALS

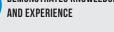


WHAT OUR CLIENTS THINK OF THEIR **PINNACLE FINANCIAL ADVISOR:**

93.2%

LISTENS AND **UNDERSTANDS NEEDS**







PROVIDES TIMELY RESPONSES TO REQUESTS



PINNACLE IN ATLANTA

We were built to serve cities like Atlanta in times like these. Take a look at what Rob Garcia, our Atlanta president, has to say about how well the Pinnacle model fits into his market at **PNFP.COM/GARCIA**

Then read more of Rob's thoughts on Atlanta and our potential there at **PNFP.COM/ATLANTA**

ATLANTA SNAPSHOT

9TH LARGEST POPULATION

10TH LARGEST ECONOMY

NO. 1 METRO AREA FOR Economic growth potential



for 20 years has motivated our associates to reach companywide goals in support of long-term results, will now include an element aimed at our efforts to shore up a strong foundation of low-cost core deposits. Our prospects in legacy and expansion markets are bright, including our newest opportunity in Atlanta.

That's where we find some of the most exciting potential in our future story. Simply put, **Atlanta is one of the most attractive markets in the nation for business.** It has the ninth largest population, 10th largest economy, has been the No. 1 moving destination in the country for nine straight years and is the No. 1 metro area for economic growth potential. Atlanta is home to 26 *FORTUNE* 1000 companies, 16 *FORTUNE* 500 companies and 200 of the country's fastest growing private companies.

At the same time, Atlanta is in essentially the same position Nashville was when we founded Pinnacle. It has lost its largest homegrown bank. It is in a dramatic state of turmoil and diminished brand loyalty. Even before Truist took SunTrust to Charlotte, Greenwich research suggested that client satisfaction for the big banks we compete against was even lower in Atlanta than it was in Nashville.

The potential for market share takeaway is nearly unprecedented. And Pinnacle was built to seize on it.

Atlanta presents us a once-in-a-generation opportunity to grow a significant bank in a major American city. Over the next five years, you will see our model hard at work in Atlanta. We expect to hire 50 relationship managers, open five offices and build \$3 billion in local assets by bringing something new to the table that is missing in the market right now.

We intend to build a locally focused team of experienced financial professionals. We will arm them with a full suite of financial products to meet any client's needs backed by the full resources of a multi-billion dollar firm. We will pursue the same strategy of offering unmatched service and proactive advice that has bred client loyalty in every market we serve.

There's nothing different about what we'll do tomorrow in Atlanta, Charlotte, Winston-Salem, Charleston, Memphis or Nashville. Our model and our strategy remain unchanged because they work. They worked in Nashville in 2000, in Knoxville in 2007, Memphis and Chattanooga in 2015 and in the Carolinas and Virginia in 2017.

Twenty years ago, we built Pinnacle as a cure to the ills of big banking. Those ills never went away – in fact, they've only grown. By offering an alternative, our growth and performance have been impressive.

As long as other banks continue to pursue scale over local connections, sales over personalized advice and cost savings over service, we believe Pinnacle will continue to thrive.

It's what we were built for.

M. Terry Turner President and Chief Executive Officer

E A Malake J-

Robert A. McCabe, Jr. Chairman

ANCIAL FIN REVIEW

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, 2019

OR

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

For the transition period from ______ to _____

Commission File Number: 000-31225



| Tennessee | | | 62-1812853 | | |
|--|---------------|--------------------------------------|----------------------------|--|--|
| (State or other jurisdiction of incorporation) | | (I.R.S. Employer Identification No.) | | | |
| 150 Third Avenue South, Suite 900, | Nashville, | TN | 37201 | | |
| (Address of principal executive offices) | | (Zip Code) | | | |
| Registrant's | telephone num | ber, including | garea code: (615) 744-3700 | | |

| Title of Each Class | Trading Symbol | Name of Exchange on which Registered | |
|--------------------------------|----------------|--------------------------------------|--|
| Common Stock, par value \$1.00 | PNFP | Nasdaq Global Select Market | |

Securities registered 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 \boxtimes No \square

Indicate by check mark whether the registrant has submitted electronically, if any, 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 \boxtimes No \square

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

 Accelerated Filer \Box Smaller reporting company \Box Emerging growth company \Box

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. \Box

Indicate by check mark if the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes 🗖 No 🗵

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity as of the last business day of the registrant's most recently completed second fiscal quarter: \$4,632,460,322 as of June 30, 2019.

APPLICABLE ONLY TO CORPORATE REGISTRANTS

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 77,531,750 shares of common stock as of February 18, 2020.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Definitive Proxy Statement for the Annual Meeting of Shareholders, scheduled to be held April 21, 2020 are incorporated by reference into Part III of this Form 10-K.

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FORWARD-LOOKING STATEMENTS

All statements, other than statements of historical fact, included in this Annual Report on Form 10-K, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words "expect," "anticipate," "intend," "may," "should," "plan," "believe," "seek," "estimate" and similar expressions are intended to identify such forward-looking statements, but other statements not based on historical information may also be considered forward-looking statements. These forward-looking statements are subject to known and unknown risks, uncertainties and other factors that could cause the actual results to differ materially from the statements, including, but not limited to: (i) deterioration in the financial condition of borrowers of Pinnacle Bank and its subsidiaries or BHG resulting in significant increases in loan losses and provisions for those losses or, in the case of BHG, substitutions; (ii) the ability to grow and retain low-cost core deposits and retain large, uninsured deposits, including during times when Pinnacle Bank is seeking to lower rates it pays on deposits; (iii) the inability of Pinnacle Financial, or entities in which it has significant investments, like BHG, to maintain the historical growth rate of its, or such entities', loan portfolio; (iv) changes in loan underwriting, credit review or loss reserve policies associated with economic conditions, examination conclusions, or regulatory developments; (v) effectiveness of Pinnacle Financial's asset management activities in improving, resolving or liquidating lower-guality assets; (vi) the impact of competition with other financial institutions, including pricing pressures and the resulting impact on Pinnacle Financial's results, including as a result of compression to net interest margin; (vii) adverse conditions in the national or local economies including in Pinnacle Financial's markets throughout Tennessee, North Carolina, South Carolina and Virginia, particularly in commercial and residential real estate markets; (viii) fluctuations or differences in interest rates on loans or deposits from those that Pinnacle Financial is modeling or anticipating, including as a result of Pinnacle Bank's inability to better match deposit rates with the changes in the short-term rate environment, or that affect the yield curve; (ix) the results of regulatory examinations; (x) Pinnacle Financial's ability to identify potential candidates for, consummate, and achieve synergies from, potential future acquisitions; (xi) difficulties and delays in integrating acquired businesses or fully realizing costs savings and other benefits from acquisitions; (xii) BHG's ability to profitably grow its business and successfully execute on its business plans; (xiii) risks of expansion into new geographic or product markets including the recent expansion into the Atlanta, Georgia metro market; (xiv) any matter that would cause Pinnacle Financial to conclude that there was impairment of any asset, including goodwill or the intangible assets; (xy) reduced ability to attract additional financial advisors (or failure of such advisors to cause their clients to switch to Pinnacle Bank), to retain financial advisors (including as a result of the competitive environment for associates) or otherwise to attract customers from other financial institutions; (xvi) deterioration in the valuation of other real estate owned and increased expenses associated therewith; (xvii) inability to comply with regulatory capital requirements, including those resulting from changes to capital calculation methodologies, required capital maintenance levels or regulatory requests or directives, particularly if Pinnacle Financial's level of applicable commercial real estate loans were to exceed percentage levels of total capital in guidelines recommended by its regulators; (xviii) approval of the declaration of any dividend by Pinnacle Financial's board of directors; (xix) the vulnerability of Pinnacle Bank's network and online banking portals, and the systems of parties with whom Pinnacle Financial contracts, to unauthorized access, computer viruses, phishing schemes, spam attacks, human error, natural disasters, power loss and other security breaches; (xx) the possibility of increased compliance and operational costs as a result of increased regulatory oversight (including by the Consumer Financial Protection Bureau), including oversight of companies in which Pinnacle Financial or Pinnacle Bank have significant investments, like BHG, and the development of additional banking products for Pinnacle Bank's corporate and consumer clients; (xxi) the risks associated with Pinnacle Financial and Pinnacle Bank being a minority investor in BHG, including the risk that the owners of a majority of the equity interests in BHG decide to sell the company if not prohibited from doing so by Pinnacle Financial or Pinnacle Bank; (xxii) changes in state and federal legislation, regulations or policies applicable to banks and other financial service providers, like BHG, including regulatory or legislative developments; (xxiii) the availability of and access to capital; (xxiv) adverse results (including costs, fines, reputational harm, inability to obtain necessary approvals and/or other negative effects) from current or future litigation, regulatory examinations or other legal and/or regulatory actions; and (xxv) general competitive, economic, political and market conditions. A more detailed description of these and other risks is contained in "Item 1A. Risk Factors" below. Many of such factors are beyond Pinnacle Financial's ability to control or predict, and readers are cautioned not to put undue reliance on such forward-looking statements. Pinnacle Financial disclaims any obligation to update or revise any forward-looking statements contained in this Annual Report on Form 10-K, whether as a result of new information, future events or otherwise.

PART I

Unless this Form 10-K indicates otherwise or the context otherwise requires, the terms "we," "our," "us," "the firm," "Pinnacle Financial Partners," "Pinnacle" or "Pinnacle Financial" as used herein refer to Pinnacle Financial Partners, Inc., and its subsidiaries, including Pinnacle Bank, which we sometimes refer to as "our bank subsidiary" or "our bank" and its other subsidiaries. References herein to the fiscal years 2015, 2016, 2017, 2018 and 2019 mean our fiscal years ended December 31, 2015, 2016, 2017, 2018 and 2019 mean our fiscal years ended December 31, 2015, 2016, 2017, 2018 and 2019.

ITEM 1. BUSINESS

OVERVIEW

Pinnacle Financial Partners is a bank holding company headquartered in Tennessee, with approximately \$27.8 billion in total assets as of December 31, 2019. The holding company is the parent company of Pinnacle Bank, a Tennessee state-chartered bank, and owns 100% of the capital stock of Pinnacle Bank. The firm started operations on October 27, 2000, in Nashville, Tennessee, and has since grown through a combination of acquisitions and organic growth to 111 offices, including 47 in Tennessee, 36 in North Carolina, 20 in South Carolina and eight in Virginia.

The firm operates as a community bank in 12 primarily urban markets and their surrounding communities. As an urban community bank, Pinnacle provides the personalized service most often associated with smaller banks while offering many of the sophisticated products and services, such as investments and treasury management, more typically found at much larger banks. This approach has enabled Pinnacle Bank to attract clients from the regional and national banks in all its markets. As a result, Pinnacle Bank has grown steadily in market share rankings in many of its markets, according to the 2019 FDIC Summary of Deposits data.

DNED Damasit

| Metropolitan Statistical Area (MSA) | Deposit Rank | PNFP Deposit Market Share |
|--|--------------|------------------------------|
| Nashville-Davidson-Murfreesboro-Franklin, TN | 1 | 15.5% |
| Knoxville, TN | 4 | 9.4% |
| Chattanooga, TN-GA | 4 | 8.4% |
| Memphis, TN-MS-AR | 8 | 2.7% |
| Greensboro-High Point, NC | 4 | 11.2% |
| Charlotte-Concord-Gastonia, NC-SC | 8 | 0.4% |
| Raleigh, NC | 14 | 1.3% |
| Charleston-North Charleston, SC | 8 | 4.1% |
| Greenville-Anderson-Mauldin, SC | 13 | 1.5% |
| Roanoke, VA | 4 | 8.2% |
| Winston-Salem, NC | 3 | 2.8% |

The FDIC Summary of Deposits data as of June 30, 2019 is as follows:

ACQUISITIONS

In July 2015, Pinnacle Financial completed the acquisition of CapitalMark Bank & Trust ("CapitalMark") for approximately \$19.7 million in cash (including payments related to fractional shares) and 3,306,184 shares of Pinnacle Financial's common stock valued at approximately \$175.5 million. All of CapitalMark's outstanding stock options vested upon consummation of the CapitalMark acquisition and were converted into options to purchase shares of Pinnacle Financial's common stock at the common stock exchange rate for the merger. The fair market value of stock options assumed was approximately \$30.4 million. The CapitalMark merger increased our presence in the Knoxville MSA and expanded our operations into the Chattanooga MSA and surrounding counties.

In September 2015, Pinnacle Financial completed the acquisition of Magna Bank ("Magna Bank") for an aggregate of \$19.5 million in cash (including payments related to fractional shares) and 1,371,717 shares of Pinnacle Financial's common stock valued at approximately \$63.5 million. Additionally, at the time of the merger there were 139,417 unexercised stock options that were exchanged for cash equal to \$14.32 less the option's exercise price. This consideration totaled approximately \$847,000, including all applicable payroll taxes. The Magna merger expanded our operations into the Memphis MSA.

In July 2016, Pinnacle Financial completed the acquisition of Avenue Financial Holdings, Inc. ("Avenue") for an aggregate of \$20.9 million in cash (including payments related to fractional shares) and 3,760,326 shares of Pinnacle Financial's common stock valued at approximately \$182.5 million. Additionally, at the time of merger there were 257,639 unexercised stock options that were exchanged

for cash equal to \$20.00 per share less the option's exercise price. This consideration totaled approximately \$987,000, including all applicable payroll taxes. The Avenue merger increased our presence in the Nashville MSA.

In June 2017, Pinnacle Financial completed the acquisition of BNC Bancorp ("BNC") for an aggregate of 27,687,100 shares of Pinnacle Financial's common stock valued at \$1.9 billion and approximately \$129,000 in cash (related to fractional shares). Included in the shares of common stock issued were 136,890 shares of unvested restricted stock that Pinnacle Financial assumed and which continued to vest over their original contractual terms. The fair value of these awards was \$9.2 million, with \$5.4 million attributable to services provided by the recipients prior to the merger, that accordingly was included as merger consideration. This acquisition expanded our operations into the Carolinas and Virginia.

On July 2, 2019, Pinnacle Bank acquired all of the outstanding stock of Advocate Capital, Inc. (Advocate Capital) for a cash price of \$59 million. Advocate Capital is a finance firm headquartered in Nashville, TN which supports the financial needs of legal firms through both case expense financing and working capital lines of credit. Pinnacle Financial accounted for the acquisition of Advocate Capital under the acquisition method in accordance with ASC Topic 805. Accordingly, the purchase price is allocated to the fair value of the assets acquired and liabilities acquired as of the date of acquisition. Determining the fair value of assets and liabilities, particularly illiquid assets and liabilities, is a complicated process involving significant judgment regarding estimates and assumptions used to calculate estimated fair value. Fair value adjustments based on updated estimates could materially affect the goodwill recorded on the Advocate Capital acquisition. At the acquisition date, Advocate Capital's net assets were initially recorded at a fair value of approximately \$45.6 million, consisting mainly of loans receivable. Advocate Capital's \$134.3 million of indebtedness was also paid off in connection with consummation of the acquisition. The purchase price allocations for the acquisition of Advocate Capital are preliminary and will be finalized upon the receipt of final valuations on certain assets and liabilities.

In February 2015, Pinnacle Bank acquired a 30% membership interest in Bankers Healthcare Group, LLC ("BHG"), a company which primarily is engaged in the business of making term loans to healthcare practices, for \$75 million in cash. On March 1, 2016, Pinnacle Financial and Pinnacle Bank entered into an agreement to acquire 8.55% and 10.45%, respectively, of the outstanding membership interests in BHG for \$114.0 million, payable in a mix of cash and stock consideration. The cash consideration was \$74.1 million and the stock consideration was 860,470 shares of Pinnacle Financial's common stock, with a fair value of \$39.9 million on the date of acquisition.

On March 1, 2016, Pinnacle Financial, Pinnacle Bank and the other members of BHG entered into an Amended and Restated Limited Liability Company Agreement of BHG that provides for, among other things, the following terms: (i) the inability of any member of BHG to transfer its ownership interest in BHG without the consent of the other members of BHG until March 1, 2021, other than transfers to family members, trusts or affiliates of the transferring member, in connection with the acquisition of Pinnacle Financial or Pinnacle Bank or as a result of a change in applicable law that forces Pinnacle Financial and/or Pinnacle Bank to divest their ownership interests in BHG; (ii) the inability of the board of managers of BHG (of which Pinnacle Financial and Pinnacle Bank have two of the five members (the "Pinnacle Managers")) to approve a sale of BHG until March 1, 2020 without the consent of one of the Pinnacle Managers; (iii) co-sale rights for Pinnacle Financial and Pinnacle Bank in the event the other members of BHG decide to sell all or a portion of their ownership interests after March 1, 2021; and (iv) a right of first refusal for BHG and the other members of BHG in the event that Pinnacle Financial and/or Pinnacle Bank were to sell all or a portion of their ownership interests after March 1, 2021; and (iv) a right of first refusal for BHG and the other members of BHG in the event that Pinnacle Financial and/or Pinnacle Bank were to sell all or a portion of their ownership interests after March 1, 2021; and (iv) a right of first refusal for BHG and the other members of BHG in the event that Pinnacle Financial and/or Pinnacle Bank were to sell all or a portion of their ownership interests after March 1, 2021, except in connection with a transfer of their ownership interests to an affiliate or in connection with the acquisition of Pinnacle Financial or Pinnacle Bank.

PRODUCTS AND SERVICES

Lending Services

We offer a full range of lending products, including commercial, real estate and consumer loans to individuals and small-to mediumsized businesses and professional entities. We compete for these loans with competitors who are also well established in our geographic markets as well as other non-depository institution lenders that are subject to less regulation than we are.

Pinnacle Bank's loan approval policies provide for various levels of officer lending authority. When the total amount of loans to a single borrower exceeds an individual officer's lending authority, officers with higher lending authority determine whether to approve any new loan requests or renewals of existing loans. Loans to directors and executive officers subject to Regulation O of the FDIC's rules and regulations require approval of the board, and, certain extensions of credit, including loans above certain amounts require approval of a committee of the board.

Pinnacle Bank's lending activities are subject to a variety of lending limits imposed by federal and state law. Differing limits apply based on the type of loan or the nature of the borrower, including the borrower's relationship to Pinnacle Bank. In general, however, at December 31, 2019, we were able to loan any one borrower a maximum amount equal to approximately \$436.0 million, for loans that meet certain additional collateral guidelines. These legal limits will increase or decrease as Pinnacle Bank's capital increases or

decreases as a result of its earnings or losses, the injection of additional capital, payments of dividends, acquisitions, or for other reasons. Pinnacle Bank has internal loan limits ranging from \$15 million to \$60 million, dependent upon the internal risk rating of a loan, all of which limits are well below the legal lending limit of the bank. All relationships in excess of their limit were each approved by the executive committee of the board of directors or the full board of directors. Pinnacle Bank currently has 46 relationships in excess of the \$60 million internal loan limit.

The principal economic risk associated with each category of loans that Pinnacle Bank has made or may in the future make is the creditworthiness of the borrower. General economic factors affecting a commercial or consumer borrower's ability to repay include interest, inflation and unemployment rates, as well as other factors affecting a borrower's assets, clients, suppliers and employees. Many of Pinnacle Bank's commercial loans are made to small- to medium-sized businesses that are sometimes less able to withstand competitive, economic and financial pressures than larger borrowers. During periods of economic weakness these businesses may be more adversely affected than other enterprises and may cause increased levels of nonaccrual or other problem loans, loan charge-offs and higher provision for loan losses.

Pinnacle Bank's commercial clients borrow for a variety of purposes. The terms of these loans (which include equipment loans and working capital loans) will vary by purpose and by type of any underlying collateral. Commercial loans may be unsecured or secured by accounts receivable or by other business assets. Pinnacle Bank also makes a variety of commercial real estate loans, including both loans secured by investment properties and business loans secured by real estate.

Pinnacle Bank also makes a variety of loans to individuals for personal, family, investment and household purposes, including secured and unsecured installment and term loans and lines of credit, residential first mortgage loans, home equity loans and home equity lines of credit. We also offer credit cards for consumers and businesses directly as well as through the marketing efforts of BHG.

Through Advocate Capital we make loans to law firms to finance case expenses and the firms working capital needs. These loans are typically secured by the borrower's receivables and include guarantees by certain individual partners of the firm.

Deposit Services

Pinnacle Bank seeks to establish a broad base of core deposits, including savings, checking, noninterest-bearing checking, interestbearing checking, money market and certificate of deposit accounts, including access to products offered through various CDARS programs. While Pinnacle is focused on attracting operating accounts and other core deposits and lowering our cost of funds, rates paid on such deposits vary among banking markets and deposit categories due to different terms and conditions, individual deposit size, services rendered and rates paid by competitors on similar deposit products. We act as a depository for a number of state and local governments and government agencies or instrumentalities. Such public fund deposits are often subject to competitive bid and in many cases must be secured by pledging a portion of our investment securities or a letter of credit.

To attract deposits, Pinnacle Bank has typically employed a reputation management plan in its current geographic markets primarily based on relationship banking and features a broad product line and competitive rates and services. The primary sources of deposits are businesses, their owners and individuals interested in a comprehensive relationship with their financial institution located in those geographic markets. Pinnacle Bank traditionally has obtained these deposits primarily through personal solicitation by its financial advisors and leadership team, although its use of advertising has increased in recent years, primarily due to its partnerships with the Tennessee Titans NFL football team and the Memphis Grizzlies NBA basketball team.

Pinnacle Bank also offers its targeted commercial clients a comprehensive array of treasury management and remote deposit services, which allow electronic deposits to be made from the client's place of business. Our treasury management services include, among other products, online wire origination, enhanced ACH origination services, positive pay, zero balance and sweep accounts, automated bill pay services, electronic receivables processing, lockbox processing, merchant card acceptance services, small business and commercial credit cards and corporate purchasing cards.

Investment, Trust and Insurance Services

Pinnacle Bank contracts with Raymond James Financial Services, Inc. ("RJFS"), a registered broker-dealer and investment adviser, to offer and sell various securities and other financial products to the public through associates who are employed by both Pinnacle Bank and RJFS. RJFS is a subsidiary of Raymond James Financial, Inc.

Pinnacle Bank offers, through RJFS, non-FDIC insured investment products to help clients achieve their financial objectives within their risk tolerances. The brokerage and investment advisory program offered by RJFS complements Pinnacle Bank's general banking business and further supports its business philosophy and strategy of delivering to our clients a comprehensive array of products and services that meet their financial needs. Pursuant to its contract, RJFS is primarily responsible for the compliance monitoring of dual employees of RJFS and Pinnacle Bank. Additionally, Pinnacle Bank has developed its own compliance-monitoring program in an

effort to further ensure that associates deliver these products in a manner consistent with the various regulations governing such activities. Pinnacle Bank receives a percentage of commission credits and fees generated by the program. Pinnacle Bank remains responsible for various expenses associated with the program, including furnishings, equipment and promotional expenses and general personnel costs, including commissions paid to licensed brokers.

Pinnacle Bank also maintains a trust team that provides fiduciary and investment management services for individual and commercial clients. Account types include personal trust, endowments, foundations, individual retirement accounts, pensions and custody.

Additionally, Pinnacle Wealth Advisors, a registered investment advisor, provides investment advisory services to its clients. Miller Loughry Beach Insurance Services, Inc. and HPB Insurance Group, Inc., each insurance agency subsidiaries of Pinnacle Bank, provide insurance products, particularly in the property and casualty area, to their respective clients.

M&A Advisory and Securities Offering Services

PNFP Capital Markets, Inc. launched in 2015. As a registered broker-dealer, this team partners with Pinnacle Bank's financial advisors to offer corporate clients merger and acquisition advisory services, private debt, equity and mezzanine placement services, interest rate derivatives and other selected middle-market advisory services.

Other Banking Services

Given client demand to access banking and investment services easily, Pinnacle Bank also offers a broad array of conveniencecentered products and services, including 24-hour telephone and online banking, mobile banking, debit and credit cards, direct deposit, remote deposit capture and mobile deposit options. We also offer cash management services for small- to medium-sized businesses. Additionally, Pinnacle Bank is associated with a nationwide network of automated teller machines of other financial institutions that clients are able to use throughout our footprint. In many cases, Pinnacle Bank reimburses its clients for any fees that may be charged for using the nationwide ATM network, providing greater convenience as compared to regional competitors.

Competitive Conditions

We face substantial competition in all areas of our operations from a variety of different competitors, many of which are larger and have more financial resources than we do. Such competitors primarily include national, regional, and internet banks within the various markets in which we operate though we also compete with smaller community banks that seek to offer service levels similar to ours. We also face competition from many others types of institutions, including, without limitation, savings and loans associations, credit unions, finance companies, brokerage firms, insurance companies, and other financial intermediaries.

The financial services industry is becoming even more competitive as a result of legislative, regulatory and technological changes and continued consolidation. Banks, securities firms, and insurance companies can operate as affiliates under the umbrella of a financial holding company, which can offer virtually any type of financial service, including banking, securities underwriting, insurance (both agency and underwriting), and merchant banking. Also, technology has lowered barriers to entry and made it possible for nonbanks to offer products and services traditionally provided by banks, such as automatic transfer and automatic payment systems. Many of our nonbank competitors have fewer regulatory constraints and may have lower cost structures. Additionally, due to their size, many competitors may be able to achieve economies of scale and, as a result, may offer a broader range of products and services as well as better pricing for those products and services than we can. Continued consolidation in the financial services industry, due in part to the regulatory changes made under the Economic Growth, Regulatory Relief and Consumer Protection Act, including the increased asset threshold for required stress testing, as discussed below under "Supervision and Regulation - The Dodd-Frank Act," has contributed to increases in the number of large competitors we face in our markets. Finally, our competitors may choose to offer lower interest rates and pay higher deposit rates than we do.

We believe that the most important criteria to our bank's targeted clients when selecting a bank is their desire to receive exceptional and personal customer service while being able to enjoy convenient access to a broad array of financial products. Additionally, when presented with a choice, we believe that many of our bank's targeted clients would prefer to deal with an institution that favors local decision making as opposed to where many important decisions regarding a client's financial affairs are made outside of the local community.

Employees

As of December 31, 2019, we employed 2,487.0 full-time equivalent associates. The firm focuses on associates first and strives to create a culture where they are engaged and excited to come to work. All associates joining Pinnacle, including those joining as a result of an acquisition, participate in a three-day orientation that focuses on culture. Consulting firm Great Place to Work and FORTUNE magazine recognized us as one of the 100 Best Companies to Work For in 2017, 2018 and 2019. Prior to this eligibility,

these organizations named us among best workplaces in the United States on their Best Small & Medium Workplaces list in 2012, 2013 and 2014. American Banker has also recognized Pinnacle Bank as one of the top 20 "Best Banks to Work For" in the country every year from 2013 to 2019. Additionally, we were inducted into the Nashville Business Journal's "Best Places to Work" Hall of Fame in 2013 after winning the award for 10 consecutive years. We were also awarded the "Best Place to Work" among mid-sized companies by the Memphis Business Journal in 2015, 2017, 2018 and 2019. And we were named a Top Workplace among mid-sized companies by the Knoxville News Sentinel in 2017, 2018 and 2019. Several of Pinnacle's newer markets in the Carolinas and Virginia began competing in (and winning) "best workplace" awards in 2019. All of these honors place heavy emphasis on anonymous surveys of associates in the judging criteria. These awards illustrate that our culture is strong, and our financial returns illustrate that the focus on culture is a winning business strategy.

None of our employees are represented by a union, collective bargaining agreement or similar arrangement, and we have not experienced any labor disputes or strikes arising from any organized labor groups. We believe our internal work environment surveys and other feedback mechanisms indicate that employee relations are strong.

OTHER INFORMATION

Investment Securities

In addition to loans, Pinnacle Bank has investments primarily in United States treasury and agency securities, agency sponsored mortgage-backed securities, and state and municipal securities. No investment in any of those instruments exceeds any applicable limitation imposed by law or regulation. The risk committee of the board of directors reviews the investment portfolio on an ongoing basis in order to ensure that the investments conform to Pinnacle Bank's asset liability management policy as set by the board of directors.

Asset and Liability Management

Our Asset Liability Management Committee ("ALCO"), composed of senior managers of Pinnacle Bank, manages Pinnacle Bank's assets and liabilities and strives to provide a stable, optimized net interest income and margin, adequate liquidity and ultimately a suitable after-tax return on assets and return on equity. ALCO conducts these management functions within the framework of written policies that Pinnacle Bank's board of directors has adopted. ALCO works to maintain an acceptable position between rate sensitive assets and rate sensitive liabilities. The Risk Committee of the board of directors oversees the ALCO function on an ongoing basis.

Available Information

We file reports with the Securities and Exchange Commission ("SEC"), including annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K. The SEC maintains an Internet site at www.sec.gov that contains the reports, proxy and information statements, and other information we have filed or furnished with the SEC.

Our website address is www.pnfp.com. Please note that our website address is provided as an inactive textual reference only. We make available free of charge through our website, the annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The information provided on our website is not part of this report, and is therefore not incorporated by reference unless such information is otherwise specifically referenced elsewhere in this report.

We have also posted our Corporate Governance Guidelines, Corporate Code of Conduct for directors, officers and employees, and the charters of our Audit Committee, Human Resources and Compensation Committee, Executive Committee, Risk Committee and Nominating and Corporate Governance Committee of our board of directors on the Corporate Governance section of our website at www.pnfp.com. We will make any legally required disclosures regarding amendments to, or waivers of, provisions of our Corporate Code of Conduct, Corporate Governance Guidelines or current committee charters on our website. Our corporate governance materials are available free of charge upon request to our Corporate Secretary, Pinnacle Financial Partners, Inc., 150 Third Avenue South, Suite 900, Nashville, Tennessee 37201.

SUPERVISION AND REGULATION

Both Pinnacle Financial and Pinnacle Bank are subject to extensive state and federal banking laws and regulations that impose restrictions on and provide for general regulatory oversight of Pinnacle Financial's and Pinnacle Bank's operations. These laws and regulations are generally intended to protect depositors and borrowers, not shareholders.

Pinnacle Financial

Pinnacle Financial is a bank holding company under the federal Bank Holding Company Act of 1956 that has elected to become a "financial holding company" thereunder. As a result, it is subject to the supervision, examination, and reporting requirements of the Bank Holding Company Act and the regulations of the Board of Governors of the Federal Reserve System ("Federal Reserve").

Acquisition of Banks. The Bank Holding Company Act requires every bank holding company to obtain the Federal Reserve's prior approval before:

- Acquiring 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 bank's voting shares;
- Acquiring all or substantially all of the assets of any bank; or
- Subject to certain exemptions, merging or consolidating with any other bank holding company.

Additionally, the Bank Holding Company Act provides that the Federal Reserve may not approve any of these transactions if it would substantially lessen competition or otherwise function as a restraint of trade, or result in or tend to create a monopoly, unless the anticompetitive effects of the proposed transaction are clearly outweighed by the public interest in meeting the convenience and needs of the communities to be served. The Federal Reserve is also required to consider the financial and managerial resources and future prospects of the bank holding companies and banks concerned; the effectiveness of the applicant in combating money laundering; the convenience and needs of the communities to be served; and the extent to which the proposal would result in greater or more concentrated risk to the United States banking or financial system.

Under the Bank Holding Company Act, as amended by the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), if well capitalized and well managed, a bank holding company located in Tennessee may purchase a bank located outside of Tennessee. Conversely, a well capitalized and well managed bank holding company located outside of Tennessee may purchase a bank located inside Tennessee. In each case, however, state law restrictions may be placed on the acquisition of a bank that has only been in existence for a limited amount of time or will result in specified concentrations of deposits. For example, Tennessee law currently prohibits a bank holding company from acquiring control of a Tennessee-based financial institution until the target financial institution has been in operation for three years.

Change in Bank Control. Subject to various exceptions, the Bank Holding Company Act and the Federal 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 an individual or company acquires 25% or more of any class of voting securities of the bank holding company. Control is rebutably presumed to exist 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 registered securities 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.

Pinnacle Financial's common stock is registered under Section 12 of the Exchange Act. The regulations provide a procedure for challenge of the rebuttable control presumption.

Permitted Activities. Bank holding companies generally are prohibited, except in certain statutorily prescribed instances including exceptions for financial holding companies, from acquiring direct or indirect ownership or control of 5% or more of any class of the outstanding voting shares of any company that is not a bank or bank holding company and from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, or furnishing services to its subsidiaries. However, subject to prior notice or Federal Reserve approval, bank holding companies may engage in, or acquire shares of companies engaged in, activities determined by the Federal Reserve to be so closely related to banking or managing or controlling banks as to be a proper incident thereto. The Gramm-Leach-Bliley Act of 1999 amended the Bank Holding Company Act and expanded the activities in which bank holding companies and affiliates of banks are permitted to engage. The Gramm-Leach-Bliley Act eliminated many federal and state law barriers to affiliations among banks and securities firms, insurance companies, and other financial service providers, and provided that holding companies which elected to become financial holding companies, as Pinnacle Financial has done, could engage in activities that are:

- Financial in nature;
- Incidental to a financial activity (as determined by the Federal Reserve in consultation with the Secretary of the U.S. Treasury); or

• Complementary to a financial activity and do not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally (as determined by the Federal Reserve).

The Gramm-Leach-Bliley Act identifies the following activities as financial in nature:

- Lending, trust and other banking activities;
- Insuring, guaranteeing, or indemnifying against loss or harm, or providing and issuing annuities, and acting as principal, agent, or broker for these purposes, in any state;
- Providing financial, investment, or advisory services;
- Issuing or selling instruments representing interests in pools of assets permissible for a bank to hold directly;
- Underwriting, dealing in or making a market in securities;
- Activities that the Federal Reserve has determined to be so closely related to banking or managing or controlling banks as to be a proper incident to banking or managing or controlling banks;
- Activities permitted outside of the United States that the Federal Reserve has determined to be usual in connection with banking or other financial operations abroad;
- Merchant banking, including through securities or insurance affiliates; and
- Insurance company portfolio investments.

The Gramm-Leach-Bliley Act also authorizes the Federal Reserve, in consultation with the Secretary of the U.S. Treasury, to determine activities in addition to those listed above that are financial in nature or incidental or complementary to such financial activity. In determining whether a particular activity is financial in nature or incidental or complementary to a financial activity, the Federal Reserve must consider (1) the purpose of the Bank Holding Company Act and the Gramm-Leach-Bliley Act, (2) changes or reasonably expected changes in the marketplace in which financial holding companies compete and in the technology for delivering financial services, and (3) whether the activity is necessary or appropriate to allow financial holding companies to effectively compete with other financial service providers and to efficiently deliver information and services. Pinnacle Financial became a financial holding company effective as of February 17, 2016.

To maintain financial holding company status, a financial holding company and all of its depository institution subsidiaries must be "well capitalized" and "well managed" and, except in limited circumstances, in satisfactory compliance with the Community Reinvestment Act, as discussed in the section captioned "Community Reinvestment Act" below. A depository institution subsidiary is considered to be "well capitalized" if it satisfies the requirements for this status discussed in the section captioned "Capital Adequacy" below. A depository institution subsidiary is considered "well managed" if it received a composite rating and management rating of at least "satisfactory" in its most recent examination. A financial holding company's status will also depend upon it maintaining its status as "well capitalized" and "well managed" under applicable Federal Reserve regulations. If a financial holding company must enter into an agreement with the Federal Reserve to comply with all applicable capital and management requirements. Until the financial holding company returns to compliance, the Federal Reserve may impose limitations or conditions on the conduct of its activities, and the company may not commence any of the broader financial activities permissible for financial holding company does not return to compliance within 180 days, the Federal Reserve may require divestiture of the holding company's depository institutions or alternatively the holding company may be required to cease to engage in the activities that it is engaged in that a bank holding company is not permitted to engage in without being a financial holding company.

In order for a financial holding company to commence any new activity permitted by the Bank Holding Company Act or to acquire a company engaged in any new activity permitted by the Bank Holding Company Act, each insured depository institution subsidiary of the financial holding company must have received a rating of at least "satisfactory" in its most recent examination under the Community Reinvestment Act.

Despite prior approval, the Federal Reserve may order a financial holding company or its subsidiaries to terminate any of these activities or to terminate its ownership or control of any subsidiary when it has reasonable cause to believe that the financial holding company's continued ownership, activity or control constitutes a serious risk to the financial safety, soundness, or stability of any of its bank subsidiaries or if there is a failure to maintain certain capital or management standards.

Support of Subsidiary Institutions. Pinnacle Financial is required to act as a source of financial and managerial strength for its bank subsidiary, Pinnacle Bank, and to commit resources to support Pinnacle Bank. This support can be required at times when it would not be in the best interest of Pinnacle Financial's shareholders or creditors to provide it. In the event of Pinnacle Financial's bankruptcy, any commitment by it to a federal bank regulatory agency to maintain the capital of Pinnacle Bank would be assumed by the bankruptcy trustee and entitled to a priority of payment.

Pinnacle Bank

Pinnacle Financial owns one bank - Pinnacle Bank. Pinnacle Bank is a state bank chartered under the laws of the State of Tennessee that is not a member of the Federal Reserve. As a result, it is subject to the supervision, examination and reporting requirements and the regulations of the Federal Deposit Insurance Corporation ("FDIC") and Tennessee Department of Financial Institutions ("TDFI"). The TDFI has the authority to approve or disapprove mergers, the issuance of preferred stock and capital notes, the establishment of branches and similar corporate actions. The TDFI regularly examines state banks like Pinnacle Bank and in connection with its examinations may identify matters necessary to improve a bank's operation in accordance with principles of safety and soundness. The FDIC also has examination powers with respect to state, non-member banks like Pinnacle Bank. Any matters identified in such examinations are required to be appropriately addressed by the bank. Pinnacle Bank is also subject to numerous state and federal statutes and regulations that will affect its business, activities and operations.

Branching. While the TDFI has authority to approve branch applications, state banks are required by the State of Tennessee to adhere to branching laws applicable to state chartered banks in the states in which they are located. With prior regulatory approval, Tennessee law permits banks based in the state to either establish new or acquire existing branch offices throughout Tennessee. As a result of the Dodd-Frank Act, Pinnacle Bank and any other national or state-chartered bank generally may branch across state lines to the same extent as banks chartered in the state where the branch is located.

FDIC Insurance. Deposits in Pinnacle Bank are insured by the FDIC up to \$250,000 subject to applicable limitations. To offset the cost of this insurance, the FDIC has adopted a risk-based assessment system for insured depository institutions that takes into account the risks attributable to different categories and concentrations of an insured depository institution's assets and liabilities. An institution's assessment rate depends on the category to which it is assigned and certain adjustments specified by the FDIC, with less risky institutions paying lower assessments. Under the Dodd-Frank Act, the FDIC has adopted regulations that base deposit insurance assessments on total assets less capital rather than deposit liabilities and include off-balance sheet liabilities of institutions and their affiliates in risk-based assessments. After an institution's average assets exceed \$10 billion over four quarters as ours have, the assessment rate increases compared to institutions at lower average asset levels. In addition, the FDIC retains the authority to further increase Pinnacle Bank's assessment rates and the FDIC has established a higher reserve ratio of 2% as a long-term goal which goes beyond what is required by statute. Continued increases in our FDIC insurance premiums could have an adverse effect on Pinnacle Bank's and Pinnacle Financial's results of operations.

The FDIC may terminate its insurance of an institution's deposits if it finds that the 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.

General Enforcement Authority of Regulators

Bank holding companies (including those that have elected to be financial holding companies) and insured banks also may be subject to potential enforcement actions of varying levels of severity by the federal regulators for unsafe or unsound practices in conducting their business, or for violation of any law, rule, regulation, condition imposed in writing by any applicable agency or term of a written agreement with that agency. In more serious cases, enforcement actions may include the issuance of directives to increase capital; the issuance of formal and informal agreements; the imposition of civil monetary penalties; the issuance of a cease and desist order that can be judicially enforced; the issuance of removal and prohibition orders against officers, directors, and other institution-affiliated parties; the termination of the bank's deposit insurance; the appointment of a conservator or receiver for the bank; and the enforcement of such actions through injunctions or restraining orders based upon a judicial determination that the agency would be harmed if such equitable relief was not granted.

Capital Adequacy

The Federal Reserve has established a risk-based and a leverage measure of capital adequacy for bank holding companies. Pinnacle Bank is also subject to risk-based and leverage capital requirements adopted by the FDIC, which are substantially similar to those adopted by the Federal Reserve for bank holding companies. The risk-based capital standards are designed to make regulatory capital requirements more sensitive to differences in risk profiles among banks and bank holding companies, to account for off-balance-sheet exposure, and to minimize disincentives for holding liquid assets. Assets and off-balance-sheet items, such as letters of credit and unfunded loan commitments, are assigned to broad risk categories, each with appropriate risk weights. The resulting capital ratios represent capital as a percentage of total risk-weighted assets and off-balance-sheet items. Tennessee state banks are required to have the capital structure that the TDFI deems adequate, and the Commissioner of the TDFI as well as federal regulators may require a state bank (or its holding company in the case of federal regulators) to increase its capital structure to the point deemed adequate by the Commissioner or such other federal regulator before granting approval of a branch application, merger application or charter amendment.

The Dodd-Frank Act contains a number of provisions dealing with capital adequacy of insured depository institutions and their holding companies, and for the most part these provisions have resulted in insured depository institutions and their holding companies being subject to more stringent capital requirements than before passage of the act. Under the Dodd-Frank Act, federal regulators have established minimum Tier 1 leverage and risk-based capital requirements for, among other entities, banks and bank holding companies on a consolidated basis. These minimum requirements require that a bank holding company maintain a ratio of Tier 1 capital to average assets, less goodwill, other intangible assets and other required deductions ("Tier 1 leverage ratio") of not less than 4% and a total capital ratio of not less than 8%.

In July 2013, the Federal Reserve and the FDIC approved final rules that substantially amended the regulatory capital rules applicable to Pinnacle Bank and Pinnacle Financial, effective January 1, 2015. The final rules implement the regulatory capital reforms of the Basel Committee on Banking Supervision reflected in "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems" (Basel III) and changes required by the Dodd-Frank Act.

Under these rules, the leverage and risk-based capital ratios of bank holding companies may not be lower than the leverage and riskbased capital ratios for insured depository institutions. The final capital rules implementing Basel III include minimum risk-based capital and leverage ratios for banks and their holding companies. Moreover, these rules refined the definition of what constitutes "capital" for purposes of calculating those ratios, including the definitions of Tier 1 capital and Tier 2 capital. Total capital consists of two components, Tier 1 capital and Tier 2 capital. Tier 1 capital generally consists of common stock (plus related surplus) and retained earnings, minority interests in the equity accounts of consolidated subsidiaries and noncumulative perpetual preferred stock and related surplus, less goodwill and other specified intangible assets and other regulatory deductions. A portion of Pinnacle Financial's and Pinnacle Bank's recorded investment in BHG, which is a minority interest in an unconsolidated entity, is subject to specified deductions. Tier 2 capital generally consists of perpetual preferred stock and related surplus not meeting the Tier 1 capital definition, qualifying subordinated debt, qualifying mandatorily convertible debt securities, and a limited amount of loan loss reserves. The Dodd-Frank Act also excludes trust preferred securities issued after May 19, 2010 from being included in Tier 1 capital unless the issuing company is a bank holding company with less than \$500 million in total assets. Trust preferred securities issued prior to that date will continue to count as Tier 1 capital for bank holding companies with less than \$15.0 billion in total assets on that date unless the company's assets thereafter exceed \$15.0 billion as a result of a merger or acquisition. The trust preferred securities issued by Pinnacle Financial or entities it has acquired previously qualified as Tier 1 capital, but no longer qualify as Tier 1 capital under the Dodd-Frank Act and Basel III as a result of our total assets exceeding \$15.0 billion as a result of the BNC merger. For a bank holding company to be considered "well-capitalized," it must maintain a Tier 1 capital ratio of at least 8%, a total capital ratio of at least 10%, and not be subject to a written agreement, order or directive to maintain a specific capital level.

The minimum capital level requirements applicable to bank holding companies and banks subject to the federal regulators' capital rules are: (i) a Tier 1 common equity ("CET1") capital ratio of 4.5%; (ii) a Tier 1 risk-based capital ratio of 6%; (iii) a total risk-based capital ratio of 8%; and (iv) a Tier 1 leverage ratio of 4% for all institutions. The rules also established a "capital conservation buffer" of 2.5% (to consist of CET1 capital) above the regulatory minimum capital ratios, that has resulted in the following minimum ratios: (i) a CET1 capital ratio of 7%, (ii) a Tier 1 capital ratio of 8.5%, and (iii) a total capital ratio of 10.5%. The phase-in of the capital conservation buffer requirement was fully implemented in January 2019. An institution will be subject to limitations on paying dividends, engaging in share repurchases and paying discretionary bonuses if capital levels fall below minimum levels plus the buffer amounts. These limitations establish a maximum percentage of eligible retained income that could be utilized for such actions.

Under the Basel III capital rules, CET1 consists of common stock and paid in capital and retained earnings. CET1 is reduced by goodwill, certain intangible assets, net of associated deferred tax liabilities, deferred tax assets that arise from tax credit and net operating loss carryforwards, net of any valuation allowance, and certain other items specified in the Basel III capital rules. The Basel III capital rules also provide for a number of deductions from and adjustments to CET1. These include, for example, the requirement that mortgage servicing rights, deferred tax assets arising from temporary differences that could not be realized through net operating loss carrybacks and significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category exceeds 10% of CET1 or all such categories in the aggregate exceed 15% of CET1.

The final rules allow banks and their holding companies with less than \$250 billion in assets a one-time opportunity to opt-out of a requirement to include unrealized gains and losses in accumulated other comprehensive income in their capital calculation. Pinnacle Financial and Pinnacle Bank each opted out of this requirement.

Pinnacle Financial must qualify as "well capitalized," among other requirements, in order for it to engage in certain acquisitions or be eligible for expedited treatment of certain regulatory applications, including those related to mergers and acquisitions. For Pinnacle Financial to qualify as "well capitalized," for these purposes it must have a Tier 1 risk-based capital ratio of at least 6% and a total risk-based capital ratio of at least 10% and not be subject to a written agreement, order or directive to maintain a specific capital level.

Failure to meet statutorily mandated capital requirements or more restrictive ratios separately established for a depository institution or its holding company by its regulators could subject a bank or bank holding company to a variety of enforcement remedies, including issuance of a capital directive, the termination of deposit insurance by the FDIC, a prohibition on accepting or renewing brokered deposits, limitations on the rates of interest that the institution may pay on its deposits and other restrictions on its business.

Additionally, the Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA") establishes a system of prompt corrective action ("PCA") to resolve the problems of undercapitalized financial institutions. Under this system, the federal banking regulators have established five capital categories (well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized) into one of which all institutions are placed. Federal banking regulators are required to take various mandatory supervisory actions and are authorized to take other discretionary actions with respect to institution is placed. Generally, subject to a narrow exception, the banking regulator must appoint a receiver or conservator within a specified period for an institution that is critically undercapitalized. The federal banking agencies have specified by regulation the relevant capital level for each category.

Under FDIC regulations, a state regulated bank which is not a member of the Federal Reserve (a state non-member bank) like Pinnacle Bank is "well capitalized" under PCA if it has a Tier 1 leverage ratio of 5% or better, a CET1 capital ratio of 6.5% or better, a Tier 1 risk-based capital ratio of 8% or better, a total risk-based capital ratio of 10% or better, and is not subject to a regulatory agreement, order or directive to maintain a specific level for any capital measure. A state non-member bank is considered "adequately capitalized" if it has a Tier 1 leverage ratio of at least 4%, a CET1 capital ratio of 4.5% or better, a Tier 1 risk-based capital ratio of at least 6.0%, a total risk-based capital ratio of at least 8.0% and does not meet the definition of a well-capitalized bank. Lower levels of capital result in a bank being considered undercapitalized, significantly undercapitalized and critically undercapitalized.

State non-member banks are required to be "well capitalized" in order to take advantage of expedited procedures on certain applications, such as those related to the opening of branches and mergers, and to accept and renew brokered deposits without further regulatory approval.

An institution that is categorized as undercapitalized, significantly undercapitalized, or critically undercapitalized is required to submit an acceptable capital restoration plan to its appropriate federal banking agency. In addition, a bank holding company must guarantee that a subsidiary depository institution meets its capital restoration plan, subject to various limitations. The controlling holding company's obligation to fund a capital restoration plan is limited to the lesser of 5% of an undercapitalized subsidiary's assets or the amount required to meet regulatory capital requirements. An undercapitalized institution is also generally prohibited from increasing its average total assets, making acquisitions, establishing any branches or engaging in any new line of business, except under an accepted capital restoration plan or with FDIC approval. The FDIC is required to resolve a bank when its ratio of tangible equity to tangible assets reaches 2%. The regulations also establish procedures for downgrading an institution into a lower capital category based on supervisory factors other than capital.

The Basel III capital rules prescribe a standardized approach for risk weightings that expand the risk-weighting categories from the four Basel I-derived categories (0%, 20%, 50% and 100%) to a much larger and more risk-sensitive number of categories, depending on the nature of the assets, generally ranging from 0% for U.S. government and agency securities, to 600% for certain equity exposures, and resulting in higher risk weights for a variety of asset categories. Specific changes to the rules impacting Pinnacle Financial's and Pinnacle Bank's determination of risk-weighted assets include, among other things:

- applying a 150% risk weight instead of a 100% risk weight for certain high volatility commercial real estate acquisition, development and construction loans;
- assigning a 150% risk weight to the unsecured portion of non-residential mortgage loans that are 90 days past due or otherwise on nonaccrual status;
- providing for a 20% credit conversion factor for the unused portion of a commitment with an original maturity of one year or less that is not unconditionally cancellable (previously set at 0%);
- providing for a risk weight, generally not less than 20% with certain exceptions, for securities lending transactions based on the risk weight category of the underlying collateral securing the transaction;
- providing for a 600% risk weight on equity exposures; and
- eliminating the 50% cap on the risk weight for OTC derivatives.

In December 2017, the Basel Committee on Banking Supervision published the last version of the Basel III accord, generally referred to as "Basel IV." The Basel Committee stated that a key objective of the revisions incorporated into the framework is to reduce excessive variability of risk-weighted assets ("RWA"), which will be accomplished by enhancing the robustness and risk sensitivity of the standardized approaches for credit risk and operational risk, which will facilitate the comparability of banks' capital ratios; constraining the use of internally modeled approaches; and complementing the risk-weighted capital ratio with a finalized leverage ratio and a revised and robust capital floor. Leadership of the federal banking agencies who are tasked with implementing Basel IV has indicated that it is considering how to appropriately apply these revisions in the United States. Although it is uncertain at this time, we anticipate some, if not all, of the Basel IV accord may be incorporated into the capital requirements framework applicable to Pinnacle Financial and Pinnacle Bank.

At December 31, 2019, Pinnacle Bank's CET1 capital ratio was 11.2%, Tier 1 risk-based capital ratio was 11.2%, total risk-based capital ratio was 12.2% and Tier 1 leverage ratio was 10.5%, compared to 10.5%, 10.5%, 11.5% and 9.8% at December 31, 2018, respectively. At December 31, 2019, Pinnacle Financial's CET1 capital ratio was 9.7%, Tier 1 risk-based capital ratio was 9.7%, total risk-based capital ratio was 13.2% and Tier 1 leverage ratio was 9.1%, compared to 9.6%, 9.6%, 12.2% and 8.9% at December 31, 2018, respectively. All of these ratios exceeded regulatory minimums and those required by Basel III and FDICIA (including after application of any capital conservation buffer) to be considered well capitalized. More information concerning Pinnacle Financial's and Pinnacle Bank's regulatory ratios at December 31, 2019 is included in Note 19 to the "Notes to Consolidated Financial Statements" included elsewhere in this Annual Report on Form 10-K.

Capital Planning

Banking organizations must have appropriate capital planning processes, with proper oversight from the board of directors. Accordingly, pursuant to a separate, general supervisory letter from the Federal Reserve, bank holding companies are expected to conduct and document comprehensive capital adequacy analyses prior to the declaration of any dividends (on common stock, preferred stock, trust preferred securities or other Tier 1 capital instruments), capital redemptions or capital repurchases. Moreover, the federal banking agencies have adopted a joint agency policy statement, noting that the adequacy and effectiveness of a bank's interest rate risk management process and the level of its interest rate exposures are critical factors in the evaluation of the bank's capital adequacy. A bank with material weaknesses in its interest rate risk management process or high levels of interest rate exposure relative to its capital will be directed by the relevant federal banking agencies to take corrective actions.

In November 2018, Pinnacle Financial announced that its board of directors had authorized a share repurchase program for up to \$100.0 million of its outstanding common stock. This repurchase program expires on March 31, 2020. During the twelve months ended December 31, 2019, Pinnacle Financial repurchased 1.1 million shares of its common stock at a weighted average price of \$55.70 and an aggregate cost of \$61.4 million. In aggregate, Pinnacle Financial repurchased approximately 1.5 million shares, for approximately \$82.1 million at a weighted average share price of \$54.45 under the share repurchase program announced in November 2018.

In October 2019, Pinnacle Financial announced that its board of directors had authorized an additional share repurchase program for up to \$100.0 million of its outstanding common stock after completion of the previously announced program. The repurchase program announced on October 15, 2019 is scheduled to expire upon the earlier of Pinnacle Financial's repurchase of shares of its outstanding common stock having an aggregate purchase price of \$100.0 million and December 31, 2020. Repurchases of shares of Pinnacle Financial's common stock will be made in accordance with applicable laws and may be made at management's discretion from time to time in the open market, through privately negotiated transactions or otherwise.

Payment of Dividends

Pinnacle Financial is a legal entity separate and distinct from Pinnacle Bank. The principal source of Pinnacle Financial's cash flow, including cash flow to pay interest to its holders of subordinated debentures and subordinated notes, and any dividends payable to common shareholders, are dividends that Pinnacle Bank pays to Pinnacle Financial as its sole shareholder. Under Tennessee law, Pinnacle Financial is not permitted to pay dividends if, after giving effect to such payment, it would not be able to pay its debts as they become due in the usual course of business or its total assets would be less than the sum of its total liabilities plus any amounts needed to satisfy any preferential rights if it were dissolving. In addition, in deciding whether or not to declare a dividend of any particular size, Pinnacle Financial's board of directors must consider its and Pinnacle Bank's current and prospective capital, liquidity, and other needs.

In addition to state law limitations on Pinnacle Financial's ability to pay dividends, the Federal Reserve imposes limitations on Pinnacle Financial's ability to pay dividends. As noted above, effective January 1, 2016, Federal Reserve regulations limit dividends, stock repurchases and discretionary bonuses to executive officers if Pinnacle Financial's regulatory capital is below the level of regulatory minimums plus the applicable capital conservation buffer.

Statutory and regulatory limitations also apply to Pinnacle Bank's payment of dividends to Pinnacle Financial. Pinnacle Bank is required by Tennessee law to obtain the prior approval of the Commissioner of the TDFI for payments of dividends if the total of all dividends declared by its board of directors in any calendar year will exceed (1) the total of Pinnacle Bank's net income for that year, plus (2) Pinnacle Bank's retained net income for the preceding two years. As of December 31, 2019, Pinnacle Bank could pay dividends to Pinnacle Financial of up to \$721.2 million. Generally, federal regulatory policy encourages holding company debt to be serviced by subsidiary bank dividends or additional equity rather than debt issuances. Pinnacle Financial had available cash balances of approximately \$182.0 million at December 31, 2019.

The payment of dividends by Pinnacle Bank and Pinnacle Financial may also be affected by other factors, such as the requirement to maintain adequate capital above statutory and regulatory requirements imposed on Pinnacle Bank or Pinnacle Financial by their regulators. The federal banking agencies have indicated that paying dividends that deplete a depository institution's capital base to an inadequate level would be an unsafe and unsound banking practice. Under the FDICIA, a depository institution may not pay any dividend if payment would cause it to become undercapitalized or if it already is undercapitalized. Moreover, the federal agencies have issued policy statements that provide that bank holding companies and insured depository institutions should generally only pay dividends out of current operating earnings, and the capital rules adopted implementing Basel III prohibit the payment of dividends when a holding company or insured depository institution buffer described elsewhere in this report. See "Capital Adequacy" above.

During the fourth quarter of 2013, Pinnacle Financial initiated a quarterly common stock dividend in the amount of \$0.08 per share. The board of directors of Pinnacle Financial has increased the dividend amount per share over time. The most recent increase occurred on October 16, 2018, when the board of directors increased the dividend to \$0.16 per share. During the year ended December 31, 2019, Pinnacle Financial paid \$49.8 million in net dividends to its common shareholders. On January 21, 2020, our board of directors declared a \$0.16 per share quarterly cash dividend to common shareholders which approximated \$12.3 million in aggregate dividend payments will be paid on February 28, 2020 to common shareholders of record as of the close of business on February 7, 2020. The amount and timing of all future dividend payments, if any, is subject to our board's discretion and will depend on our earnings, capital position, financial condition and other factors, including new regulatory capital requirements, as they become known to us.

Restrictions on Transactions with Affiliates

Both Pinnacle Financial and Pinnacle Bank are subject to the provisions of Section 23A of the Federal Reserve Act. Section 23A places limits on the amount of:

- A bank's loans or extensions of credit, including purchases of assets subject to an agreement to repurchase, to or for the benefit of affiliates;
- A bank's investment in affiliates;
- Assets a bank may purchase from affiliates, except for real and personal property exempted by the Federal Reserve;
- The amount of loans or extensions of credit to third parties collateralized by the securities or obligations of affiliates;
- Transactions involving the borrowing or lending of securities and any derivative transaction that results in credit exposure to an affiliate; and
- A bank's guarantee, acceptance or letter of credit issued on behalf of an affiliate.

The total amount of the above transactions is limited in amount, as to any one affiliate, to 10% of a bank's capital and surplus and, as to all affiliates combined, to 20% of a bank's capital stock and surplus. In addition to the limitation on the amount of these transactions, each of the above transactions must also meet specified collateral requirements. Pinnacle Bank must also comply with other provisions designed to avoid the taking of low-quality assets.

Pinnacle Financial and Pinnacle Bank are also subject to the provisions of Section 23B of the Federal Reserve Act which, among other things, prohibits an institution from engaging in the above transactions with affiliates unless the transactions are on terms substantially the same, or at least as favorable to the institution or its subsidiaries, as those prevailing at the time for comparable transactions with nonaffiliated companies.

Pinnacle Bank is also subject to restrictions on extensions of credit to its executive officers, directors, principal shareholders and their related interests. These extensions of credit must be made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with third parties, and must not involve more than the normal risk of repayment or present other unfavorable features.

Community Reinvestment Act and Fair Lending

The Community Reinvestment Act ("CRA") requires that, in connection with examinations of financial institutions within their respective jurisdictions, the Federal Reserve and the FDIC shall evaluate the record of each financial institution in meeting the credit needs of its local communities, including low- and moderate-income neighborhoods consistent with safe and sound operations of the institutions. These facts are also considered in evaluating mergers, acquisitions, and applications to open a branch or facility. Failure to adequately meet these criteria could impose additional requirements and limitations on Pinnacle Bank. Additionally, banks are required to publicly disclose the terms of various Community Reinvestment Act-related agreements. Pinnacle Bank received an "outstanding" CRA rating from its primary federal regulator on its most recent regulatory examination.

Pinnacle Bank is also subject to fair lending requirements and reporting obligations involving its home mortgage lending operations. Fair lending laws prohibit discrimination in the provision of banking services, and bank regulators have increasingly focused on the enforcement of these laws. Fair lending laws include the Equal Credit Opportunity Act of 1974 and the Fair Housing Act of 1968, which prohibit discrimination in credit and residential real estate transactions on the basis of prohibited factors including, among others, race, color, national origin, gender and religion. Pinnacle Bank may be liable, either through administrative enforcement or private civil actions, for policies that result in a disparate treatment of or have a disparate impact on a protected class of applicants or borrowers. If a pattern or practice of lending discrimination is alleged by a regulator, then that agency may refer the matter to the U.S. Department of Justice ("DOJ") for investigation. Pursuant to a Memorandum of Understanding, the DOJ and Consumer Financial Protection Bureau ("CFPB") have agreed to share information, coordinate investigations and generally commit to strengthen their coordination efforts. Pinnacle Bank is required to have a fair lending program that is of sufficient scope to monitor the inherent fair lending risk of the institution and that appropriately remediates issues which are identified.

Cybersecurity and Data Privacy

State and federal banking regulators have issued various policy statements and, in some cases, regulations, emphasizing the importance of technology risk management and supervision. Such policy statements and regulations indicate that financial institutions should design multiple layers of security controls to establish lines of defense and to ensure that their risk management processes also address the risk posed by compromised customer credentials, including security measures to reliably authenticate customers accessing internet-based services of the financial institution. A financial institution's management is expected to maintain sufficient business continuity planning processes to ensure the rapid recovery, resumption and maintenance of the institution's operations after a cyber-attack involving destructive malware. A financial institution is expected to develop appropriate processes to enable recovery of data and business operations and address rebuilding network capabilities and restoring data if the institution or its critical service providers fall victim to this type of cyber-attack.

Federal statutes and regulations, including the Gramm-Leach-Bliley Act and the Right to Financial Privacy Act of 1978, limit Pinnacle Financial's and Pinnacle Bank's ability to disclose non-public information about consumers, customers and employees to nonaffiliated third parties. Specifically, the Gramm-Leach-Bliley Act requires disclosure of our privacy policies and practices relating to sharing non-public information and enables retail customers to opt out of the institution's ability to share information with unaffiliated third parties under certain circumstances. The Gramm-Leach-Bliley Act also requires Pinnacle Financial and Pinnacle Bank to implement a comprehensive information security program that includes administrative, technical and physical safeguards to ensure the security and confidentiality of customer records and information and, if applicable state law is more protective of customer privacy than the Gramm-Leach-Bliley Act, financial institutions, including Pinnacle Bank, will be required to comply with such state law. An increasing number of state laws and regulations have been enacted in recent years to implement privacy and cybersecurity standards and regulations, including data breach notification and data privacy requirements. Other nations in which our customers do business, such as the European Union, have adopted similar requirements in the states and nations in which our customers are located and ongoing investments in our information systems and compliance capabilities.

Other laws and regulations impact Pinnacle Financial's and Pinnacle Bank's ability to share certain information with affiliates and non-affiliates for marketing and/or non-marketing purposes. These regulations affect how consumer information is transmitted through diversified financial companies and conveyed to outside vendors. In connection with the regulations governing the privacy of consumer financial information, the federal banking agencies, including the FDIC, have adopted guidelines for establishing information security standards and programs to protect such information. In addition, Pinnacle Bank has established a privacy policy that it believes promotes compliance with the federal requirements.

Other Consumer Laws and Regulations

Interest and other charges collected or contracted for by Pinnacle Bank are subject to state usury laws and federal laws concerning interest rates. For example, under the Service Members Civil Relief Act, a lender is generally prohibited from charging an annual interest rate in excess of 6% on any obligations for which the borrower is a person on active duty with the United States military.

Pinnacle Bank's loan operations are also subject to federal laws applicable to credit transactions, such as the:

- Federal Truth-In-Lending Act, governing disclosures of credit terms and costs to consumer borrowers, giving consumers the right to cancel certain credit transactions, and defining requirements for servicing consumer loans secured by a dwelling;
- Home Mortgage Disclosure Act of 1975, requiring financial institutions to provide information to enable the public and public officials to determine whether a financial institution is fulfilling its obligation to help meet the housing needs of the community it serves;
- Equal Credit Opportunity Act, prohibiting discrimination on the basis of race, creed or other prohibited factors in extending credit;
- Fair Credit Reporting Act of 1978, governing the use and provision of information to credit reporting agencies;
- Fair Debt Collection Practices Act, governing the manner in which consumer debts may be collected by collection agencies;
- Service Members Civil Relief Act, governing the repayment terms of, and property rights underlying, secured obligations of
 persons in active military service;
- Rules and regulations of the various federal agencies charged with the responsibility of implementing the federal laws;
- Electronic Fund Transfers Act, which regulates fees and other terms of electronic funds transactions;
- Fair and Accurate Credit Transactions Act of 2003, which permanently extended the national credit reporting standards of the Fair Credit Reporting Act, and permits consumers, including our customers, to opt out of information sharing among affiliated companies for marketing purposes and requires financial institutions, including banks, to notify a customer if the institution provides negative information about the customer to a national credit reporting agency or if the credit that is granted to the customer is on less favorable terms than those generally available;
- Fair Housing Act, which prohibits discriminatory practices relative to real estate related transactions, including the financing of housing and the rules and regulations of the various federal agencies charged with the responsibility of implementing such federal laws; and
- Real Estate Settlement and Procedures Act of 1974, which affords consumers greater protection pertaining to federally related mortgage loans by requiring, among other things, improved and streamlined loan estimate forms including clear summary information and improved disclosure of yield spread premiums.

Pinnacle Bank's deposit operations are subject to the:

- Right to Financial Privacy Act, which imposes a duty to maintain confidentiality of consumer financial records and prescribes procedures for complying with administrative subpoenas of financial records;
- Electronic Fund Transfers Act and Regulation E issued by the Federal Reserve to implement that act, which govern automatic deposits to and withdrawals from deposit accounts and customers' rights and liabilities (including with respect to the permissibility of overdraft charges) arising from the use of automated teller machines and other electronic banking services.
- Truth in Savings Act, which requires depository institutions to disclose the terms of deposit accounts to consumers;
- Expedited Funds Availability Act, which requires financial institutions to make deposited funds available according to specified time schedules and to disclose funds availability policies to consumers; and
- Check Clearing for the 21st Century Act ("Check 21"), which is designed to foster innovation in the payments system and to enhance its efficiency by reducing some of the legal impediments to check truncation. Check 21 created a new negotiable instrument called a substitute check and permits, but does not require banks to truncate original checks, process check information electronically, and deliver substitute checks to banks that wish to continue receiving paper checks.

Pinnacle Bank's loan and deposit operations are both subject to the Bank Secrecy Act ("BSA") which governs how banks and other firms report certain currency transactions and maintain appropriate safeguards against "money laundering" activities as discussed in the section captioned "Anti-Terrorism Legislation and Anti-Money Laundering" below.

Examination and enforcement by the state and federal banking agencies, and other such enforcement authorities, for non-compliance with consumer protection laws and their implementing regulations have increased and become more intense. The advent of the CFPB, as described in more detail below, further heightens oversight and review of compliance with consumer protection laws and regulations. Due to these heightened regulatory concerns, including increased enforcement of the CRA by the federal banking agencies, and new powers and authority of the CFPB, Pinnacle Bank and its affiliates may incur additional compliance costs or be required to expend additional funds for investments in their local community.

Anti-Terrorism Legislation and Anti-Money Laundering

Pursuant to the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism ("USA PATRIOT") Act of 2001, as amended, financial institutions are subject to prohibitions against specified financial transactions and account relationships as well as enhanced due diligence and "know your customer" standards in their dealings with foreign financial institutions and foreign customers.

A major focus of governmental policy on financial institutions in recent years has been aimed at combating money laundering and terrorist financing. BSA and its implementing regulations and parallel requirements of the federal banking regulators require Pinnacle Bank to maintain a risk-based anti-money laundering ("AML") program reasonably designed to prevent and detect money laundering and terrorist financing and to comply with the recordkeeping and reporting requirements of the BSA, including the requirement to report suspicious activity. The USA PATRIOT Act substantially broadened the scope of AML laws and regulations by imposing significant new compliance and due diligence obligations on financial institutions, creating new crimes and penalties and expanding the extra-territorial jurisdiction of the United States. Financial institutions, including banks, are required under final rules implementing Section 326 of the USA PATRIOT Act to establish procedures for collecting standard information from customers opening new accounts and verifying the identity of these new account holders within a reasonable period of time. Financial institutions are also prohibited from entering into specified financial transactions and account relationships and must take certain steps to assist government agencies in detecting and preventing money laundering and to report certain types of suspicious transactions. In May 2016, Treasury's Financial Crimes Enforcement Network ("FinCEN") issued rules under the BSA requiring financial institutions to identify the beneficial owners who own or control certain legal entity customers at the time an account is opened and to update their AML compliance programs, to include risk-based procedures for conducting ongoing customer due diligence. We have implemented procedures designed to comply with these requirements.

Pinnacle Bank currently has policies and procedures in place designed to comply with the USA PATRIOT Act, the BSA and the other regulations targeting terrorism and money laundering. Federal banking regulators are required, when reviewing bank holding company acquisition and bank merger applications, to consider the effectiveness of the anti-money laundering activities of the applicants. Material deficiencies in anti-money laundering compliance, and non-compliance with related requirements such as the U.S. economic and trade sanctions regimes, can result in public enforcement actions by the bank regulatory agencies and other government agencies, including the imposition of civil money penalties and supervisory restrictions on growth and expansion. Such enforcement actions could also have serious reputational consequences for Pinnacle Financial and Pinnacle Bank.

The Office of Foreign Assets Control

The Office of Foreign Assets Control ("OFAC"), which is an office in the U.S. Department of the Treasury, is responsible for helping to ensure that U.S. entities do not engage in transactions with "enemies" of the United States, as defined by various Executive Orders and Acts of Congress. OFAC publishes lists of names of persons and organizations suspected of aiding, harboring or engaging in terrorist acts; owned or controlled by, or acting on behalf of target countries, and narcotics traffickers. If a bank finds a name on any transaction, account or wire transfer that is on an OFAC list, it must freeze or block the transactions. Pinnacle Bank has appointed a compliance officer to oversee the inspection of its accounts and the filing of any notifications. Pinnacle Bank actively checks high-risk OFAC areas such as new accounts, wire transfers and customer files. These checks are performed using software that is updated each time a modification is made to the lists provided by OFAC and other agencies of Specially Designated Nationals and Blocked Persons.

The Dodd-Frank Act

New regulations and statutes are regularly proposed that contain wide-ranging proposals for altering the structures, regulations and competitive relationships of the nation's financial institutions. In 2010, the U.S. Congress passed the Dodd-Frank Act, which includes significant consumer protection provisions related to, among other things, residential mortgage loans that have increased, and are likely to further increase, our regulatory compliance costs. The Dodd-Frank Act also imposes other restrictions on our operations, including restrictions on the types of investments that bank holding companies and banks can make. Failure to comply with the requirements of the Dodd-Frank Act would negatively impact our results of operations and financial condition and could limit our growth or expansion activities. While we cannot predict what effect any presently contemplated or future changes in the laws or regulations or their interpretations would have on us, such changes could be materially adverse to our investors.

Set out below are certain of the additional provisions of the Dodd-Frank Act to which we are subject since our total assets exceed \$10 billion.

Durbin Amendment. The Dodd-Frank Act included provisions (known as the "Durbin Amendment") which restrict interchange fees to those which are "reasonable and proportionate" for certain debit card issuers and limits the ability of networks and issuers to restrict debit card transaction routing. The Federal Reserve issued final rules implementing the Durbin Amendment on June 29, 2011. In the final rules, interchange fees for debit card transactions were capped at \$0.21 plus five basis points (plus \$0.01 for fraud loss) in order to be eligible for a safe harbor such that the fee is conclusively determined to be reasonable and proportionate. The interchange fee restrictions contained in the Durbin Amendment, and the rules promulgated thereunder, only apply to debit card issuers with \$10 billion or more in total consolidated assets, like Pinnacle Bank. The implications of the Durbin Amendment first became applicable to us on July 1, 2017.

<u>Consumer Financial Protection Bureau</u>. The Dodd-Frank Act also created the CFPB, which took over responsibility for enforcing the principal federal consumer protection laws, such as the Truth in Lending Act, the Equal Credit Opportunity Act, the Real Estate Settlement Procedures Act and the Truth in Saving Act, among others, on July 21, 2011. We are subject to oversight by the CFPB.

The CFPB has broad rulemaking authority for a wide range of consumer financial laws that apply to all banks including, among other things, the authority to prohibit "unfair, deceptive, or abusive" acts and practices. Abusive acts or practices are defined as those that (1) materially interfere with a consumer's ability to understand a term or condition of a consumer financial product or service, or (2) take unreasonable advantage of a consumer's (a) lack of financial savvy, (b) inability to protect himself in the selection or use of consumer financial products or services, or (c) reasonable reliance on a covered entity to act in the consumer's interests. The CFPB has the authority to investigate possible violations of federal consumer financial law, hold hearings and commence civil litigation. The CFPB can issue cease-and-desist orders against banks and other entities that violate consumer financial laws. The CFPB may also institute a civil action against an entity in violation of federal consumer financial law in order to impose a civil penalty or an injunction. The CFPB has been active in bringing enforcement actions related to consumer financial protection laws and obtaining the forms of relief described above.

The rules issued by the CFPB will have a long-term impact on our business, including our mortgage loan origination and servicing activities. Compliance with these rules will increase our overall regulatory compliance costs. On July 1, 2017, the CFPB took over conducting on-site consumer examinations from the FDIC for all regulations that transferred under their supervision.

On May 24, 2018, President Trump signed into law the Economic Growth, Regulatory Relief, and Consumer Protection Act (the "Growth Act"). The Growth Act alters some of the provisions of the Dodd-Frank Act. Certain of these provisions, to which we became subject once our total assets exceeded \$10 billion, are set out below, along with the changes made to such provisions under the Growth Act.

Under the Dodd-Frank Act, publicly traded bank holding companies with \$10 billion or more in total assets like Pinnacle Financial were required to establish a risk committee responsible for oversight of enterprise-wide risk management practices. Pinnacle Financial established a risk committee on February 7, 2017. The Growth Act raised the minimum asset threshold triggering the requirement to establish a risk committee from \$10 billion to \$50 billion. As a result, Pinnacle Financial is no longer required to maintain its standalone risk committee though it expects it will continue to do so.

Pursuant to the Dodd-Frank Act, any banking organization, including whether a bank holding company or a depository institution, with more than \$10 billion in total consolidated assets and regulated by a federal financial regulatory agency was required to conduct annual company-run stress tests to ensure it had sufficient capital during periods of economic downturn. Pinnacle Financial's and Pinnacle Bank's first stress tests were due in July 2018. The Growth Act raised the asset threshold at which companies are required to conduct the stress tests from \$10 billion to \$250 billion. While we are no longer required to annually conduct stress tests under the Dodd-Frank Act, we expect to continue to perform stress tests from time to time in connection with our capital planning process and to monitor our capital consistent with the safety and soundness expectations of the federal regulators.

While the Economic Growth Act provides some regulatory relief for mid-sized bank holding companies like us, most provisions of the Dodd-Frank Act and its implementing regulations remain in place and will continue to result in additional operating and compliance costs that could have a material adverse effect on our business, financial condition and results of operation.

Securities Registration and Listing

Pinnacle Financial's securities are registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and listed on the Nasdaq Global Select Market. As such, Pinnacle Financial is subject to the information, proxy solicitation, insider trading, corporate governance, and other requirements and restrictions of the Exchange Act, as well as the Marketplace Rules and other requirements promulgated by the Nasdaq Stock Market, LLC. As a public company, Pinnacle Financial is also subject to the accounting oversight and corporate governance requirements of the Sarbanes-Oxley Act of 2002, including, among other things, required executive certification of financial presentations, increased requirements for board audit committees and their members, and enhanced requirements relating to disclosure controls and procedures and internal control over financial reporting.

Insurance Agencies

Each of Miller Loughry Beach and HPB Insurance Group is subject to licensing requirements and extensive regulation under the laws of the various states in which it conducts its insurance agency business. These laws and regulations are primarily for the protection of policyholders. In all jurisdictions, the applicable laws and regulations are subject to amendment or interpretation by regulatory authorities. Generally, those authorities are vested with relatively broad discretion to grant, renew and revoke licenses and approvals and to implement regulations. Licenses may be denied or revoked for various reasons, including for regulatory violations or upon conviction for certain crimes. Possible sanctions that may be imposed for violation of regulations include the suspension of individual employees, limitations on engaging in a particular business for a specified period of time, revocation of licenses, censures and fines.

Effect of Governmental Monetary Policies

Our earnings are affected by domestic economic conditions and the monetary and fiscal policies of the United States government and its agencies. The Federal Reserve's monetary policies have had, and are likely to continue to have, an important impact on the operating results of commercial banks through the Federal Reserve's statutory power to implement national monetary policy in order, among other things, to curb inflation or combat a recession. The Federal Reserve, through its monetary and fiscal policies, affects the levels of bank loans, investments and deposits through its control over the issuance of United States government securities, its regulation of the discount rate applicable to member banks and its influence over reserve requirements to which member banks are subject. We cannot predict the nature or impact of future changes in monetary and fiscal policies.

Proposed Legislation and Regulatory Action

New regulations and statutes are regularly proposed that contain wide-ranging provisions for altering the structures, regulations and competitive relationships of the nation's financial institutions. Throughout 2017, 2018 and 2019, the U.S. Congress has debated, proposed and, in some cases, passed changes to the financial institution regulatory landscape, including the Growth Act and other proposed amendments to the Dodd-Frank Act, including raising the asset threshold levels at which financial institutions and their holding companies become subject to enhanced regulatory oversight and compliance requirements. Federal banking regulators have also proposed changes to certain of the rules they adopted pursuant to the Dodd-Frank Act. We cannot predict whether or in what form any proposed regulation or statute will be adopted or the extent to which our business may be affected by any new regulation or statute or change in applicable rules or regulations. Even if modifications are enacted to existing or proposed regulations, including raising certain assets thresholds above those currently in place, we may continue to face enhanced scrutiny from our regulators who may expect us to continue to comply with the current, more stringent requirements as part of their safety and soundness and compliance examinations and general oversight of our operations.

ITEM 1A. RISK FACTORS

Investing in our common stock involves various risks which are particular to our company, our industry and our market areas. If any of the following risks were to occur, we may not be able to conduct our business as currently planned and our results of operations and financial condition could be materially and negatively impacted. These matters could cause the trading price of our common stock to decline in future periods.

Our net interest margin, and consequently our net earnings, are significantly affected by interest rate levels.

Our profitability is dependent to a large extent on net interest income, which is the difference between interest income earned on loans and investment securities and interest expense paid on deposits, other borrowings, subordinated debentures and subordinated notes. The absolute level of interest rates as well as changes in interest rates or that affect the yield curve may affect our level of interest income, the largest component of our gross revenue, as well as the level of our interest expense. Interest rate fluctuations are caused by many factors which, for the most part, are not under our control. For example, national monetary policy plays a significant role in the determination of interest rates. Additionally, competitor pricing and the resulting negotiations that occur with our customers also impact the rates we collect on loans and the rates we pay on deposits. In addition, changes in the method of determining the London Interbank Offered Rate (LIBOR) or other reference rates, or uncertainty related to such potential changes, may adversely affect the value of reference rate-linked debt securities that we hold or issue, which could further impact our interest rate spread. Changes in the level of interest rates also may negatively affect our ability to originate loans, the value of our assets and our ability to realize gains from the sale of our assets, all of which could ultimately affect our results of operations and financial condition. A decline in the market value of our assets may limit our ability to borrow additional funds. As a result, we could be required to sell some of our loans and investments under adverse market conditions, upon terms that are not favorable to us, in order to maintain our liquidity. If those sales are made at prices lower than the amortized costs of the investments, we will incur losses. Following changes in the general level of interest rates, our ability to maintain a positive net interest spread is dependent on our ability to increase (in a rising rate environment) or maintain or minimize the decline in (in a falling rate environment) our loan offering rates, minimize increases on our deposit rates in a rising rate environment or promptly reduce the rates we pay on deposits in a falling rate environment, and maintain an acceptable level and mix of funding. Although we have implemented strategies we believe will reduce the potential effects of changes in interest rates on our net interest income, these strategies may not always be successful, and, in the case of certain hedging strategies, could materially and adversely impact our results of operations if short term interest rates move in a direction that is different than the direction we anticipated at the time we initiated the strategy. Accordingly, changes in levels of market interest rates could materially and adversely affect our net interest income and our net interest margin, asset quality, loan origination volume, liquidity, and overall profitability. We cannot assure you that we can minimize our interest rate risk.

Short-term interest rates increased from 2016 to early 2019. Thereafter, the Board of Governors of the Federal Reserve System reduced the benchmark federal funds rate by a total of 0.75% through three rate cuts during the second-half of 2019. Because of significant competitive pressures in our markets and the negative impact of these pressures on our deposit and loan pricing, our net interest margin was negatively impacted by these rate cuts and additional rate cuts may further negatively impact our net interest margin. Though we have instituted initiatives in an effort to counteract the possible pressure on our net interest margin in a falling rate environment, such as purchasing a loan interest rate floor, unwinding fixed-to-floating loan interest rate swaps and repositioning a portion of our investment securities portfolio, those efforts did not fully mitigate the adverse impact of a decline in short-term interest rates in 2019. Further rate cuts in 2020 could similarly negatively impact our net interest income, particularly if we are unable to lower our funding costs as quickly as the rates we earn on our loans.

An important component of our ability to mitigate pressures of a down rate environment will be our ability to reduce the rates we pay on deposits, including core deposits. If we are unable to reduce these rates, because of competitive pricing pressures in our markets, liquidity purposes or otherwise, our net interest margin will be negatively impacted. In addition, as our growth in earnings assets has outpaced growth in our core deposits in recent quarters, we have had to increase our reliance on noncore funding. These funding sources may be more rate sensitive than our core depositors, and, accordingly, we may be limited in our ability to reduce the rates we pay on these funds while maintaining on-balance sheet liquidity levels consistent with our policies, which would negatively impact our net interest margin. We seek to limit the amount of non-core funding we utilize to support our growth. If we are unable to grow our core funding at rates that are sufficient to match or exceed our loan growth we may be required to slow our loan growth.

As interest rates change, we expect that we will periodically experience "gaps" in the interest rate sensitivities of our assets and liabilities, meaning that either our interest-bearing liabilities (usually deposits and borrowings) will be more sensitive to changes in market interest rates than our interest-earning assets (usually loans and investment securities), or vice versa. In either event, if market interest rates should move contrary to our position, this "gap" may work against us, and our results of operations and financial condition may be negatively affected. We attempt to manage our risk from changes in market interest rates by adjusting the rates, maturity, repricing characteristics, and balances of the different types of our interest-earning assets and interest-bearing liabilities and by utilizing hedging strategies to reduce the impact of changes in rates. Interest rate risk management techniques are not exact. As discussed above, from time to time we have repositioned a portion of our investment securities portfolio in an effort to better position our balance sheet for potential changes in short-term rates. We employ the use of models and modeling techniques to quantify the levels of risks to net interest income, which inherently involve the use of assumptions, judgments, and estimates. While we strive to ensure the accuracy of our modeled interest rate risk profile, there are inherent limitations and imprecisions in this determination and actual results may differ.

We have entered into certain hedging transactions including interest rate swaps and interest rate floors, which are designed to lessen elements of our interest rate exposure. In addition, we have utilized fixed-to-floating rate cash flow hedges to manage interest rate exposure for our wholesale borrowings portfolio. This hedging strategy converted the LIBOR-based variable interest rate on forecasted borrowings to a fixed interest rate and was used in an effort to protect us from floating interest rate variability in a rising rate environment. In the second quarter of 2019 as it became more likely that short-term interest rates would decline over the remainder of 2019, we, among other actions, unwound our fixed-to-floating rate swaps and purchased an interest rate floor in an effort to better position our balance sheet for a falling rate environment. In the event that interest rates do not change in the manner that we anticipate at the times we institute our hedging strategies or at the pace that we anticipated, such transactions may materially and adversely affect our results of operations.

Hedging creates certain risks for us, including the risk that the other party to the hedge transaction will fail to perform (counterparty risk, which is a type of credit risk), and the risk that the hedge will not fully protect us from loss as intended (hedge failure risk). Unexpected counterparty failure or hedge failure could have a significant adverse effect on our liquidity and earnings.

We have a concentration of credit exposure to borrowers in certain industries, and we also target small to medium-sized businesses.

We have meaningful credit exposures to borrowers in certain businesses, including commercial and residential building lessors, new home builders and hotel and motel operators. These industries experienced adversity during 2008 through 2010 as a result of sluggish economic conditions, and, as a result, an increased level of borrowers in these industries were unable to perform under their loan agreements with us, or suffered loan downgrades which negatively impacted our results of operations. If the economic environment in our markets weakens in 2020 or beyond, these industry or other concentrations could result in increased deterioration in credit quality, past dues, loan charge offs and collateral value declines, which could cause our results of operations and financial condition to be negatively impacted. Furthermore, any of our large credit exposures that deteriorate unexpectedly could cause us to have to make significant additional loan loss provisions, negatively impacting our results of operations and financial condition.

A substantial focus of our marketing and business strategy is to serve small to medium-sized businesses in our market areas. As a result, a relatively high percentage of our loan portfolio consists of commercial loans primarily to small to medium-sized businesses. At December 31, 2019, our commercial and industrial loans accounted for approximately 31.8% of our total loans. Additionally, approximately 34.6% of our commercial real-estate mortgage loans at December 31, 2019 are owner-occupied commercial real estate loans, which are loans to businesses secured by the businesses' real estate. We expect to seek to expand the amount of these two types of loans in our portfolio during 2020. During periods of lower economic growth or challenging economic periods, small to medium-sized businesses may be impacted more severely and more quickly than larger businesses. Consequently, the ability of such businesses to repay their loans may deteriorate, and in some cases this deterioration may occur quickly, which would adversely impact our results of operations and financial condition.

As a result of our recent acquisitions and our organic growth in our legacy markets as well as our revaluation of deferred tax assets and recognized investment securities losses following the passage of the Tax Cuts and Jobs Act during the fourth quarter of 2017, our level of commercial real estate loans increased markedly from approximately 190% of Pinnacle Bank's total risk-based capital as of December 31, 2014 to approximately 268% of Pinnacle Bank's total risk-based capital as of December 31, 2014 to approximately 268% of Pinnacle Bank's total risk-based capital as of December 31, 2019. Our issuance of the 4.13% Fixed-to-Floating Rate Subordinated Notes due in 2029 in September 2019 contributed to a decline of such percentage from 277.7% at December 31, 2018 to 268.3% at December 31, 2019. If our level of commercial real estate loans were to exceed regulatory guidelines, our ability to grow our loan portfolio in line with our targets may be negatively impacted if we don't increase our capital levels and it may be more difficult to secure any required regulatory approvals necessary to execute on our expansion strategy without increasing our capital levels.

The percentage of real estate construction and development loans in our loan portfolio was approximately 12.3% of total loans at December 31, 2019 and approximately 83.6% of Pinnacle Bank's total risk-based capital. These loans make up approximately 4% of our non-performing loans at December 31, 2019. This type of lending is generally considered to have relatively high credit risks because the principal is concentrated in a limited number of loans with repayment dependent on the successful completion and operation of the related real estate project. Real estate industry pricing dynamics in the geographical markets in which we operate can vary from year to year, and with respect to construction, can vary between project funding and project completion. Asset values to which we underwrite loans can fluctuate from year to year and impact collateral values and the ability of our borrowers to repay their loans. Like regulatory guidelines on commercial real estate loans, federal regulators have issued guidance that imposes additional restrictions on banks with construction and development loans in excess of 100% of total risk-based capital. If our level of these loans was to exceed these guidelines, our ability to make additional loans in this segment would be limited.

Weakness in residential real estate market prices as well as demand could result in price reductions in home and land values adversely affecting the value of collateral securing some of the construction and development loans that we hold. Should we experience the return of adverse economic and real estate market conditions similar to those we experienced from 2008 through 2010 we may again experience increases in non-performing loans and other real estate owned, increased losses and expenses from the management and disposition of non-performing assets, increases in provision for loan losses, and increases in operating expenses as a result of the allocation of management time and resources to the collection and work out of loans, all of which would negatively impact our financial condition and results of operations.

We make loans to portfolio companies of private equity firms and other loans that qualify as highly leveraged transactions. In certain instances these loans may deteriorate and that deterioration may occur quickly. If the private equity sponsor is unwilling or unable to provide necessary support we may suffer losses on these loans that could materially and adversely affect our results of operations.

Our ability to grow our loan portfolio may be limited by, among other things, economic conditions, competition within our market areas, the timing of loan repayments, our ability to grow our core deposits, our ability to hire experienced bankers and seasonality.

Our ability to continue to improve our results of operations is dependent upon, among other things, growing our loan portfolio. While we believe that our strategy to grow our loan portfolio is sound and our growth targets are achievable over an extended period of time, competition within our market areas is significant, particularly for borrowers whose businesses were less negatively impacted by the challenging economic conditions of the recession. We compete with both large regional and national financial institutions, who are sometimes able to offer more attractive interest rates and other financial terms than we choose to offer, and smaller community-based financial institutions who seek to offer a similar level of service to that which we offer. This competition can make loan growth challenging, particularly if we are unwilling to price loans at levels that would cause unacceptable levels of compression of our net interest margin or if we are unwilling to structure a loan in a manner that we believe results in a level of risk to us that we are not willing to accept.

Our ability to grow our loan portfolio is also dependent on our ability to fund loan growth. We primarily seek to fund our loan growth through stable, core deposits, but at times our ability to attract core deposits in amounts sufficient to fund our loan growth has been limited by competitive pressures in our markets and our business model that focuses principally on serving small to medium-sized businesses and their owners rather than a broad retail distribution strategy. As a result, at times our funding sources have consisted of greater amounts of non-core funding.

Larger banks, with a more developed retail footprint, and non-banks, who are able to operate with greater flexibility and lower cost structures due to less regulatory oversight, are better able to attract lower-cost retail deposits than we can, which at times causes us to utilize a larger percentage of noncore funding to fund our loan growth. If we are unable to attract core deposits at sufficient levels to fund our loan growth and our percentage of noncore funding rises to levels that approach our policy limits, we may need to modify our growth plans, liquidate certain assets, participate loans to correspondents or execute other actions to allow for us to return to an acceptable level of noncore funding within a reasonable amount of time, any one of which actions could adversely affect our results of operations, particularly during periods of time when our net interest margin is experiencing compression. Moreover, loan growth throughout the year can fluctuate due in part to seasonality of the businesses of our borrowers and potential borrowers and the timing on loan repayments, particularly those of our borrowers with significant relationships with us, resulting from, among other things, excess levels of liquidity.

Much of our organic loan growth that we have experienced in recent years (and a key part of our loan growth strategy in 2020 and beyond) was the result not of strong loan demand but rather of our ability to attract experienced financial services professionals who have been able to attract customers from other financial institutions. Inability to retain these key personnel (including key personnel of the businesses we have acquired) or to continue to attract experienced lenders with established books of business (including, in either case, as a result of competitive compensation and other hiring and retention pressures), at all or at the pace we have anticipated, could negatively impact our growth because of the loss of these individuals' skills and customer relationships and/or the potential difficulty of promptly replacing them. Moreover, if these advisors we hire are unable to cause their customers to move their relationships to us in the time periods that we are targeting or at all, or if we are unable to retain such business, our loan growth may be negatively affected, which could have a material adverse effect on our results of operations and financial condition.

Negative developments in the U.S. and local economy may adversely impact our results in the future.

Our financial performance is highly dependent on the business environment in the markets where we operate and in the U.S. as a whole. Unfavorable or uncertain economic and market conditions can be caused by declines in economic growth, business activity, investor or business confidence, consumer sentiment, limitations on the availability or increases in the cost of credit and capital, increases in inflation or interest rates, natural disasters, international trade disputes and retaliatory tariffs, terrorist attacks, global pandemics, acts of war, or a combination of these or other factors. Economic conditions in the markets in which we operate deteriorated significantly between early 2008 and the middle of 2010. These challenges manifested themselves primarily in the form of increased levels of provisions for loan losses and other real estate expense related to declining collateral values in our real estate loan portfolio and increased costs associated with our portfolio of other real estate owned. A worsening of business and economic conditions generally or specifically in the principal markets in which we conduct business could have adverse effects, including the following:

- a decrease in deposit balances or the demand for loans and other products and services we offer;
- an increase in the number of borrowers who become delinquent, file for protection under bankruptcy laws or default on their loans or other obligations to us, which could lead to higher levels of nonperforming assets, net charge-offs and provisions for credit losses;
- a decrease in the value of loans and other assets secured by real estate;
- a decrease in net interest income from our lending and deposit gathering activities;

• an increase in competition resulting from financial services companies.

Although economic conditions have strengthened in most of our markets in recent periods and we have focused our efforts on growing our earning assets, we believe that it is possible we will continue to experience an uncertain and volatile economic environment during 2020, including issues of national security, health crises around the world, prolonged international trade disputes and political uncertainties surrounding the presidential election in 2020. There can be no assurance that these conditions will improve in the near term or that conditions will not worsen. Such conditions could adversely affect our business, financial condition, and results of operations.

In addition, over the last several years, the federal government has shut down periodically, in some cases for prolonged periods. It is possible that the federal government may shut down again in the future. If a prolonged government shutdown occurs, it could significantly impact business and economic conditions generally or specifically in our principal markets, which could have a material adverse effect on our results of operations and financial condition.

Our operations are principally geographically concentrated in certain markets in the southeastern United States, and changes in local economic conditions impact our profitability.

A significant percentage of our borrowers are situated in various MSAs in Tennessee, North Carolina, South Carolina and Virginia in which we operate. Our success significantly depends upon the growth in population, income levels, deposits, employment levels and housing starts in our markets, along with the continued attraction of business ventures to these areas, and our profitability is impacted by the changes in general economic conditions in these markets and other markets in which collateral securing our loans is located. We cannot assure you that economic conditions, including loan demand, in these markets will not deteriorate during 2020 or thereafter, and upon any deterioration, we may not be able to grow our loan portfolio in line with our expectations and the ability of our customers to repay their loans to us may be negatively impacted and our financial condition and results of operations could be negatively and materially impacted.

Our business may suffer if there are significant declines in the value of real estate.

The market value of real estate can fluctuate significantly in a short period of time as a result of market conditions in the geographic area in which the real estate is located. If the value of the real estate serving as collateral for our loan portfolio were to decline materially, a significant part of our loan portfolio could become under-collateralized. If the loans that are collateralized by real estate become troubled during a time when market conditions are declining or have declined, we may not be able to realize the value of the security anticipated when we originated the loan, which in turn could have an adverse effect on our allowance and provision for loan and lease losses and our financial condition, results of operations and liquidity.

Most of our foreclosed assets are comprised of real estate properties. We carry these properties at their estimated fair values less estimated selling costs. While we believe the carrying values for such assets are reasonable and appropriately reflect current market conditions, there can be no assurance that the values of such assets will not further decline prior to sale or that the amount of proceeds realized upon disposition of foreclosed assets will approximate the carrying value of such assets. If the proceeds from any such dispositions are less than the carrying value of foreclosed assets, we will record a loss on the disposition of such assets, which in turn could have an adverse effect on our results of operations.

Compared to national financial institutions, we are less able to spread the risks of unfavorable local economic conditions across a large number of diversified economies. Moreover, we cannot give any assurance that we will benefit from any market growth or return of more favorable economic conditions in our primary market areas if they do occur.

If our allowance for loan losses is not sufficient to cover losses inherent in our loan portfolio, our results of operations and financial condition will be negatively impacted.

If loan customers with significant loan balances individually or in the aggregate fail to repay their loans, our results of operations, financial condition and capital levels will suffer. We make various assumptions and judgments about the expected losses in our loan portfolio, including the creditworthiness of our borrowers and the value of any collateral securing the loans. Utilizing objective and subjective factors, we maintain an allowance for loan losses, established through a provision for loan losses charged to expense, to cover our estimate of the current expected credit losses in our loan portfolio. In determining the size of this allowance, we utilize estimates based on analyses of volume and types of loans, internal loan classifications, trends in classifications, volume and trends in delinquencies, nonaccruals and charge-offs, loss experience of various loan categories, national and local economic conditions, industry and peer bank loan quality indications, and other pertinent factors and information. Actual losses are difficult to forecast, especially if those losses stem from factors beyond our historical experience or are otherwise inconsistent with our credit quality assessments. If our assumptions are inaccurate, our current allowance may not be sufficient to cover potential loan losses, and additional provisions may be necessary which would negatively impact our results of operations and financial condition.

In addition, federal and state regulators periodically review our loan portfolio and may require us to increase our allowance for loan losses or recognize loan charge-offs. Their conclusions about the quality of a particular borrower or our entire loan portfolio may be different than ours. Any increase in our allowance for loan losses or loan charge offs as required by these regulatory agencies could have a negative effect on our results of operations and financial condition. Moreover, additions to the allowance may be necessary based on changes in economic and real estate market conditions, new information regarding existing loans, identification of additional problem loans, accounting rule changes (like those related to the Financial Accounting Standards Board's rules regarding accounting for current expected credit losses that became effective on January 1, 2020) and other factors, both within and outside of our management's control. These additions may require increased provision expense which would negatively impact our results of operations and financial condition.

Liquidity risk could impair our ability to fund our operations and jeopardize our financial condition.

Liquidity represents an institution's ability to provide funds to satisfy demands from depositors, borrowers and other creditors by either converting assets into cash or accessing new or existing sources of incremental funds. Liquidity risk arises from the possibility that we may be unable to satisfy current or future funding requirements and needs.

The objective of managing liquidity risk is to ensure that our cash flow requirements resulting from depositor, borrower and other creditor demands as well as our operating cash needs, are met, and that our cost of funding such requirements and needs is reasonable. We maintain an asset/liability and interest rate risk policy and a liquidity and funds management policy, including a contingency funding plan that, among other things, include procedures for managing and monitoring liquidity risk. Generally we rely on deposits, repayments of loans and cash flows from our investment securities as our primary sources of funds. Our principal deposit sources include consumer, commercial and public funds customers in our markets. We have used these funds, together with wholesale deposit sources such as brokered deposits, along with Federal Home Loan Bank of Cincinnati ("FHLB Cincinnati") advances, federal funds purchased and other sources of short-term and long-term borrowings, including subordinated indebtedness, to make loans, acquire investment securities and other assets and to fund continuing operations.

An inability to maintain or raise funds in amounts necessary to meet our liquidity needs could have a substantial negative effect, individually or collectively, on Pinnacle Financial's and Pinnacle Bank's liquidity. Our access to funding sources in amounts adequate to finance our activities, or on terms attractive to us, could be impaired by factors that affect us specifically or the financial services industry in general. For example, factors that could detrimentally impact our access to liquidity sources include a decrease in the level of our business activity due to a market downturn or adverse regulatory action against us, increased levels of indebtedness, a reduction in our published credit ratings, any damage to our reputation or any other decrease in depositor or investor confidence in our creditworthiness and business. Our access to liquidity could also be impaired by factors that are not specific to us, such as severe volatility or disruption of the financial markets or negative views and expectations about the prospects for the financial services industry as a whole. Any such event or failure to manage our liquidity effectively could affect our competitive position, increase our borrowing costs and the interest rates we pay on deposits, limit our access to the capital markets, cause our regulators to criticize our operations and have a material adverse effect on our results of operations or financial condition.

Deposit levels may be affected by a number of factors, including demands by customers, rates paid by competitors (particularly as it relates to brokered deposits and other noncore deposits), general interest rate levels, returns available to customers on alternative investments, general economic and market conditions and other factors. Loan repayments are a relatively stable source of funds but are subject to the borrowers' ability to repay loans, which can be adversely affected by a number of factors including changes in general economic conditions, adverse trends or events affecting business industry groups or specific businesses, declines in real estate values or markets, business closings or lay-offs, inclement weather, natural disasters, prolonged government shutdowns and other factors. Furthermore, loans generally are not readily convertible to cash. Accordingly, we may be required from time to time to rely on secondary sources of liquidity to meet growth in loans, deposit withdrawal demands or otherwise fund operations. Such secondary sources include FHLB Cincinnati advances, brokered deposits, secured and unsecured federal funds lines of credit from correspondent banks, Federal Reserve borrowings and/or accessing the equity or debt capital markets. As our reliance on non-core funding (particularly brokered time deposits) increased in 2019, our liquidity risk has similarly increased.

These noncore funding sources can be more rate sensitive than core deposits, and the availability of these noncore funding sources is subject to broad economic conditions, in some instances regulation, and to investor assessment of our financial strength and, as such, the cost of funds may fluctuate significantly and/or the availability of such funds may be restricted, thus impacting our net interest income, our immediate liquidity and/or our access to additional liquidity. We have somewhat similar risks to the extent high balance core deposits exceed the amount of deposit insurance coverage available.

In the event that our funding strategies call for the use of brokered deposits, there can be no assurance that such sources will be available, or will remain available, or that the cost of such funding sources will be reasonable, or that we will be able to offer competitive rates to retain these deposits upon their maturity (particularly in a down rate or low rate environment). Additionally, should we no longer be considered well-capitalized, our ability to access new brokered deposits or retain existing brokered deposits could be affected by market conditions, regulatory requirements or a combination thereof, which could result in most, if not all, brokered deposit sources being unavailable. The inability to utilize brokered deposits as a source of funding could have an adverse effect on our results of operations, financial condition and liquidity.

We anticipate we will continue to rely primarily on deposits, loan repayments, and cash flows from our investment securities to provide liquidity. Additionally, where necessary, the secondary sources of borrowed funds and brokered deposits described above will be used to augment our primary funding sources. If we are unable to access any of these secondary funding sources when needed, or retain these funding sources upon maturity, we might be unable to meet our customers' or creditors' needs, which would adversely affect our financial condition, results of operations, and liquidity.

The performance of our investment securities portfolio is subject to fluctuation due to changes in interest rates and market conditions, including credit deterioration of the issuers of individual securities.

Changes in interest rates can negatively affect the performance of most of our investment securities. Interest rate volatility can reduce unrealized gains or increase unrealized losses in our portfolio. Interest rates are highly sensitive to many factors including monetary policies, domestic and international economic, social and political issues, including trade disputes and global health pandemics, and other factors beyond our control. Fluctuations in interest rates can materially affect both the returns on and market value of our investment securities. Additionally, actual investment income and cash flows from investment securities that carry prepayment risk, such as mortgage-backed securities and callable securities, may materially differ from those anticipated at the time of investment or subsequently as a result of changes in interest rates and market conditions.

Our investment securities portfolio consists of several securities whose trading markets are "not active." As a result, we utilize alternative methodologies for pricing these securities that include various estimates and assumptions. There can be no assurance that we can sell these investment securities at the price derived by these methodologies, or that we can sell these investment securities at all, which could have an adverse effect on our financial condition, results of operations and liquidity.

We monitor the financial position of the various issuers of investment securities in our portfolio, including each of the state and local governments and other political subdivisions where we have exposure. To the extent we have securities in our portfolio from issuers who have experienced a deterioration of financial condition, or who may experience future deterioration of financial condition, the value of such securities may decline and could result in an other-than-temporary impairment charge, which could have an adverse effect on our financial condition, results of operations and liquidity.

In addition, from time to time we may restructure portions of our investment securities portfolio as part of our asset liability management strategies, and may incur losses, which may be material, in connection with any such restructuring.

Implementation of CECL will change the way we calculate our Allowance for Loan Losses.

The FASB adopted a new accounting standard that became effective for Pinnacle Bank beginning January 1, 2020. This standard, referred to as current expected credit loss, or CECL, requires financial institutions to determine periodic estimates of lifetime expected credit losses on loans, and recognize the expected credit losses through provision for credit losses. CECL changed the current method of provisioning for loan losses that are probable, which has required us to increase our allowance for loan losses, and is increasing the types and amounts of data we need to collect and review to determine the appropriate level of our allowance for loan losses. In addition, the adoption of CECL may result in more volatility in the level of our allowance for loan losses. An increase, to the extent material, in our allowance for loan losses or expenses incurred to determine the appropriate level of the allowance for loan losses could have a material adverse effect on our capital levels, financial condition and results of operations. A reduction in our capital levels could subject us to a variety of enforcement remedies available to the federal regulatory authorities and would negatively impact our ability to pursue acquisitions or other expansion opportunities if we are unable to satisfactorily raise additional capital.

A decline in our stock price or expected future cash flows, or a material adverse change in our results of operations or prospects, could result in impairment of our goodwill.

A significant and sustained decline in our stock price and market capitalization below book value, a significant decline in our expected future cash flows, a significant adverse change in the business climate, slower growth rates or other factors could result in impairment of our goodwill. At December 31, 2019, our goodwill and other identifiable intangible assets totaled approximately \$1.9 billion. If we were to conclude that a write-down of our goodwill is necessary, then the appropriate charge would likely cause a material loss. Any significant loss would adversely impact the capacity of Pinnacle Bank to pay dividends to Pinnacle Financial without seeking prior regulatory approval, which could adversely affect Pinnacle Financial's ability to pay required interest payments on its outstanding indebtedness or to continue to pay dividends to its shareholders.

Our accounting estimates and risk management processes rely on analytical and forecasting models and tools.

The processes we use to estimate expected credit losses, calculate our allowance for loan losses and measure the fair value of financial instruments, as well as the processes used to estimate the effects of changing interest rates and other measures of our financial condition and results of operations, depend upon the use of analytical and forecasting models and tools. These models and tools reflect assumptions that may not be accurate, particularly in times of market stress or other unforeseen circumstances. Even if these assumptions are accurate, the models and tools may prove to be inadequate or inaccurate because of other flaws in their design or their implementation. Any such failure in our analytical or forecasting models and tools could have a material adverse effect on our business, financial condition and results of operations.

Our selection of accounting policies and methods may affect our reported financial results.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Our management must exercise judgment in selecting and applying many of these accounting policies and methods so they comply with GAAP and reflect management's judgment of the most appropriate manner to report our financial condition and results of operations. In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which may be reasonable under the circumstances, yet which may result in our reporting materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to presenting our financial condition and results of operations. They require management to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. Because of the uncertainty of estimates involved in these matters, we may be required to do one or more of the following: significantly increase the allowance for loan losses or sustain loan losses that are significantly higher than the reserve provided; recognize significantly increase our accrued tax liability. Any of these could have a material adverse effect on our business, financial condition or results of operations. For a discussion of our critical accounting policies, see "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Estimates" included elsewhere in this Annual Report on Form 10-K.

Changes to LIBOR may adversely affect the holder of, the market value of, and the interest expense paid on our subordinated notes and our subordinated debentures and related trust preferred securities, and may affect certain of our loans.

On July 27, 2017, the Financial Conduct Authority, which regulates LIBOR, announced that it intends to stop persuading or compelling banks to submit rates for the calculation of LIBOR to the LIBOR administrator after 2021. The announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. It is impossible to predict whether and to what extent banks will continue to provide LIBOR submissions to the LIBOR administrator, whether LIBOR will cease to be published or supported before or after 2021 or whether any additional reforms to LIBOR may be enacted in the United Kingdom or elsewhere; however, it does appear highly likely that LIBOR will be discontinued or modified by 2021. At this time, no consensus exists as to what rate or rates may become accepted alternatives to LIBOR and it is impossible to predict the effect of any such alternatives on the value of securities based on LIBOR such as our subordinated notes and our subordinated debentures and related trust preferred securities.

Uncertainty as to the nature of such potential changes, alternative reference rates, the replacement or disappearance of LIBOR or other reforms may adversely affect the value of and the return on our subordinated notes and our subordinated debentures and related trust preferred securities, as well as the interest we pay on those securities.

At December 31, 2019, approximately 36.3% of our total loan portfolio was indexed to 30-day, 90-day, 180-day and one-year LIBOR. Many of our loan agreements that are indexed to LIBOR include provisions that do not require us to default to any alternative index recommendations but instead allow us, in our sole discretion, to designate an alternative interest rate index in the event that LIBOR should become unavailable or unstable. While we believe these provisions within our loan agreements address the potential future unavailability of LIBOR, there can be no assurance that such provisions will be effective or that they, or our actions in this respect, will not be challenged by our borrowers.

BHG's results of operations have become a larger portion of our results of operations, and challenges in BHG's business that negatively affect its results would now more significantly impact our results.

Pinnacle Financial and Pinnacle Bank collectively hold a 49% interest in BHG. While we have a significant stake in BHG, are entitled to designate two members of BHG's five person board of managers and in some instances have protective rights to block BHG from engaging in certain activities, including, until March 1, 2020, a sale of BHG (following March 1, 2020, the other managers can approve a sale of BHG without our consent), the other managers and members of BHG may make most decisions regarding BHG's and its subsidiaries' operations without our consent or approval. Any sale of all or a portion of our interest in BHG would adversely affect our recurring noninterest income. Moreover, there are certain limitations on our ability to sell our interest in BHG without first offering BHG and the other members a right of first refusal, and we are prohibited from transferring any portion of our interest without the consent of the other members of BHG prior to March 1, 2021, other than transfers in connection with an acquisition of Pinnacle Financial or Pinnacle Bank or as a result of a change in applicable law that forces Pinnacle Financial and/or Pinnacle Bank to divest Pinnacle Financial's or Pinnacle Bank's ownership interests in BHG.

A significant portion of BHG's revenue (and correspondingly our interest in any of BHG's net profits) comes from the sale of loans originated by BHG to community banks. BHG, and its subsidiaries, also retain loans that they originate on their balance sheet and earn interest income on those loans. Recently, BHG has been retaining more of the loans that it originates on its balance sheet. This practice requires more external funding of BHG's business than the historical practice of routinely selling loans to other financial institutions and will likely increase BHG's funding costs. It also increases BHG's exposure to credit losses in its portfolio, which losses could materially and adversely impact BHG's results of operations and Pinnacle Financial's and Pinnacle Bank's interest in BHG's net profits. If BHG is unable to secure the necessary funding for this change in its business model, it may be required to return to a business model that focuses more on a gain on sale approach that could negatively impact BHG's results and our noninterest income contributed by our investment in BHG.

Future contributions to our earnings from BHG and its subsidiaries will require that they continue to grow their business and increase the amount of loans that they are able to originate and sell, if not retained on BHG's or a subsidiary's balance sheet. In the event that BHG's loan growth slows over historical levels or its loan sales decrease (including but not limited to as a result of regulatory restrictions on banks that are the principal purchasers of BHG's loans), its results of operations and our noninterest income would be adversely affected. BHG currently operates in most states without the need for a permit or any other license as its loans are principally commercial, business purpose loans that don't trigger the need for licensure. In the event that BHG or its subsidiaries were required to register or become licensed in any state in which they operate, including as a result of their expanding into consumer lending or expanding into other lending areas like patient financing, or regulations are adopted that seek to limit BHG's or its subsidiaries' ability to operate in any jurisdiction or that seek to limit the amounts of interest that BHG can charge on its loans, BHG's results of operations (and Pinnacle Financial's and Pinnacle Bank's interest in BHG's net profits) could be materially and adversely affected.

Recently, BHG has expanded its operations to include commercial lending to other professional service firms like attorneys, accountants and others. Through subsidiaries that it owns, it also has expanded into patient financing, which involves making loans to individuals to finance medical expenses, particularly those where patients have high deductible health plans. BHG may further expand its business into other types of lending, which may not be as profitable as BHG's current lending products or successful at all. These new product lines may involve more risk than BHG's historical business and BHG's loss rates may increase when compared to historical levels. Moreover, BHG and its subsidiaries will likely face greater regulatory scrutiny in certain of these lines of business that may increase BHG's compliance costs and its risk of regulatory scrutiny. Failure to realize the expected revenue increases and/or other projected benefits from, and any increased compliance costs and regulatory scrutiny in connection with, any such expansion could have a negative impact on BHG's business, which would negatively impact our interest in BHG's profits.

BHG's business is also subject to increased scrutiny by bank regulatory agencies as a result of our investment. The FDIC has published guidance related to the operation of marketplace lenders and banks' business relationships with such lenders and other third parties in which banks are required to exercise increased oversight and ongoing monitoring and other responsibility for such third parties' compliance with applicable regulatory guidance and requirements. As a result, we are subject to enhanced responsibility for and risk related to BHG and our relationship with it. BHG's compliance costs have increased since our investment and are likely to continue to increase, including as a result of its new product lines, and its loan yields may be negatively impacted, which would negatively impact its results of operations and Pinnacle Financial's and Pinnacle Bank's interest in BHG's net profits. If banks that are examined by the FDIC became restricted in their ability to buy loans originated by BHG, BHG's business would be negatively impacted, which would negatively impact our interest in BHG's profits.

Because of our ownership of a portion of BHG, BHG is limited in the types of activities in which it may engage. Were BHG to desire to expand its operations into areas that are not permissible for an entity owned by a state member bank like Pinnacle Bank, it may need to do so through separate entities in which we do not have an ownership interest. Were these businesses to be more profitable than BHG's core business or require BHG's management's attention in ways that are detrimental to BHG, our investment in BHG may be negatively impacted.

Implementation of the various provisions of the Dodd-Frank Act has increased our operating costs and may continue to do so or otherwise have a material adverse effect on our business, financial condition or results of operations.

Since the 2008 financial crisis, financial institutions generally have been subjected to increased regulation and scrutiny from federal regulatory authorities. The U.S. Congress responded to the financial crisis by enacting a variety of statutes, in particular the Dodd-Frank Act, which contained numerous far-reaching changes and reforms for the financial services industry and directs federal regulatory agencies to issue regulations to implement these reforms. The Dodd-Frank Act also restructured the regulation of depository institutions, including the creation of the CFPB to administer consumer protection and fair lending laws, a function that was formerly performed by the depository institution regulators. The provisions of the Dodd-Frank Act and the rules adopted to implement those provisions have made far-reaching changes to the regulatory framework under which we operate and have had, and may continue to have, a material impact on our operations, particularly through increased regulatory burdens and compliance costs.

The Dodd-Frank Act and its implementing regulations impose various additional requirements on bank holding companies with \$10 billion or more in total assets, including compliance with portions of the Federal Reserve's enhanced prudential oversight requirements. In addition, banks with \$10 billion or more in total assets are primarily examined by the CFPB with respect to various federal consumer financial protection laws and regulations. Previously, Pinnacle Bank was subject to regulations adopted by the CFPB, but the FDIC was primarily responsible for examining our compliance with consumer protection laws and those CFPB regulations. As an agency with evolving regulations and practices, there is uncertainty as to how the CFPB's examination and regulatory authority might impact our business. Should the CFPB take issue with our operations or determine that we are not complying with applicable rules and regulations, we may incur additional costs (including personnel costs) which may be significant to comply with those rules and regulations for which the CFPB has oversight responsibility or fines for noncompliance.

Beginning on July 1, 2017 we became subject to the Durbin Amendment promulgated under the Dodd-Frank Act. Under the Durbin Amendment, interchange fees for debit card transactions are capped at \$0.21 plus five basis points (plus \$0.01 for fraud loss). This limitation on interchange fees has adversely impacted our results of operations and will continue to do so.

Ongoing compliance with our regulatory obligations has resulted in (any may continue to cause us to incur) further increased regulatory compliance costs, fee reductions and restrictions on activities in which we may have otherwise engaged, any of which could have a material adverse effect on our business, financial condition or results of operations. Moreover, our failure to comply with these or other regulations could result in regulatory enforcement actions against us or make it more difficult to receive any required regulatory approvals necessary to execute on our growth strategy, each of which could have a material adverse effect on our results of operations, business or financial condition.

Future changes to the laws and regulations applicable to the financial industry, if enacted or adopted, may impact our profitability or financial condition, require more oversight or change certain of our business practices, and expose us to additional costs, including increased compliance costs. We cannot predict whether any such legislative or regulatory changes, including those that could benefit our business and results of operations, will be enacted or adopted or, if they are, whether they will have a material effect on us.

Changes to capital requirements for bank holding companies and depository institutions that became effective January 1, 2015 and that are now fully phased in may negatively impact Pinnacle Financial's and Pinnacle Bank's results of operations.

In July 2013, the Federal Reserve and the FDIC approved final rules that substantially amended the regulatory risk-based capital rules applicable to Pinnacle Bank and Pinnacle Financial. The final rules, which became effective on January 1, 2015, implement the Basel III regulatory capital reforms and changes required by the Dodd-Frank Act.

Under these rules, the leverage and risk-based capital ratios of bank holding companies may not be lower than the leverage and riskbased capital ratios for insured depository institutions. The final rules include new minimum risk-based capital and leverage ratios. Moreover, these rules refine the definition of what constitutes "capital" for purposes of calculating those ratios, including the definitions of Tier 1 capital and Tier 2 capital. The minimum capital level requirements now applicable to bank holding companies and banks subject to the rules are: (i) a CET1 capital ratio of 4.5%; (ii) a Tier 1 capital ratio of 6%; (iii) a total capital ratio of 8%; and (iv) a Tier 1 leverage ratio of 4% for all institutions. The rules also establish a "capital conservation buffer" of 2.5% (that is now fully phased in as of January 1, 2019) above the new regulatory minimum risk-based capital ratios, and result in the following minimum ratios now that the capital conservation buffer is fully phased in: (i) a CET1 capital ratio of 7%, (ii) a Tier 1 capital ratio of 8.5%, and (iii) a total capital ratio of 10.5%. We will be subject to limitations on paying dividends, engaging in share repurchases and paying discretionary bonuses if our capital levels fall below these minimums plus the buffer amounts. These limitations establish a maximum percentage of eligible retained income that could be utilized for such actions.

Under these rules, Tier 1 capital generally consists of common stock (plus related surplus) and retained earnings, minority interest in the equity accounts of consolidated subsidiaries, and noncumulative preferred stock and related surplus, less goodwill and other specified intangible assets and other regulatory deductions. CET1 capital generally consists of common stock, retained earnings and paid in capital. CET1 capital is reduced by goodwill, certain intangible assets, net of associated deferred tax liabilities, deferred tax assets that arise from tax credit and net operating loss carryforwards, net of any valuation allowance, and certain other items specified in the Basel III capital rules. The Basel III capital rules also provide for a number of deductions from and adjustments to CET1 capital. These include, for example, the requirement that mortgage servicing rights, deferred tax assets arising from temporary differences that could not be realized through net operating loss carrybacks and significant investments in non-consolidated financial entities be deducted from CET1 capital to the extent that any one such category exceeds 10% of CET1 capital or all such categories in the aggregate exceed 15% of CET1 capital.

Tier 2 capital generally consists of perpetual preferred stock and related surplus not meeting the Tier 1 capital definition, qualifying subordinated debt, qualifying mandatorily convertible debt securities, and a limited amount of loan loss reserves. Cumulative preferred stock and trust preferred securities issued after May 19, 2010, no longer qualify as Tier 1 capital, but such securities issued prior to May 19, 2010, including in the case of bank holding companies with less than \$15.0 billion in total assets at that date, trust preferred securities issued prior to that date, continue to count as Tier 1 capital subject to certain limitations. Following the merger with BNC and as a result of that merger, our total assets were in excess of \$15.0 billion which caused the subordinated debentures we and BNC issued related to trust preferred offerings to cease to qualify as Tier 1 capital under applicable banking regulations. Though these securities no longer qualify as Tier 1 capital, we believe these subordinated debentures continue to qualify as Tier 2 capital. Subordinated notes we have previously issued also qualify as Tier 2 capital subject to certain limitations. Under applicable regulatory guidelines, beginning on the fifth year from the maturity date of a Tier 2 capital instrument, the portion of the instrument that is able to be counted as Tier 2 capital is reduced on a pro rata basis over that five-year period. We may need to increase the level of Tier 1 capital we (or Pinnacle Bank) maintains through issuance of common stock or noncumulative perpetual preferred stock, which could cause dilution to our existing common shareholders. Similarly, as existing Tier 2 capital instruments approach maturity, we may seek to refinance those instruments or issue or incur additional indebtedness to support our and Pinnacle Bank's capital levels.

The final rules allow banks and their holding companies with less than \$250 billion in assets a one-time opportunity to opt-out of a requirement to include unrealized gains and losses in accumulated other comprehensive income in their capital calculation. Both Pinnacle Financial and Pinnacle Bank opted-out of this requirement.

The application of more stringent capital requirements for Pinnacle Financial and Pinnacle Bank, like those adopted to implement the Basel III reforms or future reforms, could, among other things, result in lower returns on invested capital, require the raising of additional capital, particularly in the form of common stock, make it more difficult for us to receive regulatory approvals related to our growth initiatives and result in regulatory actions if we were to be unable to comply with such requirements. Furthermore, the imposition of liquidity requirements in connection with the implementation of Basel III either because we became subject to those requirements directly or because our regulators seek to propose additional on-balance sheet liquidity requirements on us, could result in our having to lengthen the term of our funding, restructure our business models and/or increase our holdings of liquid assets, which could adversely impact our results of operations.

Implementation of changes to asset risk weightings for risk-based capital calculations, items included or deducted in calculating regulatory capital and/or additional capital conservation buffers could result in management modifying its business strategy and could limit our ability to make distributions, including paying dividends or buying back shares.

Our ability to maintain required capital levels and adequate sources of funding and liquidity could be impacted by changes in the capital markets and deteriorating economic and market conditions.

Federal and state bank regulators require Pinnacle Financial and Pinnacle Bank to maintain adequate levels of capital to support operations. At December 31, 2019, Pinnacle Bank's regulatory capital ratios were at "well-capitalized" levels under regulatory guidelines. Growth in assets (either organically or as a result of acquisitions) at rates in excess of the rate at which our capital is increased through retained earnings will reduce our capital ratios unless we continue to increase capital. Failure by us to meet applicable capital guidelines or to satisfy certain other regulatory requirements could subject us to a variety of enforcement remedies available to the federal regulatory authorities and would negatively impact our ability to pursue acquisitions or other expansion opportunities.

We may need to raise additional capital (including through the issuance of common or preferred stock or additional Tier 2 capital instruments) in the future to provide us with sufficient capital resources and liquidity to meet our commitments and business needs or in connection with our growth or as a result of deterioration in our asset quality. Our ability to maintain capital levels, sources of

funding and liquidity could be impacted by negative perceptions of our business or prospects, changes in the capital markets and deteriorating economic and market conditions. Pinnacle Bank is required to obtain regulatory approval in order to pay dividends to Pinnacle Financial unless the amount of such dividends does not exceed its net income for that calendar year plus retained net income for the preceding two years. Any restriction on the ability of Pinnacle Bank to pay dividends to Pinnacle Financial could impact Pinnacle Financial's ability to continue to pay dividends on its common stock or its ability to pay interest on its indebtedness.

We cannot assure you that access to capital will be available to us on acceptable terms or at all. Any occurrence that may limit our access to the capital markets may materially and adversely affect our capital costs and our ability to raise capital and/or debt and, in turn, our liquidity. If we cannot raise additional capital when needed, our ability to expand through internal growth or acquisitions or to continue operations could be impaired.

We currently invest in bank owned life insurance ("BOLI") and may continue to do so in the future.

We had \$652.7 million in general, hybrid and separate account BOLI contracts at December 31, 2019. BOLI is an illiquid long-term asset that provides tax savings because cash value growth and life insurance proceeds are not taxable, subject to certain exceptions. However, if we needed additional liquidity and converted the BOLI to cash, such transaction would be subject to ordinary income tax and applicable penalties. We are also exposed to the credit risk of the underlying securities in the investment portfolio and to the insurance carrier's credit risk (in a general account contract). If BOLI was exchanged to another carrier, additional fees would be incurred and a tax-free exchange could only be done for insureds that were still actively employed by us at that time. There is interest rate risk relating to the market value of the underlying investment securities associated with the BOLI in that there is no assurance that the market value of these securities will not decline. Investing in BOLI exposes us to liquidity, credit and interest rate risk, which could adversely affect our results of operations, financial condition and liquidity.

Our acquisitions and future expansion may result in additional risks.

From 2015 through 2017, we completed the acquisitions of CapitalMark, Magna, Avenue and BNC and made a significant investment in BHG. In 2019, we acquired Advocate Capital. We expect to continue to consider and explore opportunities to expand in our current markets and in select primarily high-growth markets located outside of Tennessee in the southern portion of the United States through additional branches and also may consider expansion within these markets through additional acquisitions of all or part of other financial institutions, including our recent expansion into the Atlanta, Georgia metro market on a de novo basis late in 2019. These types of expansions, including the Atlanta expansion, involve various risks, including:

Management of Growth. We may be unable to successfully:

- maintain loan quality in the context of significant loan growth;
- identify and expand into suitable markets;
- obtain regulatory and other approvals;
- identify and acquire suitable sites for new banking offices;
- attract sufficient deposits and capital to fund anticipated loan growth;
- recruit seasoned professionals with significant experience and established books of business;
- maintain adequate common equity and regulatory capital;
- scale our technology platform and operational infrastructure;
- avoid diversion or disruption of our existing operations or management as well as those of the acquired institution;
- maintain adequate management personnel and systems to oversee and support such growth;
- maintain adequate internal audit, loan review and compliance functions; and
- implement additional policies, internal controls, procedures and operating systems required to support such growth.

Results of Operations. There is no assurance that existing offices or future offices will maintain or achieve deposit levels, loan balances or other operating results necessary to avoid losses or produce profits. Our growth strategy necessarily entails growth in overhead expenses as we add new offices and staff. Our historical results may not be indicative of future results or results that may be achieved as we continue to evaluate opportunities to increase the number and concentration of our branch offices in our newer markets.

Development of Offices. There are considerable costs involved in opening branches (particularly those in new markets), and new branches generally do not generate sufficient revenues to offset their costs until they have been in operation for at least a year or more. Accordingly, any new branches we establish, including those we plan to establish in Atlanta, can be expected to negatively impact our earnings for some period of time until they reach certain economies of scale. The same is true for our efforts to expand in these markets with the hiring of additional seasoned professionals with significant experience in that market. Our expenses could be further

increased if we encounter delays in opening any of our new branches. We may be unable to accomplish future branch expansion plans due to a lack of available satisfactory sites, difficulties in acquiring such sites, failure or inability to receive any required regulatory approvals, increased expenses or loss of potential sites due to complexities associated with zoning and permitting processes, higher than anticipated merger and acquisition costs or other factors. Finally, we have no assurance any branch will be successful even after it has been established or acquired, as the case may be.

Regulatory and Economic Factors. Our growth and expansion plans may be adversely affected by a number of regulatory and economic developments or other events. Failure or inability to obtain required regulatory approvals, changes in laws and regulations or other regulatory developments and changes in prevailing economic conditions or other unanticipated events may prevent or adversely affect our continued growth and expansion. Such factors may cause us to alter our growth and expansion plans or slow or halt the growth and expansion process, which may prevent us from entering into or expanding in our other markets or allow competitors to gain or retain market share in our existing markets.

Infrastructure and Controls. We may not successfully implement improvements to, or integrate, our information and control systems, procedures and processes in an efficient or timely manner and may discover deficiencies in existing systems and controls. In particular, our systems, controls and procedures must be able to accommodate an increase in transaction volume and the infrastructure that comes with new products, branches, markets or any combination thereof. Thus, our growth strategy may divert management from our existing operation and may require us to incur additional expenditures to expand our administrative and operational infrastructure, which may adversely affect earnings, shareholder returns, and our efficiency ratio.

Failure to successfully address these and other issues related to our expansion in Atlanta or in any other future market could have a material adverse effect on our financial condition and results of operations, and could adversely affect our ability to successfully implement our business strategy. Also, if our growth occurs more slowly than anticipated or declines, our results of operations and financial condition could be materially adversely affected.

We may face risks with respect to future acquisitions.

When we attempt to expand our business through mergers and acquisitions (as we did from 2015 through 2017), we seek targets that are culturally similar to us, have experienced management and possess either significant market presence or have potential for improved profitability through economies of scale or expanded services. In addition to the general risks associated with our growth plans which are highlighted above, in general acquiring other banks, businesses or branches, particularly those in markets with which we are less familiar, involves various risks commonly associated with acquisitions, including, among other things:

- the time and costs associated with identifying and evaluating potential acquisition and merger targets;
- inaccuracies in the estimates and judgments used to evaluate credit, operations, culture, management and market risks with respect to the target institution;
- the time and costs of evaluating new markets, hiring experienced local management, including as a result of de novo expansion into a market such as our recent expansion into the Atlanta, Georgia metro market, and opening new bank locations, and the time lags between these activities and the generation of sufficient assets and deposits to support the significant costs of the expansion that we may incur, particularly in the first 12 to 24 months of operations;
- our ability to finance (or increase capital levels in connection with) an acquisition and possible dilution to our existing shareholders;
- the diversion of our management's attention to the negotiation of a transaction and integration of an acquired company's operations with ours;
- the incurrence of an impairment of goodwill associated with an acquisition and adverse effects on our results of operations;
- entry into new markets where we have limited or no direct prior experience;
- closing delays and increased expenses related to the resolution of lawsuits filed by our shareholders or shareholders of companies we may seek to acquire;
- the inability to receive regulatory approvals timely or at all, including as a result of community objections, or such approvals being restrictively conditional; and
- risks associated with integrating the operations, technologies and personnel of the acquired business.

Though we expect to remain principally focused on organically growing our business in our existing markets (including our new market in Atlanta) during 2020, we nonetheless may have opportunities to evaluate merger and acquisition opportunities that are presented to us in our current markets as well as other markets throughout the southern portion of the United States and conduct due diligence activities related to possible transactions with other financial institutions. As a result, merger or acquisition discussions and, in some cases, negotiations may take place and future mergers or acquisitions involving cash, debt or equity securities and related

capital raising transactions may occur at any time. Generally, acquisitions of financial institutions involve the payment of a premium over book and market values, and, therefore, some dilution of our book value and fully diluted earnings per share may occur in connection with any future transaction. Failure to realize the expected revenue increases, cost savings, increases in product presence and/or other projected benefits from an acquisition could have a material adverse effect on our financial condition and results of operations.

In addition, we may face significant competition from numerous other financial services institutions, many of which may have greater financial resources than we do, when considering acquisition opportunities, particularly in our targeted high-growth markets located outside of Tennessee. Accordingly, attractive acquisition opportunities may not be available to us. There can be no assurance that we will be successful in identifying or completing any potential future acquisitions.

An ineffective risk management framework could have a material adverse effect on our strategic planning and our ability to mitigate risks and/or losses and could have adverse regulatory consequences.

We have implemented a risk management framework to identify and 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, operational, capital, compliance, strategic and reputational risks. Our framework also includes financial, analytical, forecasting, or other modeling methodologies, which involves management assumptions and judgment. In addition, our board of directors, in consultation with management, has adopted a risk appetite statement, which sets forth certain thresholds and limits to govern our overall risk profile. However, there is no assurance that our risk management framework, including the risk metrics under our risk appetite statement, will be effective under all circumstances or that it will adequately identify, manage or mitigate any risk or loss to us. If our risk management framework is not effective, we could suffer unexpected losses and become subject to regulatory consequences, as a result of which our business, financial condition, results of operations or prospects could be materially adversely affected.

We are dependent on our information technology and telecommunications systems and third-party servicers, and systems failures, interruptions or breaches of security could have an adverse effect on our financial condition and results of operations, as well as cause legal or reputational harm.

We are dependent upon information technologies, computer systems and networks, including those maintained by us and those maintained and provided to us by third parties, to conduct operations and are reliant on technology to help increase efficiency in our business. These systems could become unavailable or impaired due to a variety of causes, including storms and other natural disasters, terrorist attacks, fires, utility outages, internal or external theft or fraud, design defects, human error, misconduct or complications or failures encountered as existing systems are maintained, replaced or upgraded. For example, our financial, accounting, data processing, or other operating or security systems or infrastructure or those of third parties upon which we rely may fail to operate properly or become disabled or damaged, which could adversely affect our ability to process transactions or provide services. In the event that backup systems are utilized, they may not process data as quickly as our primary systems and we may experience data losses in the course of such recovery. We continuously update the systems on which we rely to support our operations and growth and to remain compliant with all applicable laws, rules and regulations globally. This updating entails significant costs and creates risks associated with implementing new systems and integrating them with existing ones, including business interruptions that may occur in the course of such implementation challenges. We maintain a system of internal controls and security to mitigate the risks of many of these occurrences and maintain insurance coverage for certain risks; however, should an event occur that is not prevented or detected by our internal controls, causes an interruption, degradation or outage in service, or is uninsured against or in excess of applicable insurance limits, such occurrence could have an adverse effect on our business and our reputation, which, in turn, could have a material adverse effect on our financial condition, results of operations and liquidity.

Our operations rely on the secure processing, storage and transmission of confidential, proprietary, personal and other information in our computer systems and networks. Although we take protective measures and endeavor to modify these systems as circumstances warrant, the security of our computer systems, software and networks may be vulnerable to breaches, unauthorized access, misuse, computer viruses, ransomware or other malicious code and other events that could have a security impact. We provide our customers the ability to bank remotely, including over the Internet or through their mobile device. The secure transmission of confidential information is a critical element of remote and mobile banking. Our network, and the systems of parties with whom we contract or on which we rely, as well as those of our customers and regulators, could be vulnerable to unauthorized access, computer viruses, phishing schemes, spam attacks, human error, natural disasters, power loss and other security breaches. Sources of attacks vary and may include hackers, disgruntled employees or vendors, organized crime, terrorists, foreign governments, corporate espionage and activists. In recent periods, there continues to be a rise in electronic fraudulent activity, security breaches and cyber-attacks within the financial services industry, especially in the commercial banking sector due to cyber criminals targeting commercial bank accounts.

Cybersecurity risks for banking organizations have significantly increased in recent years in part because of the proliferation of new technologies, and the use of the Internet and telecommunications technologies to conduct financial transactions. For example, cybersecurity risks may increase in the future as we continue to increase our mobile-payment and other Internet-based product

offerings and expand our internal use of web-based products and applications. Even the most advanced internal control environment may be vulnerable to compromise. Targeted social engineering attacks are becoming more prevalent and sophisticated and are extremely difficult to prevent. The techniques used by bad actors change frequently, may not be recognized until launched and may not be recognized until well after a breach has occurred. Additionally, the existence of cyber attacks or security breaches at third parties with access to our data, such as vendors, may not be disclosed to us in a timely manner. Consistent with industry trends, we remain at risk for attempted electronic fraudulent activity, as well as attempts at security breaches and cybersecurity-related incidents. We may be required to spend significant capital and other resources to protect against the threat of security breaches and computer viruses, or to alleviate problems caused by security breaches or viruses. To the extent that our activities or the activities of our vendors, regulators or customers involve the storage and transmission of confidential information, security breaches (including breaches of security of customer, vendor or regulatory systems and networks) and viruses could expose us to claims, litigation and other possible liabilities, which may be significant. Any inability to prevent security breaches or computer viruses could also cause existing customers to lose confidence in our systems and could adversely affect our reputation, results of operations and ability to attract and retain customers and businesses. Further, a security breach could also subject us to additional regulatory scrutiny, expose us to civil litigation and possible financial liability and cause reputational damage.

We outsource many of our major systems, such as data processing, loan servicing and deposit processing systems. 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 sustained or repeated, a system failure or service denial could result in a deterioration of our ability to process new and renewal loans, gather deposits and provide customer service, 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 have a material adverse effect on our financial condition and results of operations.

We also face the risk of operational disruption, failure, termination, or capacity constraints of any of the third parties that facilitate our business activities, including vendors, exchanges, and other financial intermediaries. Such parties could also be the source or cause of an attack on, or breach of, our operational systems, data or infrastructure, and could disclose such attack or breach to us in a delayed manner or not at all. In addition, we may be at risk of an operational failure with respect to our customers' systems. Our risk and exposure to these matters remains heightened because of, among other things, the evolving nature of these threats and the continued uncertain global economic environment.

As cyber threats continue to evolve, we may be required to expend significant, additional resources to continue to modify or enhance our protective measures, investigate and remediate any information security vulnerabilities, or respond to any changes to state or federal regulations, policy statements or laws concerning information systems or security. Any failure to maintain adequate security over our information systems, our technology-driven products and services or our customers' personal and transactional information could negatively affect our business and our reputation and result in fines, penalties, or other costs, including litigation expense and/or additional compliance costs, all of which could have a material adverse effect on our financial condition, results of operations and liquidity. Furthermore, the public perception that a cyber attack on our systems has been successful, whether or not this perception is correct, may damage our reputation with customers and third parties with whom we do business. A successful penetration or circumvention of system security could cause us negative consequences, including loss of customers and business opportunities, or damage to our customers' and/or third parties' computers or systems, and could result in a violation of applicable privacy laws and other laws, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in our security measures, reputational damage, reimbursement or other compensatory costs, additional compliance costs, and could adversely impact our results of operations, liquidity and financial condition.

Environmental liability associated with commercial lending could result in losses.

In the course of business, Pinnacle Bank may acquire, through foreclosure, or deed in lieu of foreclosure, properties securing loans it has originated or purchased which are in default. Particularly in commercial real estate lending, there is a risk that hazardous substances could be discovered on these properties. In this event, Pinnacle Financial, or Pinnacle Bank, might be required to remove these substances from the affected properties at our sole cost and expense. The cost of this removal could substantially exceed the value of affected properties. We may not have adequate remedies against the prior owner or other responsible parties and could find it difficult or impossible to sell the affected properties. These events could have a material adverse effect on our business, results of operations and financial condition.

We have acquired a number of retail banking facilities and other real properties, any of which may contain hazardous or toxic substances. 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.

National or state legislation or regulation may increase our expenses and reduce earnings.

Bank regulators are increasing regulatory scrutiny, and additional restrictions (including those originating from the Dodd-Frank Act) on financial institutions have been proposed or adopted by regulators and by Congress. Changes in tax law, federal legislation, regulation or policies, such as bankruptcy laws, deposit insurance, consumer protection laws, and capital requirements, among others, can result in significant increases in our expenses and/or charge-offs, which may adversely affect our results of operations and financial condition. Changes in state or federal tax laws or regulations can have a similar impact. State and municipal governments, including the State of Tennessee, could seek to increase their tax revenues through increased tax levies which could have a meaningful impact on our results of operations. Furthermore, financial institution regulatory agencies are expected to continue to be aggressive in responding to concerns and trends identified in examinations, including the continued issuance of additional formal or informal enforcement or supervisory actions. These actions, whether formal or informal, could result in our agreeing to limitations or to take actions that limit our operational flexibility, restrict our growth, increase our operating expenses, or increase our capital or liquidity levels. Failure to comply with any formal or informal regulatory restrictions, including informal supervisory actions, could lead to further regulatory enforcement actions. In addition, the issuance of certain regulatory enforcement actions against Pinnacle Financial or Pinnacle Bank could constitute an event of default under our loan agreement with U.S. Bank, which could cause the acceleration of any outstanding borrowings under the loan agreement and termination of the agreement.

Negative developments in the financial services industry and the impact of recently enacted or new legislation in response to those developments could negatively impact our operations by restricting our business operations, including our ability to originate or sell loans, and adversely impact our financial performance. In addition, industry, legislative or regulatory developments may cause us to materially change our existing strategic direction, capital strategies, compensation or operating plans.

Our business reputation and relationships are important and any damage to them could have a material adverse effect on our business.

Our reputation is very important in sustaining our business and we rely on our relationships with our current, former and potential clients and shareholders and other actors in the industries that we serve. Any damage to our reputation, whether arising from regulatory, supervisory or enforcement actions, matters affecting our financial reporting or compliance with SEC and exchange listing requirements, negative publicity, the way in which we conduct our business or otherwise could strain our existing relationships and make it difficult for us to develop new relationships. Any such damage to our reputation and relationships could in turn lead to a material adverse effect on our business.

We face substantial competition and are subject to certain regulatory constraints not applicable to some of our competitors, which may decrease our growth or profits.

We face substantial competition for deposits, and for credit and trust relationships, and other financial services and products in the communities we serve. Competing providers include other banks, thrifts and trust companies, insurance companies, mortgage banking operations, credit unions, finance companies, title companies, money market funds and other financial and nonfinancial companies, including mobile payment platforms, which may offer products functionally equivalent to those offered by us. Competing providers may have greater financial resources than we do and offer services within and outside the market areas we serve. In addition to this challenge of attracting and retaining customers for traditional banking services, our competitors include securities dealers, brokers, mortgage bankers, investment advisors and finance and insurance companies who seek to offer one-stop financial services to their customers that may include services that financial institutions have not been able or allowed to offer to their customers in the past. The increasingly competitive environment is primarily a result of changes in regulation, changes in technology and product delivery systems and the accelerating pace of consolidation among financial service providers. If we are unable to adjust both to increased competition for traditional banking services and changing customer needs and preferences, our financial performance could be adversely affected.

Some of our competitors, including credit unions, are not subject to certain regulatory constraints, such as the Community Reinvestment Act, which requires us to, among other things, implement procedures to make and monitor loans throughout the communities we serve. Credit unions also have federal tax exemptions that may allow them to offer lower rates on loans and higher rates on deposits than taxpaying financial institutions such as commercial banks. In addition, non-depository institution competitors are generally not subject to the extensive regulation applicable to institutions, like Pinnacle Bank, that offer federally insured deposits. Other institutions may have other competitive advantages in particular markets or may be willing to accept lower profit margins on certain products. These differences in resources, regulation, competitive advantages, and business strategy may decrease our net interest margin, may increase our operating costs, and may make it harder for us to compete profitably.

The financial services industry could become even more competitive as a result of legislative, regulatory and technological changes and continued consolidation. For example, the Growth Act and, if adopted, certain proposed implementing regulations significantly reduce the regulatory burden of certain large bank holding companies and raise the asset thresholds at which more onerous requirements apply, which could cause certain large bank holding companies to become more competitive, to more aggressively pursue expansion or to more readily consolidate with similar sized financial institutions. Also, technology has lowered barriers to entry and made it possible for non-banks to offer products and services traditionally provided by banks, such as mobile payment and other automatic transfer and payment systems, and for banks that do not have a physical presence in our markets to compete for deposits. The absence of regulatory requirements may give non-bank financial companies a competitive advantage over us.

The implementation of other new lines of business or new products and services may subject us to additional risk.

We continuously evaluate our service offerings and may implement new lines of business or offer new products and services within existing lines of business in the future. There are substantial risks and uncertainties associated with these efforts. In developing and marketing new lines of business and/or new products and services, we undergo a new product process to assess the risks of the initiative, and invest significant time and resources to build internal controls, policies and procedures to mitigate those risks, including hiring experienced management to oversee the implementation of the initiative. 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 and/or a new product or service. Furthermore, any new line of business and/or new product or service could require the establishment of new key and other controls and have a significant impact on our existing system of internal controls. Failure to successfully manage these risks in the development and implementation of new lines of business and/or new products or services could have a material adverse effect on our business and, in turn, our financial condition and results of operations.

Inability to retain senior management and key employees or to attract new experienced financial services professionals could impair our relationship with our customers, reduce growth and adversely affect our business.

We have assembled a senior management team which has substantial background and experience in banking and financial services in our markets. Moreover, much of our organic loan growth that we have experienced in recent years (and that we are seeking during 2020) was the result not of strong loan demand but rather of our ability to attract experienced financial services professionals who have been able to attract customers from other financial institutions. We are continuing to deploy a similar hiring strategy in the Carolinas and Virginia and we are in the early stages of deploying such strategy in Atlanta. Inability to retain these key personnel (including key personnel of the businesses we have acquired) or to continue to attract experienced lenders with established books of business (including, in either case, as a result of competitive compensation and other hiring and retention pressures), at all or at the pace we have anticipated, could negatively impact our growth because of the loss of these individuals' skills and customer relationships and/or the potential difficulty of promptly replacing them. Moreover, the higher costs we have to pay to hire and retain these experienced individuals could cause our noninterest expense levels to rise and negatively impact our results of operations.

Many of our key associates, and those we seek to hire, are experienced bankers who have been engaged in the business of commercial banking for a significant period of time. While we believe this model of hiring has contributed to our success, we face risks associated with this older workforce. Our healthcare costs may exceed those of our peers on account of our older associate base. Additionally, as a number of our long-term employees approach retirement age, our ability to successfully plan for the transition of those associates' clients to other associates becomes more important to our future success. If we are unable to successfully manage such transitions, our relationships with our clients may be negatively impacted and our results of operations may be negatively affected.

We are subject to certain litigation, and our expenses related to this litigation may adversely affect our results.

We are from time to time subject to certain litigation in the ordinary course of our business. As we have aggressively hired new revenue producing associates over the last five years we, and the associates we have hired, have also periodically been the subject of litigation and threatened litigation with these associates' former employers. We may also be subject to claims related to our loan servicing programs, particularly those involving servicing of commercial real estate loans. These and other claims and legal actions, as well as supervisory and enforcement actions by our regulators, including the CFPB or other regulatory agencies with which we deal, including those with oversight of our loan servicing programs, could involve large monetary claims, capital directives, agreements with federal regulators, cease and desist orders and significant defense costs. The outcome of any such cases or actions is uncertain. Substantial legal liability or significant regulatory action against us could have material adverse financial effects or cause significant reputational harm to us, which in turn could seriously harm our business prospects.

In accordance with GAAP, for matters where a loss is not probable or the amount of the loss cannot be estimated, no accrual is established. For matters where it is probable we will incur a loss and the amount can be reasonably estimated, we establish an accrual for the loss. Once established, the accrual is adjusted periodically to reflect any relevant developments. The actual cost of any

outstanding legal proceedings or threatened claims, however, may turn out to be substantially higher than the amount accrued. Further, our insurance may not cover all litigation, other proceedings or claims, or the costs of defense. Future developments could result in an unfavorable outcome for any existing or new lawsuits or investigations in which we are, or may become, involved, which may have a material adverse effect on our business and our results of operations.

Our business is dependent on technology, and an inability to invest in technological improvements may adversely affect our results of operations and financial condition.

The financial services industry is undergoing rapid technological changes with frequent introductions of new technology-driven solutions, and as customer preferences and expectations continue to evolve, technology has lowered barriers to entry and made it possible for non-banks to offer products and services traditionally provided by banks, such as automatic transfer and automatic payment systems, as well as nontraditional alternatives like crowdfunding and digital wallets. In addition to better serving customers, the effective use of technology increases efficiency and enables financial institutions to reduce costs. We have made significant investments in data processing, management information systems and internet banking accessibility. Our future success will depend in part upon our ability to create additional efficiencies in our operations through the use of technology. Many of our competitors have substantially greater resources to invest in technological improvements. We cannot make assurances that our technological improvements will increase our operational efficiency or that we will be able to effectively implement new technology-driven solutions or be successful in marketing these products and services to our customers.

We are subject to various statutes and regulations that may impose additional costs or limit our ability to take certain actions.

We operate in a highly regulated industry and are subject to examination, supervision, and comprehensive regulation by various regulatory agencies. Our compliance with these regulations is costly and restricts certain of our activities, including payment of dividends, mergers and acquisitions, investments, loans and interest rates charged on loans, interest rates paid on deposits and locations of offices. We are also subject to capital requirements established by our regulators, which require us to maintain specified levels of capital. It is possible that our FDIC assessments may increase in the future. Any future assessment increases could negatively impact our results of operations. Significant changes in laws and regulations applicable to the banking industry have been recently adopted and others are being considered in Congress. We cannot predict the effects of these changes on our business and profitability. Because government regulation greatly affects the business and financial results of commercial banks and bank holding companies, our cost of compliance could adversely affect our ability to operate profitably. Additionally, we are subject to laws regarding our handling, disclosure and processing of personal and confidential information of certain parties, such as our employees, customers, suppliers, counterparties and other third parties. The Gramm-Leach-Bliley Act requires us to periodically disclose our privacy policies and practices relating to sharing such information and enables retail customers to opt out of our ability to share information with unaffiliated third parties, under certain circumstances. Other laws and regulations impact our ability to share certain information with affiliates and non-affiliates for marketing and/or non-marketing purposes, or to contact customers with marketing offers. We are subject to laws that require us to implement a comprehensive information security program that includes administrative, technical and physical safeguards to provide the security and confidentiality of customer records and information. Additionally, other legislative and regulatory activity continue to lend uncertainty to privacy compliance requirements that impact our business. We also expect that there will continue to be new laws, regulations and industry standards concerning privacy, data protection and information security proposed and enacted in various jurisdictions. The potential effects of pending legislation are far-reaching and may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply.

The soundness of other financial institutions could adversely affect us.

Our ability to engage in routine funding transactions could be adversely affected by the actions and financial stability of other financial institutions. Financial services institutions are interrelated as a result of trading, clearing, counterparty or other relationships. We have exposure to various counterparties, including brokers and dealers, commercial and correspondent banks, and others including those with whom we have implemented our hedging strategies. As a result, defaults by, or rumors or questions about, one or more financial services institutions, or the financial services industry generally, may result in market-wide liquidity problems and could lead to losses or defaults by such other institutions. Such occurrences could expose us to credit risk in the event of default of one or more counterparties and could have a material adverse effect on our financial position, results of operations and liquidity.

We depend on the accuracy and completeness of information about customers.

In deciding whether to extend credit or enter into certain transactions, we rely on information furnished by or on behalf of customers, including financial statements, credit reports, tax returns and other financial information. We may also rely on representations of those customers or other third parties, such as independent auditors, as to the accuracy and completeness of that information. Reliance on inaccurate or misleading personal information, financial statements, credit reports, tax returns or other financial information, including information falsely provided as a result of identity theft, could have an adverse effect on our business, financial condition and results of operations.

We may be subject to claims and litigation asserting lender liability.

From time to time, and particularly during periods of economic stress, customers, including real estate developers and consumer borrowers, may make claims or otherwise take legal action pertaining to performance of our responsibilities. These claims are often referred to as "lender liability" claims and are sometimes brought in an effort to produce or increase leverage against us in workout negotiations or debt collection proceedings. Lender liability claims frequently assert one or more of the following allegations: breach of fiduciary duties, fraud, economic duress, breach of contract, breach of the implied covenant of good faith and fair dealing, and similar claims. Whether customer claims and legal action related to the performance of our responsibilities are founded or unfounded, if such claims and legal actions are not resolved in a favorable manner, they may result in significant financial liability and/or adversely affect our market reputation, products and services, as well as potentially affecting customer demand for those products and services. Any financial liability or reputation damage could have a material adverse effect on our business, which, in turn, could have a material adverse effect on our financial condition, results of operations and liquidity.

We may be subject to claims and litigation pertaining to fiduciary responsibility.

From time to time as part of our normal course of business, customers may make claims and take legal action against us based on actions or inactions related to the fiduciary responsibilities of Pinnacle Bank's trust and wealth management associates. If such claims and legal actions are not resolved in a manner favorable to us, they may result in financial liability and/or adversely affect our market reputation or our products and services. Any financial liability or reputation damage could have a material adverse effect on our business, which, in turn, could have a material adverse effect on our financial condition and results of operations.

Natural disasters may adversely affect us.

Our operations and customer base are located in markets where natural disasters, including tornadoes, severe storms, fires, wildfires, floods, hurricanes and earthquakes often occur. Such natural disasters could significantly impact the local population and economies and our business, and could pose physical risks to our properties. Although our banking offices are geographically dispersed throughout portions of the southeastern United States and we maintain insurance coverages for such events, a significant natural disaster in or near one or more of our markets could have a material adverse effect on our financial condition, results of operations or liquidity.

Pinnacle Financial is required to act as a source of financial and managerial strength for Pinnacle Bank in times of stress.

Under federal law, Pinnacle Financial is required to act as a source of financial and managerial strength to Pinnacle Bank, and to commit resources to support Pinnacle Bank if necessary. Pinnacle Financial may be required to commit additional resources to Pinnacle Bank at times when Pinnacle Financial may not be in a financial position to provide such resources or when it may not be in Pinnacle Financial's, or its shareholders' or its creditors' best interests to do so. Providing such support is more likely during times of financial stress for Pinnacle Financial and Pinnacle Bank, which may make any capital Pinnacle Financial is required to raise to provide such support more expensive or dilutive than it might otherwise be. In addition, any capital loans Pinnacle Financial makes to Pinnacle Bank are subordinate in right of payment to depositors and to certain other indebtedness of Pinnacle Bank. In the event of Pinnacle Financial's bankruptcy, any commitment by it to a federal banking regulator to maintain the capital of Pinnacle Bank will be assumed by the bankruptcy trustee and entitled to priority of payment.

Non-compliance with the USA PATRIOT Act, the Bank Secrecy Act or other laws and regulations could result in fines or sanctions against us or restrict our ability to make acquisitions.

The Bank Secrecy Act, as amended by the USA PATRIOT Act of 2001, requires financial institutions to design and implement programs to prevent financial institutions from being used for money laundering and terrorist activities. If such activities are detected, financial institutions are obligated to file suspicious activity reports with the U.S. Treasury Department's Office of Financial Crimes Enforcement Network. These rules require financial institutions to establish procedures for identifying and verifying the identity of customers seeking to open new financial accounts. Failure to comply with these regulations could result in fines or sanctions, including restrictions on conducting acquisitions or establishing new branches, as well as additional operating expenses to add staff and/or technological enhancements to our systems to better comply with our obligations. Failure to maintain and implement adequate programs to combat money laundering and terrorist financing could also have serious reputational consequences for us, which could have a material adverse effect on our business, financial condition or results of operations.

The price of our common stock may be volatile or may decline.

The trading price of our common stock may fluctuate as a result of a number of factors, many of which are outside our control. In addition, the stock market is subject to fluctuations in trading volumes that affect the market prices of the shares of many companies. These broad market fluctuations could adversely affect the market price of our common stock. Among the factors that could affect our stock price are:

- actual or anticipated quarterly fluctuations in our results of operations and financial condition;
- changes in revenue or earnings estimates or publication of research reports and recommendations by financial analysts;
- failure to meet analysts' revenue or earnings estimates;
- speculation in the press or investment community;
- strategic actions by us or our competitors;
- actions by institutional shareholders;
- fluctuations in the stock price and operating results of our competitors;
- general market conditions and, in particular, developments related to market conditions for the financial services industry;
- market perceptions about the innovation economy, including levels of funding or "exit" activities of companies in the industries we serve;
- proposed or adopted regulatory changes or developments;
- changes in the political climate;
- market reactions to social media messages or posts;
- anticipated or pending investigations, proceedings or litigation that involve or affect us; and
- domestic and international economic and social factors unrelated to our performance.

The trading price of the shares of our common stock and the value of our other securities will further depend on many factors, which may change from time to time, including, without limitation, our financial condition, performance, creditworthiness and prospects, and future sales of our equity or equity-related securities. In some cases, the markets have produced downward pressure on stock prices and credit availability for certain issuers without regard to those issuers' underlying financial strength. A significant decline in our stock price could result in substantial losses for individual shareholders and could lead to costly and disruptive securities litigation, as well as the loss of key employees.

Our ability to declare and pay dividends is limited.

While our board of directors has approved the payment of a quarterly cash dividend on our common stock since the fourth quarter of 2013, there can be no assurance of whether or when we may pay dividends on our common stock in the future. Future dividends, if any, will be declared and paid at the discretion of our board of directors and will depend on a number of factors, including our and Pinnacle Bank's capital levels. Our principal source of funds used to pay cash dividends on our common stock will be dividends that we receive from Pinnacle Bank. Although Pinnacle Bank's asset quality, earnings performance, liquidity and capital requirements will be taken into account before we declare or pay any future dividends on our common stock, our board of directors will also consider our liquidity and capital requirements and our board of directors could determine to declare and pay dividends without relying on dividend payments from Pinnacle Bank.

Federal and state banking laws and regulations and state corporate laws restrict the amount of dividends we may declare and pay and that Pinnacle Bank may declare and pay to us. For example, Federal Reserve regulations implementing the capital rules required under Basel III do not permit dividends unless capital levels exceed certain higher levels applying capital conservation buffers.

In addition, the terms of our subordinated debentures, including the subordinated debentures we assumed upon the consummation of the BNC merger, prohibit us from paying dividends on our common stock at times when we are deferring the payment of interest on such subordinated debentures. Moreover, the terms of the loan agreement for Pinnacle Financial's line of credit prohibits us from paying dividends when there is an event of default existing under the loan agreement, or the payment of a dividend would cause an event of default.

We may issue additional common stock or other equity securities in the future which could dilute the ownership interest of existing shareholders.

We may issue additional shares of common stock, or securities convertible into, exchangeable for or representing rights to acquire shares of common stock, including in connection with acquisitions. We may sell these shares at prices below the current market price of shares, and the sale of these shares may significantly dilute shareholder ownership. We could also issue additional shares in connection with acquisitions of other financial institutions (as we did in connection with our acquisition of BNC and our other recent acquisitions) or investments in fee-related or other businesses (as we did with BHG), which could also dilute shareholder ownership.

Holders of Pinnacle Financial's junior subordinated debentures have rights that are senior to those of Pinnacle Financial's shareholders.

At December 31, 2019, Pinnacle Financial had outstanding trust preferred securities and accompanying junior subordinated debentures totaling \$763.0 million. Payments of the principal and interest on the trust preferred securities are conditionally guaranteed by Pinnacle Financial, and the accompanying subordinated debentures are senior to shares of Pinnacle Financial's common stock. As a result, Pinnacle Financial must make payments on the subordinated debentures (and the related trust preferred securities) before any dividends can be paid on common stock and, in the event of Pinnacle Financial's bankruptcy, dissolution or liquidation, the holders of the subordinated debentures must be satisfied before any distributions can be made on Pinnacle Financial's common stock. Pinnacle Financial has the right to defer distributions on its junior subordinated debentures (and the related trust preferred securities) for up to five years, during which time no dividends may be paid on its common stock.

Pinnacle Financial and Pinnacle Bank have issued subordinated indebtedness the holders of which have rights that are senior to those of Pinnacle Financial's common shareholders.

From time to time, Pinnacle Financial and Pinnacle Bank have issued, and in connection with the Avenue merger and BNC merger, assumed, subordinated notes. At December 31, 2019, Pinnacle Financial and Pinnacle Bank had an aggregate of \$630.0 million of subordinated notes outstanding, not including the subordinated debentures issued in connection with our trust preferred securities. Moreover, the notes we have issued rank senior to shares of Pinnacle Financial's common stock and Pinnacle Bank's subordinated indebtedness is structurally senior to the rights of the holders of Pinnacle Financial's common stock. In the event of any bankruptcy, dissolution or liquidation of Pinnacle Financial, these notes, along with Pinnacle Financial's other indebtedness, would have to be repaid before Pinnacle Financial's shareholders would be entitled to receive any of the assets of Pinnacle Financial.

Pinnacle Financial or Pinnacle Bank may from time to time issue, or assume in connection with an acquisition, additional subordinated indebtedness that would have to be repaid before Pinnacle Financial's shareholders would be entitled to receive any of the assets of Pinnacle Financial or Pinnacle Bank.

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 holders of our securities could lose confidence in our financial reporting, which would harm our business and the trading price of our securities.

Maintaining and adapting our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, is expensive and requires significant management attention. Moreover, as we continue to grow, our internal controls may become more complex and require additional resources to ensure they remain effective amid dynamic regulatory and other guidance. Failure to implement effective controls or difficulties encountered in the process may harm our results of operations and financial condition or cause us to fail to meet our reporting obligations. If we or our independent registered accounting firm 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 the Nasdaq Global Select Market. This could have an adverse effect on our business, financial condition or results of operations, as well as the trading price of our securities, and could potentially subject us to litigation.

Our issuance of preferred stock could adversely affect holders of our common stock.

We have the ability under our current effective shelf registration statement to issue shares of preferred stock. Further, our shareholders authorized our board of directors to issue up to 10,000,000 shares of preferred stock without any further action on the part of our shareholders. Our board also has the power, without shareholder approval, to set the terms of any series of preferred stock that may be issued, including voting rights, dividend rights, conversion features, preferences over our common stock with respect to dividends or in the event of a dissolution, liquidation or winding up, and other terms. In the event that we issue preferred stock in the future that has preference over our common stock with respect to payment of dividends or upon our liquidation, dissolution, or winding up, or if we

issue debt securities, incur other borrowings or issue preferred stock with voting rights that dilute the voting power of our common stock, the rights of the holders of our common stock or the market price of our common stock could be adversely affected.

We and/or the holders of certain types of our securities could be adversely affected by unfavorable ratings from rating agencies.

The ratings agencies regularly evaluate Pinnacle Financial and Pinnacle Bank, and their ratings of our long-term debt are based on a number of factors, including our financial strength as well as factors not entirely within our control, including conditions affecting the financial services industry generally. There can be no assurance that we will not receive adverse changes in our published ratings in the future, which could adversely affect the cost and other terms upon which we are able to obtain funding, and the way in which we are perceived in the capital markets. Actual or anticipated changes, or downgrades in our published credit ratings, including any announcement that our ratings are under review for a downgrade, could affect the market value and liquidity of our securities, increase our borrowing costs and negatively impact our profitability. Additionally, a downgrade of published credit rating of any particular security issued by us or our subsidiaries could negatively affect the ability of the holders of that security to sell the securities and the prices at which any such securities may be sold.

Even though our common stock is currently traded on the Nasdaq Stock Market's Global Select Market, it has less liquidity than many other stocks quoted on a national securities exchange.

The trading volume in our common stock on the Nasdaq Global Select Market has been relatively low when compared with larger companies listed on the Nasdaq Global Select Market or other stock exchanges. Although we have experienced increased liquidity in our stock, we cannot say with any certainty that a more active and liquid trading market for our common stock will continue to develop. Because of this, it may be more difficult for shareholders to sell a substantial number of shares for the same price at which shareholders could sell a smaller number of shares.

We cannot predict the effect, if any, that future sales of our common stock in the market, or the availability of shares of common stock for sale in the market, will have on the market price of our common stock. We can give no assurance that sales of substantial amounts of common stock in the market, or the potential for large amounts of sales in the market, would not cause the price of our common stock to decline or impair our future ability to raise capital through sales of our common stock.

The market price of our common stock has fluctuated significantly, and may fluctuate in the future. These fluctuations may be unrelated to our performance. General market or industry price declines or overall market volatility in the future could adversely affect the price of our common stock, and the current market price may not be indicative of future market prices.

Our corporate organizational documents and the provisions of Tennessee law to which we are subject contain certain provisions that could have an anti-takeover effect and may delay, make more difficult or prevent an attempted acquisition of Pinnacle Financial that you may favor.

Our amended and restated charter, as amended, and bylaws, as amended, contain various provisions that could have an anti-takeover effect and may delay, discourage or prevent an attempted acquisition or change of control of Pinnacle Financial. These provisions include:

- a provision requiring our board of directors to take into account specific factors when considering an acquisition proposal;
- a provision that all extraordinary corporate transactions to which we are a party must be approved by a majority of the directors and a majority of the shares entitled to vote;
- a provision that any special meeting of our shareholders may be called only by our chairman, our chief executive officer, our president, our board of directors, or the holders of 25% of the outstanding shares of our voting stock that have held those shares for at least one year; and
- a provision establishing certain advance notice procedures for nomination of candidates for election as directors at an annual or special meeting of shareholders at which directors are elected.

Additionally, our amended and restated charter, as amended, authorizes the board of directors to issue shares of our preferred stock without shareholder approval and upon such terms as the board of directors may determine. The issuance of our preferred stock, while providing desirable flexibility in connection with possible acquisitions, financings, and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, a controlling interest in us. In addition, certain provisions of Tennessee law, including a provision which restricts certain business combinations between a Tennessee corporation and certain affiliated shareholders, may delay, discourage or prevent an attempted acquisition or change in control of our company.

An investment in our common stock is not an insured deposit and is not guaranteed by the FDIC.

An investment in our common stock is not a bank deposit and, therefore, is not insured against loss or guaranteed by the FDIC, 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 herein and our shareholders will bear the risk of loss if the value or market price of our common stock is adversely affected.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The Company's executive offices are located at 150 Third Avenue South, Suite 900, Nashville, Tennessee. At December 31, 2019, we conducted branch banking operations in 111 offices in four states. These offices include both owned and leased facilities as follows:

| State | Owned | Leased | Total |
|----------------|-------|--------|-------|
| Tennessee | 28 | 19 | 47 |
| North Carolina | 28 | 8 | 36 |
| South Carolina | 10 | 10 | 20 |
| Virginia | 6 | 2 | 8 |
| | 72 | 39 | 111 |

ITEM 3. LEGAL PROCEEDINGS

Various legal proceedings to which Pinnacle Financial or a subsidiary of Pinnacle Financial is party arise from time to time in the normal course of business. There are no material pending legal proceedings to which Pinnacle Financial or any of its subsidiaries is a party or of which any of its or its subsidiaries' properties are subject.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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

Pinnacle Financial's common stock is traded on the Nasdaq Global Select Market under the symbol "PNFP" and has traded on that market since July 3, 2006. As of February 25, 2020, Pinnacle Financial had approximately 4,684 stockholders of record.

In connection with the settlement of income tax liabilities associated with the Company's equity compensation plans and pursuant to the common stock share repurchase program approved by the Pinnacle Financial board of directors and announced during the fourth quarter of 2018, Pinnacle Financial repurchased shares of its common stock during the quarter ended December 31, 2019 as follows:

| Period | Total Number of Shares Repurchased ⁽¹⁾ | Av | erage Price Paid Per Share | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽²⁾ | S Y | Approximate Dollar Value of Shares That May Yet Be Purchased nder the Plans or Programs ⁽²⁾ |
|---------------------------------------|---|----|-------------------------------|---|--------|---|
| October 1, 2019 to October 31, 2019 | 204,071 | \$ | 56.13 | 201,226 | \$ | 19,559,000 |
| November 1, 2019 to November 30, 2019 | 27,415 | | 59.69 | 27,307 | | 17,929,000 |
| December 1, 2019 to December 31, 2019 | _ | | | | | 17,929,000 |
| Total | 231,486 | \$ | 56.55 | 228,533 | \$ | 17,929,000 |

⁽¹⁾ During the quarter ended December 31, 2019, 10,963 shares of restricted stock previously awarded to certain of our associates vested. We withheld 2,953 shares to satisfy tax withholding requirements associated with their vesting.

⁽²⁾ On November 13, 2018, Pinnacle Financial announced that its board of directors authorized a share repurchase program for up to \$100.0 million of Pinnacle Financial's outstanding common stock. This current repurchase program expires on March 31, 2020. On October 15, 2019, Pinnacle Financial's board of directors approved and additional \$100 million share repurchase program that will commence upon the expiration or earlier exhaustion of the \$100 million repurchase program scheduled to expire on March 31, 2020. This share repurchase program will expire on December 31, 2020. Pinnacle Financial repurchased 1,102,038 shares of its common stock at an aggregate cost of \$61.4 million in the fiscal year ended December 31, 2019. Share repurchases may be made from time to time, on the open market or in privately negotiated transactions, at the discretion of the management of Pinnacle Financial, after the board of directors of Pinnacle Financial authorizes a repurchase program. The approved share repurchase programs do not obligate Pinnacle Financial to repurchase any dollar amount or number of shares, and the programs may be extended, modified, suspended, or discontinued at any time. Stock repurchases generally are affected through open market purchases, and may be made through unsolicited negotiated transactions. The timing of these repurchases will depend on market conditions and other requirements.

ITEM 6. SELECTED FINANCIAL DATA

| (dollars in thousands, except per share data) | 2019 ⁽¹⁾ | 2018 | 2017 ⁽²⁾ | 2016 ⁽³⁾⁽⁴⁾ | 2015 ⁽⁵⁾⁽⁶⁾ |
|---|-------------------------|------------------|----------------------------|---|----------------------------|
| Total assets | \$ 27,805,496 | \$ 25,031,044 | \$ 22,205,700 | \$ 11,194,623 | \$ 8,714,544 |
| Loans, net of unearned income | 19,787,876 | 17,707,549 | 15,633,116 | 8,449,925 | 6,543,235 |
| Allowance for loan losses | 94,777 | 83,575 | 67,240 | 58,980 | 65,432 |
| Total securities | 3,728,991 | 3,277,968 | 2,536,045 | 1,323,797 | 966,442 |
| Goodwill, core deposit and other intangible assets | 1,870,941 | 1,853,282 | 1,864,712 | 566,698 | 442,773 |
| Deposits and securities sold under agreements to repurchase | 20,307,382 | 18,953,848 | 16,586,964 | 8,845,014 | 7,050,498 |
| Advances from FHLB | 2,062,534 | 1,443,589 | 1,319,909 | 406,304 | 300,305 |
| Subordinated debt and other borrowings | 749,080 | 485,130 | 465,505 | 350,768 | 141,606 |
| Stockholders' equity | 4,355,748 | 3,965,940 | 3,707,952 | 1,496,696 | 1,155,611 |
| Statement of Operations Data: | | | | | |
| Interest income | \$ 1,067,936 | \$ 946,717 | \$ 636,138 | \$ 363,609 | \$ 255,169 |
| Interest expense | 301,794 | 210,375 | 92,832 | 38,615 | 18,537 |
| Net interest income | 766,142 | 736,342 | 543,306 | 324,994 | 236,632 |
| Provision for loan losses | 27,283 | 34,377 | 23,664 | 18,328 | 9,188 |
| Net interest income after provision for loan losses | 738,859 | 701,965 | 519,642 | 306,666 | 227,444 |
| Noninterest income | 263,826 | 200,870 | 144,904 | 121,003 | 86,530 |
| Noninterest expense | 505,148 | 452,887 | 366,560 | 236,285 | 170,877 |
| Income before income taxes | 497,537 | 449,948 | 297,986 | 191,384 | 143,098 |
| Income tax expense | 96,656 | 90,508 | 124,007 | 64,159 | 47,589 |
| Net income | 400,881 | 359,440 | 173,979 | 127,225 | 95,509 |
| Per Share Data: | | | | , i i i i i i i i i i i i i i i i i i i | |
| Earnings per share available to common stockholders – basic | \$ 5.25 | \$ 4.66 | \$ 2.73 | \$ 2.96 | \$ 2.58 |
| Weighted average common shares outstanding – basic | 76,364,303 | 77,111,372 | 63,760,578 | 43,037,083 | 37,015,468 |
| Earnings per share available to common stockholders – | 70,504,505 | //,111,5/2 | 05,700,570 | 45,057,005 | 57,015,400 |
| diluted | \$ 5.22 | \$ 4.64 | \$ 2.70 | \$ 2.91 | \$ 2.52 |
| Weighted average common shares outstanding – diluted | 76,763,903 | 77,449,917 | 64,328,189 | 43,731,992 | 37,973,788 |
| 1 | \$ 0.64 | 0.58 | \$ 0.56 | 0.56 | 0.48 |
| Book value per common share | \$ 56.89 | \$ 51.18 | \$ 47.70 | \$ 32.28 | \$ 28.25 |
| Common shares outstanding at end of period | 76,563,811 | 77,483,796 | 77,739,636 | 46,359,377 | 40,906,064 |
| Performance Ratios: | | | | | |
| Return on average assets | 1.52 % | 1.53 % | 1.02 % | 1.27 % | 1.36 % |
| Return on average stockholders' equity | 9.57 % | 9.37 % | 6.26 % | 9.47 % | 10.06 % |
| Net interest margin | 3.46 % | 3.68 % | 3.76 % | 3.70 % | 3.72 % |
| Net interest spread | 3.06 % | 3.35 % | 3.53 % | 3.46 % | 3.55 % |
| Noninterest income to average assets | 1.00 % | 0.85 % | 0.85 % | 1.21 % | 1.23 % |
| Noninterest expense to average assets | 1.91 % | 1.92 % | 2.15 % | 2.36 % | 2.42 % |
| Efficiency ratio | 49.05 % | 48.32 % | 53.26 % | 52.98 % | 52.88 % |
| Average loan to average deposit ratio | 97.78 % | 96.92 % | 95.14 % | 96.66 % | 96.39 % |
| Avg. interest-earning assets to avg. interest-bearing liabilities | 131.12 % | 132.69 % | 136.10 % | 139.39 % | 142.77 % |
| Average equity to average total assets ratio | 15.84 % | 16.29 % | 16.32 % | 13.40 % | 13.47 % |
| Dividend payout ratio | 12.24 % | 13.79 % | 20.00 % | 19.31 % | 18.97 % |
| Asset Quality Ratios: | 12.21 70 | 15.77 70 | 20.00 /0 | 19.51 /0 | 10.97 |
| Allowance for loan losses to nonaccrual loans | 153.85 % | 95.15 % | 117.00 % | 213.90 % | 222.90 % |
| Allowance for loan losses to total loans | 0.48 % | 0.47 % | 0.43 % | 0.70 % | 1.00 % |
| Nonperforming assets to total assets | 0.33 % | 0.41 % | 0.38 % | 0.30 % | 0.42 % |
| Nonperforming assets to total loans and other real estate | 0.35 % | 0.41 % | 0.58 % | 0.30 % | 0.42 % |
| Net loan charge-offs to average loans | 0.40 % | 0.38 % | 0.33 % | 0.40 % | 0.33 % |
| Capital Ratios ⁽⁷⁾ : | 0.09 70 | 0.11 70 | 0.13 70 | 0.21 70 | 0.21 / |
| Common equity Tier 1 capital | 9.70 % | 9.58 % | 9.14 % | 7.86 % | 8.61 % |
| Leverage | 9.70 % | | 9.14 % 8.65 % | 8.55 % | |
| 6 | | 8.91 % | | | 9.37 % |
| Tier 1 capital | 9.70 % | 9.58 % | 9.14 % | 8.64 % | 9.63 % |
| Total capital | 13.21 % | 12.21 % | 12.01 % | 11.86 % | 11.24 % |

(1) Information for the 2019 fiscal year includes operations of Advocate Capital from its acquisition date of July 2, 2019.

 Information for the 2017 fiscal year includes the operation of BNC from its acquisition date of June 16, 2017 and reflects approximately 27.7 million shares of Pinnacle Financial Common Stock issued in connection with the BNC merger and approximately 3.2 million shares issued in 2016 ordered expression with a public offering consummated in January 2017.
 Information for the 2016 fract year includes the operation of Aurory for its acquisition date of Jule 1, 2016 ordered expression with the BNC merger and approximately 3.2 million shares issued in connection with a public offering consummated in January 2017.

(3) Information for the 2016 fiscal year includes the operations of Avenue from its acquisition date of July 1, 2016 and reflects approximately 3.8 million shares of Pinnacle Financial Common Stock issued in connection with the Avenue merger.

(4) Information for the 2016 fiscal year includes our additional 19% membership interest in BHG which we acquired in March 2016 and reflects approximately 861,000 shares of Pinnacle Financial Common Stock issued in connection with the additional investment in BHG.

(5) Information for the 2015 fiscal year includes the operations of CapitalMark from its acquisition date of July 31, 2015 and Magna from its acquisition date of September 1, 2015 and reflects approximately 3.3 million shares and 1.4 million shares of Pinnacle Financial Common Stock issued in connection with the CapitalMark merger and the Magna merger, respectively.

(6) Information for the 2015 fiscal year includes our 30% membership interest in BHG which we acquired in February 2015.

(7) Capital ratios are for Pinnacle Financial Partners, Inc.

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

The following is a discussion of our financial condition at December 31, 2019 and 2018 and our results of operations for each of the years in the three-year period ended December 31, 2019. The purpose of this discussion is to focus on information about our financial condition and results of operations which is not otherwise apparent from our consolidated financial statements. The following discussion and analysis should be read along with our consolidated financial statements and the related notes included elsewhere herein.

Overview

General. Our fully diluted net income per common share for the year ended December 31, 2019 was \$5.22 compared to fully diluted net income per common share of \$4.64 and \$2.70 for the years ended December 31, 2018 and 2017, respectively. At December 31, 2019, loans had increased by \$2.1 billion as compared to December 31, 2018. The comparability of our financial condition and performance has been impacted by the acquisitions we have completed as well as the passage of the Tax Cuts and Jobs Act ("Tax Act") in December 2017, in each case as discussed below.

Acquisitions. We acquired BNC Bancorp and its wholly owned bank subsidiary, Bank of North Carolina (together, BNC), on June 16, 2017. At acquisition date, BNC's net assets were fair valued at \$602.7 million, including loans valued at \$5.6 billion and deposits valued at \$6.2 billion. This acquisition expanded our footprint into the Carolinas and Virginia.

Each holder of BNC common stock (including restricted shares) received 0.5235 shares of Pinnacle Financial's common stock for each share of BNC common stock held by each shareholder on the closing date. We issued 27,687,100 shares of common stock and paid cash consideration of approximately \$129,000, related to fractional shares, to the BNC shareholders. Included in the common stock issued were 136,890 assumed shares of unvested restricted stock that continued to vest in accordance with their original contractual terms. The fair value of these awards was \$9.2 million, with \$5.4 million attributable to precombination services provided by the recipients prior to the merger, that accordingly was included as merger consideration.

We acquired all of the outstanding stock of Advocate Capital, Inc. (Advocate Capital) on July 2, 2019 for a cash price of \$59 million. Advocate Capital's \$134.3 million of indebtedness at the acquisition date was also paid off in connection with consummation of the acquisition. Advocate Capital is a finance firm headquartered in Nashville, TN which supports the financial needs of legal firms through both case expense financing and working capital lines of credit. At the acquisition date, Advocate Capital's net assets were initially recorded at a fair value of approximately \$45.6 million, consisting mainly of loans receivable. The purchase price allocations for the acquisition of Advocate Capital are preliminary and will be finalized upon the receipt of final valuations on certain assets and liabilities.

Tax Cuts and Jobs Act. On December 22, 2017, the Tax Act was signed into law. Among other items, the Tax Act reduced the corporate statutory Federal tax rate from 35% to 21%, which resulted in a reduction of our blended statutory tax rate from 39.23% in 2017 to 26.14% in 2018 and 2019. As a result of such decrease, we recognized a charge of \$31.5 million in the fourth quarter of 2017 resulting from the revaluation of our deferred tax assets.

Results of operations. Our net interest income increased to \$766.1 million for 2019 compared to \$736.3 million for 2018 and \$543.3 million for 2017. The increase in 2019 as compared to 2018 was largely the result of organic loan growth. Our acquisition of BNC favorably impacted our loan growth when comparing 2018 to 2017. The net interest margin (the ratio of net interest income to average earning assets) for 2019 was 3.46% compared to 3.68% and 3.76% for 2018 and 2017, respectively.

Our provision for loan losses was \$27.3 million for 2019 compared to \$34.4 million in 2018 and \$23.7 million in 2017. Provision expense for the year ended December 31, 2019 when compared to the comparable periods in 2018 and 2017 was primarily impacted by organic loan growth in our loan portfolio and by our internal assessment of the credit quality of the loan portfolio which included charge-offs of certain loans. Our net charge-offs were \$16.1 million during 2019 compared to \$18.0 million in 2018 and \$15.4 million in 2017.

Our allowance for loan losses as a percentage of total loans increased from 0.47% at December 31, 2018 to 0.48% at December 31, 2019. The increase in the allowance as a percentage of total loans is primarily attributable to provision expense related to organic loan growth.

Noninterest income for 2019 compared to 2018 increased by \$63.0 million, or 31.3%. Noninterest income for 2018 compared to 2017 increased by \$56.0 million, or 38.6%. The increase in noninterest income from 2019 to 2018 and 2018 to 2017 was largely due to an increase in income from our investment in Bankers Healthcare Group, LLC ("BHG"), which was \$90.1 million for the year ended

December 31, 2019 compared to \$51.2 million and \$38.0 million for the years ended December 31, 2018 and 2017, respectively, and for 2018 to 2017, the consummation of the BNC merger. Outside of our 49% investment in BHG and the BNC merger, increases in noninterest income in both comparable periods was attributable to increased transaction accounts and increased production in our feebased products such as investments, insurance and trust resulting primarily from organic growth. Noninterest income was also impacted during the year ended December 31, 2019 by a \$5.9 million in net pre-tax loss on the sale of \$737.7 million of investment securities in 2018 and an \$8.3 million net pre-tax loss on the sale of \$363.9 million of investment securities in 2017 as we sought to restructure a portion of our securities portfolio in each period in preparation for changes in the yield curve during those periods.

Noninterest expense for 2019 compared to 2018 increased by \$52.3 million, or 11.5%. The majority of the increase was attributable to salaries and employee benefits expense which increased \$41.7 million, primarily resulting from annual merit increases awarded in the first quarter of 2019 as well as the increase in our associate base with our continued hiring of experienced bankers throughout our footprint during the period. Expenses associated with our annual cash incentive plan were also higher in 2019 than in 2018 as we paid out incentives at 120% of target as compared to target-level payouts in 2018. We also realized increases in equipment and occupancy costs of \$10.3 million in 2019 versus 2018. This change was in part due to a \$3.2 million non-cash impairment charge incurred during the second quarter of 2019 related to the consolidation of five offices across our footprint. Additionally, we experienced increased expenses associated with technology improvements to enhance the infrastructure of our firm during the comparable periods and expect to incur additional costs in future periods as we continue to enhance our technology infrastructure. During 2019, we incurred no merger-related expenses compared to \$8.3 million during 2018 as we finalized the acquisition, cultural and technological integration of BNC. Noninterest expense for 2018 compared to 2017 increased by \$86.3 million, or 23.6%, primarily due to the inclusion of our expanded footprint in the Carolinas and Virginia for all of 2018 compared to just over six months of operations in 2017. With the exception of OREO and merger-related expenses, we realized increases in all noninterest expense categories in 2018 when compared to 2017. Salaries and employee benefits expense increased \$62.0 million, primarily resulting from annual merit increases awarded in the first quarter of 2018 as well as the increase in our associate base primarily as a result of our merger with BNC, including their participation in the 2018 annual incentive program as compared to 2017, and continued hiring of experienced bankers throughout our footprint. We also realized increases in equipment and occupancy costs of \$20.2 million in 2018 versus 2017 due to our expanded footprint. Additionally, other noninterest expense, which includes deposit and lending related expenses, investment and trust sales expenses and administrative expenses, increased \$20.9 million in 2018 compared to 2017. Offsetting these increases was a decrease in merger-related expenses of \$23.6 million in 2018 compared to 2017. There were no merger-related expenses recorded in the second half of 2018.

The number of full-time equivalent employees increased from 2,132.0 at December 31, 2017 to 2,297.0 at December 31, 2018 and 2,487.0 at December 31, 2019.

During the three years ended December 31, 2019, 2018 and 2017, we recorded income tax expense of \$96.7 million, \$90.5 million and \$124.0 million, respectively. Income tax expense for 2018 was impacted by the reduction in the statutory federal income tax rate from 35% to 21% as a result of the Tax Act, which was signed into law in December 2017. The Tax Act also impacted income tax expense for the year ended December 31, 2017 as our deferred tax assets were revalued as a result of such rate change, resulting in a charge of \$31.5 million. Our effective tax rate for the years ended December 31, 2019, 2018 and 2017, was 19.4%, 20.1% and 41.6%, respectively.

Our efficiency ratio (the ratio of noninterest expense to the sum of net interest income and noninterest income) was 49.1%, 48.3%, and 53.3% for the three years ended December 31, 2019, 2018 and 2017, respectively. The efficiency ratio measures the amount of expense that is incurred to generate a dollar of revenue. The efficiency ratio for the year ended December 31, 2019 compared to the same period in 2018 was negatively impacted by losses on the sale of our non-prime automobile portfolio, the write-down of facilities and land acquired in the BNC acquisition that previously had been held for potential expansion, and a non-cash impairment charge related to the consolidation of five offices across our footprint during the year ended December 31, 2019. Net gains and losses on sales of securities impacted our efficiency ratios in each of 2019, 2018 and 2017. Increased revenue from increased interest earning assets in the 2019 period over the 2018 and 2017 periods and the absence of merger-related expenses in 2019 positively impacted our efficiency ratio in the 2019 period when compared to 2018 and 2017 periods. The efficiency ratio improved in 2018 as compared to 2017 primarily due to the completion in 2018 of the integration and technology conversion associated with the acquisition of BNC and the growth in interest earning assets.

Net income for 2019 was \$400.9 million compared to \$359.4 million in net income for 2018 and \$174.0 million in net income in 2017. Fully-diluted net income per common share was \$5.22 for 2019 compared to \$4.64 for 2018 and \$2.70 for 2017. Net income and fully-diluted net income per common share in 2017 were each significantly and negatively impacted by the \$31.5 million charge resulting from the revaluation of our deferred tax assets following the passage of the Tax Act, while net income and fully-diluted net income per common share in 2018 each benefited from the reduced rate under the Tax Act and continued organic growth. Net income per common share was also positively impacted in 2018 and 2019 by the share repurchase program we commenced in the fourth quarter of 2018.

Financial Condition. Our loan balances increased by \$2.1 billion during both 2019 and 2018. The increase in our outstanding loan balances during both 2019 and 2018 is largely due to the continued economic growth in our core markets, increases in the number of relationship managers, primarily in our commercial lending program, and increased focus on attracting new customers to our company.

Total deposits increased from \$18.8 billion at December 31, 2018 to \$20.2 billion at December 31, 2019. Within our deposits, the ratio of core funding to total deposits decreased from 79.0% at December 31, 2018 to 76.2% at December 31, 2019.

We believe we have hired experienced relationship managers that have significant client portfolios and longstanding reputations within the communities we serve. As such, we believe they will attract more relationship managers to our firm as well as loans and deposits from new and existing small-and middle-market clients particularly if the economies in our principal markets continue to expand.

Capital and Liquidity. At December 31, 2019 and 2018, our capital ratios, including our bank's capital ratios, exceeded regulatory minimum capital requirements and those necessary to be considered well-capitalized under applicable federal regulations. From time to time, we may be required to support the capital needs of our bank subsidiary. At December 31, 2019, we had approximately \$182.0 million of cash at the holding company which could be used to support our bank. We believe we have various capital raising techniques available to us to provide for the capital needs of our bank, including an established line of credit with another bank that can be utilized to provide up to \$75 million of additional capital support to Pinnacle Bank, if needed.

On November 13, 2018, Pinnacle Financial announced that its board of directors authorized a share repurchase program for up to \$100.0 million of Pinnacle Financial's outstanding common stock and on October 15, 2019, the board approved an additional \$100.0 million of repurchase authorization. The current repurchase program expires on March 31, 2020, with the additional \$100 million authorization expiring on December 31, 2020. We repurchased 1,102,038 shares of our common stock at an aggregate cost of \$61.4 million in 2019 compared to 405,200 shares of our common stock at an aggregate cost of \$20.7 million in 2018.

Critical Accounting Estimates

The accounting principles we follow and our methods of applying these principles conform with U.S. generally accepted accounting principles and with general practices within the banking industry. In connection with the application of those principles, we have made judgments and estimates which, in the case of the determination of our allowance for loan losses and the assessment of impairment of goodwill, has been critical to the determination of our financial position and results of operations.

Allowance for Loan Losses (allowance). Our management assesses the adequacy of the allowance prior to the end of each calendar quarter. This assessment includes procedures to estimate the allowance and test the adequacy and appropriateness of the resulting balance. The level of the allowance is based upon management's evaluation of the loan portfolio, loan loss experience, asset quality trends, known and inherent risks in the portfolio, adverse situations that may affect the borrowers' ability to repay the loan (including the timing of future payment), the estimated value of any underlying collateral, composition of the loan portfolio, economic conditions, industry and peer bank loan quality indications and other pertinent factors, including regulatory recommendations. The level of allowance maintained is believed by management to be adequate to absorb probable losses inherent in the loan portfolio at the balance sheet date. The allowance is increased by provisions charged to expense and decreased by charge-offs, net of recoveries of amounts previously charged-off. Allocation of the allowance may be made for specific loans, but the entire allowance is available for any loan that, in management's judgment, is deemed to be uncollectible.

Our allowance for loan loss assessment methodology was modified during the year ended December 31, 2017 to (i) extend the lookback period from 24 quarters to a period beginning January 1, 2006 to better capture the risk associated with this extended economic cycle, (ii) eliminate the use of risk ratings in the calculation of the loss rate and instead focus on loss rate by loan type and (iii) expand the economic variables used in the qualitative assessment to incorporate our expanded footprint. We also eliminated the use of a loss emergence period in light of the minimal population of losses available to evaluate that were previously being extrapolated to the full population of loans, and shifted the focus of our analysis to more of a quantitative model. There was no material impact on the adoption of the change in the allowance for loan loss assessment methodology.

Our allowance for loan losses is composed of the result of two independent analyses pursuant to the provisions of ASC 450-20, Loss Contingencies and ASC 310-10-35, Receivables. The ASC 450-20 analysis is intended to quantify the inherent risks in our performing loan portfolio. The ASC 310-10-35 analysis includes a loan-by-loan analysis of impaired loans, including those reported as nonaccrual, troubled-debt restructurings and purchase credit impaired.

In assessing the adequacy of the allowance, we also consider the results of our ongoing independent loan review process. We undertake this process both to ascertain those loans in the portfolio with elevated credit risk and to assist in our overall evaluation of the risk characteristics of the entire loan portfolio. Our loan review process includes the judgment of management, independent

internal loan reviewers, and reviews that may have been conducted by third-party reviewers, primarily regulatory examiners. We incorporate relevant loan review results in the allowance.

The ASC 450-20 component of the allowance for loan losses begins with a historical loss rate calculation for each loan pool with similar risk characteristics. The losses realized over a rolling four-quarter cycle are utilized to determine an annual loss rate for each loan pool for each quarter-end in our look-back period. The look-back period in our loss rate calculation begins with January 2006, as we believe the period from January 1, 2006 to present is more representative of this economic cycle. The loss rates for each category are then averaged and applied to the end of period loan portfolio balances to determine estimated losses. The loss rates provide a quantitative estimate of credit losses inherent in our end of period loan portfolio based on our actual loss experience.

The estimated loan loss allocation for all loan segments also considers management's estimate of probable losses for a number of qualitative factors that have not been considered in the quantitative analysis. The qualitative categories and the measurements used to quantify the risks within each of these categories are subjectively selected by management, but measured by objective measurements period over period. The data for each measurement may be obtained from internal or external sources. The current period measurements are evaluated and assigned a factor commensurate with the current level of risk relative to past measurements over time. The resulting factor is applied to the non-impaired loan portfolio. This amount represents estimated probable inherent credit losses which exist, but have not yet been identified either in our risk rating or impairment process, as of the balance sheet date, and is based upon quarterly trend assessments in portfolio concentrations, policy exceptions, economic conditions, associate retention, independent loan review results, collateral considerations, credit quality, competition and regulatory requirements, enterprise wide risk assessments, and peer group credit quality. The qualitative allowance allocation, as determined by the processes noted above, is increased or decreased for each loan segment based on the assessment of these various qualitative factors.

The allowance for loan losses for purchased loans is calculated similarly to that utilized for our legacy loans. Our accounting policy is to compare the computed allowance for loan losses for purchased loans to any remaining fair value adjustment on a loan-by-loan basis. If the computed allowance is greater than the remaining fair value adjustment, the excess is added to the allowance for loan losses by a provision for loan losses.

The ASC 450-20 portion of the allowance also includes a small unallocated component. We believe that the unallocated amount is warranted for inherent factors that cannot be practically assigned to individual loan categories, such as the imprecision in the overall loss allocation measurement process, the subjectivity risk of not considering all relevant environmental categories and related measurements and imprecision in our credit risk ratings process. The appropriateness of the unallocated component of the allowance is assessed each quarter end based upon changes in the overall business environment not otherwise captured.

The impaired loan allowance is determined pursuant to ASC 310-10-35. Loans are impaired when, based on current information and events, it is probable that we will be unable to collect all amounts due according to the contractual terms of the loan agreement. Collection of all amounts due according to the contractual terms means collecting all interest and principal payments of a loan as scheduled in the loan agreement. This evaluation is inherently subjective as it requires material estimates including the amounts and timing of future cash flows expected to be received on impaired loans that may be susceptible to significant change. Loan losses are charged off when management believes that the full collectability of the loan is unlikely. A loan may be partially charged-off after a "confirming event" has occurred which serves to validate that full repayment pursuant to the terms of the loan is unlikely.

An impairment allowance is recognized if the fair value of the loan is less than the recorded investment in the loan (recorded investment in the loan is the principal balance plus any accrued interest, net of deferred loan fees or costs and unamortized premium or discount). The impairment is recognized through the provision for loan losses and is a component of the allowance. Loans that are impaired are recorded at the present value of expected future cash flows discounted at the loan's effective interest rate, or if the loan is collateral dependent, at the fair value of the collateral, less estimated disposal costs. If the loan is collateral dependent, the principal balance of the loan is charged-off in an amount equal to the impairment measurement. The fair value of collateral dependent loans is derived primarily from collateral appraisals performed by independent third-party appraisers. Management believes it follows appropriate accounting and regulatory guidance in determining impairment and accrual status of impaired loans. This analysis is completed for all individual loans greater than \$1.0 million. The resulting allowance percentage by segment adjusted for specific trends identified, if applicable, is then applied to the remaining population of impaired loans.

Pursuant to the guidance set forth in ASU 2011-02, A Creditor's Determination of Whether a Restructuring is a Troubled Debt Restructuring, the above impairment methodology is also applied to those loans identified as troubled debt restructurings.

We then test the resulting allowance by comparing the balance in the allowance to historical trends and industry and peer information. Our management then evaluates the result of the procedures performed, including the results of our testing, and decides on the appropriateness of the balance of the allowance in its entirety. The audit committee of our board of directors approves the allowance for loan loss policy annually and reviews the methodology and approves the resultant allowance prior to the filing of quarterly and annual financial information.

While our policies and procedures used to estimate the allowance for loan losses, as well as the resultant provision for loan losses charged to operations, are considered adequate by management and are reviewed from time to time by our regulators, they are necessarily approximate and inherently imprecise. There are factors beyond our control, such as conditions in the local, national, and international economy, a local real estate market or particular industry conditions which may materially negatively impact our asset quality and the adequacy of our allowance for loan losses and thus the resulting provision for loan losses.

Effective January 1, 2020, we adopted ASU 2016-13, Financial Instruments - Measurement of Current Expected Credit Losses on Financial Instruments (CECL), which will modify the accounting for the allowance for loan losses from an incurred loss model to an expected loss model, as discussed more fully under "Part II - Item 8. Financial Statements and Supplementary Data - Note 1. Summary of Significant Accounting Policies" of this Report.

Impairment of Goodwill. Goodwill is evaluated for impairment annually and more frequently if events and circumstances indicate that the asset might be impaired. ASC 350, Intangibles — Goodwill and Other, provides an entity the option to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If an entity does a qualitative assessment and determines it is necessary, or if a qualitative assessment is not performed, it is required to perform a two-step goodwill impairment test to identify potential goodwill impairment and measure the amount of goodwill impairment loss to be recognized for that reporting unit (if any). If, based on a qualitative assessment, an entity determines that the fair value of a reporting unit is more than its carrying amount, the two-step goodwill impairment test is not required. The results of our qualitative assessment as of September 30, 2019, our annual assessment date, indicated that the fair value of our reporting unit was more than its carrying value, and accordingly, the two-step goodwill impairment test was not performed.

Should our common stock experience a sustained price decline or other impairment indicators become known, additional impairment testing of goodwill may be required. Should it be determined in a future period that the goodwill has become impaired, then a charge to earnings will be recorded in the period such determination is made. While we believe that the assumptions utilized in our testing were appropriate, they may not reflect actual outcomes that could occur. Specific factors that could negatively impact the assumptions used include the following: a change in the control premium being realized in the market or a meaningful change in the number of mergers and acquisitions occurring; the amount of expense savings that may be realized in an acquisition scenario; significant fluctuations in our asset/liability balances or the composition of our balance sheet; a change in the overall valuation of the stock market, specifically bank stocks; performance of Southeast U.S. Banks; and Pinnacle Financial's performance relative to peers. Changing these assumptions, or any other key assumptions, could have a material impact on the amount of goodwill impairment, if any.

Results of Operations

The following is a summary of our results of operations for 2019, 2018 and 2017 (in thousands except per share data):

| | | Years Decem | | 2019-2018 Percent Increase | ear ended cember 31, | 2018-2017 Percent Increase |
|---|----|----------------|---------------|----------------------------------|-------------------------|----------------------------------|
| | _ | 2019 | 2018 | (Decrease) | 2017 | (Decrease) |
| Interest income | \$ | 1,067,936 | \$ 946,717 | 12.80 % | \$ 636,138 | 48.82 % |
| Interest expense | | 301,794 | 210,375 | 43.46 % | 92,832 | 126.62 % |
| Net interest income | | 766,142 | 736,342 | 4.05 % | 543,306 | 35.53 % |
| Provision for loan losses | | 27,283 | 34,377 | (20.64)% | 23,664 | 45.27 % |
| Net interest income after provision for loan losses | | 738,859 | 701,965 | 5.26 % | 519,642 | 35.09 % |
| Noninterest income | | 263,826 | 200,870 | 31.34 % | 144,904 | 38.62 % |
| Noninterest expense | | 505,148 | 452,887 | 11.54 % | 366,560 | 23.55 % |
| Net income before income taxes | | 497,537 | 449,948 | 10.58 % | 297,986 | 51.00 % |
| Income tax expense | | 96,656 | 90,508 | 6.79 % | 124,007 | (27.01)% |
| Net income | \$ | 400,881 | \$ 359,440 | 11.53 % | \$ 173,979 | 106.60 % |
| Basic net income per common share | \$ | 5.25 | \$ 4.66 | 12.66 % | \$ 2.73 | 70.70 % |
| Diluted net income per common share | \$ | 5.22 | \$ 4.64 | 12.50 % | \$ 2.70 | 71.85 % |

Net Interest Income. Net interest income represents the amount by which interest earned on various earning assets exceeds interest paid on deposits and other interest bearing liabilities and is the most significant component of our revenues. For the year ended December 31, 2019, we recorded net interest income of approximately \$766.1 million, which resulted in a net interest margin of 3.46%. For the year ended December 31, 2018, we recorded net interest income of approximately \$736.3 million, which resulted in a net interest margin of 3.68%. For the year ended December 31, 2017, we recorded net interest income of approximately \$543.3 million, which resulted in a net interest margin of 3.76%. These increases in net interest income were attributable to the growth in our loan portfolio due to our merger with BNC, organic growth, and changes in the interest rates we receive on interest earning assets offset in part by increases in the volume and the rates we pay on deposits and our other funding sources.

The following table sets forth the amount of our average balances, interest income or interest expense for each category of interestearning assets and interest-bearing liabilities and the average interest rate for total interest-earning assets and total interest-bearing liabilities, net interest spread and net interest margin for each of the years in the three-year period ended December 31, 2019 (in thousands):

| | | 2019 | | | 2018 | | 2017 | | | |
|--|---------------------|-----------|------------------|---------------------|-----------|------------------|---------------------|-----------|------------------|--|
| | Average Balances | Interest | Rates/ Yields | Average Balances | Interest | Rates/ Yields | Average Balances | Interest | Rates/ Yields | |
| Interest-earning assets: | | | | | | | | | | |
| Loans ⁽¹⁾⁽²⁾ | \$18,847,104 | \$955,388 | 5.17 % | \$16,899,738 | \$850,472 | 5.09 % | \$12,254,790 | \$578,286 | 4.79 % | |
| Securities: | | | | | | | | | | |
| Taxable | 1,791,663 | 46,649 | 2.60 % | 1,804,958 | 48,192 | 2.67 % | 1,724,612 | 39,060 | 2.26 % | |
| Tax-exempt ⁽²⁾ | 1,680,758 | 51,138 | 3.62 % | 1,202,143 | 35,995 | 3.58 % | 488,478 | 13,712 | 3.76 % | |
| Federal funds sold and other | 631,331 | 14,761 | 2.34 % | 518,923 | 12,058 | 2.32 % | 335,491 | 5,080 | 1.51 % | |
| Total interest-earning assets | 22,950,856 | 1,067,936 | 4.78 % | 20,425,762 | 946,717 | 4.71 % | 14,803,371 | 636,138 | 4.38 % | |
| Nonearning assets: | | | | | | | | | | |
| Intangible assets | 1,859,548 | | | 1,859,183 | | | 1,273,577 | | | |
| Other nonearning assets | 1,624,750 | | | 1,269,083 | | | 939,269 | _ | | |
| | \$26,435,154 | | | \$23,554,028 | _ | | \$17,016,217 | | | |
| Interest-bearing liabilities: | | - | | | • | | | | | |
| Interest-bearing deposits: | | | | | | | | | | |
| Interest checking | 3,236,907 | 36,901 | 1.14 % | 3,064,328 | 28,767 | 0.94 % | 2,328,350 | 11,261 | 0.48 % | |
| Savings and money market | 7,557,265 | 104,138 | 1.38 % | 6,994,938 | 73,431 | 1.05 % | 5,455,607 | 32,844 | 0.60 % | |
| Time deposits | 3,978,688 | 90,602 | 2.28 % | 3,070,071 | 48,845 | 1.59 % | 1,765,089 | 15,479 | 0.88 % | |
| Total interest-bearing deposits | 14,772,860 | 231,641 | 1.57 % | 13,129,337 | 151,043 | 1.15 % | 9,549,046 | 59,584 | 0.62 % | |
| Securities sold under agreements to repurchase | 117,518 | 570 | 0.49 % | 129,899 | 588 | 0.45 % | 119,055 | 406 | 0.34 % | |
| Federal Home Loan Bank advances | 2,055,365 | 43,675 | 2.12 % | 1,663,968 | 34,174 | 2.05 % | 788,237 | 12,399 | 1.57 % | |
| Subordinated debt and other borrowings | 557,387 | 25,908 | 4.65 % | 470,189 | 24,570 | 5.23 % | 420,790 | 20,443 | 4.86 % | |
| Total interest-bearing liabilities | 17,503,130 | 301,794 | 1.72 % | 15,393,393 | 210,375 | 1.37 % | 10,877,128 | 92,832 | 0.85 % | |
| Noninterest-bearing deposits | 4,503,134 | — | 0.00 % | 4,305,942 | — | 0.00 % | 3,331,741 | _ | 0.00 % | |
| Total deposits and interest- bearing liabilities | 22,006,264 | 301,794 | 1.37 % | 19,699,335 | 210,375 | 1.07 % | 14,208,869 | 92,832 | 0.65 % | |
| Other liabilities | 241,935 | | | 18,281 | | | 30,218 | | | |
| Stockholders' equity | 4,186,955 | | | 3,836,412 | _ | | 2,777,130 | _ | | |
| | \$26,435,154 | | | \$23,554,028 | | | \$17,016,217 | | | |
| Net interest income | | \$766,142 | | | \$736,342 | | | \$543,306 | | |
| Net interest spread ⁽³⁾ | | | 3.06 % | | | 3.35 % | | | 3.53 % | |
| Net interest margin ⁽⁴⁾ | | | 3.46 % | | | 3.68 % | | | 3.76 % | |

(1) Average balances of nonperforming loans are included in average loan balances.

(2) Yields computed on tax-exempt instruments on a tax equivalent basis and include \$29.0 million, \$16.2 million and \$12.3 million for the years ended December 31, 2019, 2018 and 2017, respectively. The tax-exempt benefit has been reduced by the projected impact of tax-exempt income that will be disallowed pursuant to IRS Regulations for the period presented.

(3) Yields realized on interest-bearing assets less the rates paid on interest-bearing liabilities. The net interest spread calculation excludes the impact of demand deposits. Had the impact of demand deposits been included, the net interest spread for the year ended December 31, 2019 would have been 3.41% compared to a net interest spread for the years ended December 31, 2018 and 2017 of 3.65% and 3.73%, respectively. (4) Net interest margin is the result of net interest income calculated on a tax-equivalent basis divided by average interest earning assets for the period.

For the year ended December 31, 2019, our net interest spread was 3.06%, while the net interest margin was 3.46% compared to a net interest spread of 3.35% for the year ended December 31, 2018 and 3.53% for the year ended December 31, 2017, and a net interest margin of 3.68% and 3.76%, respectively. Although our net interest margin was positively impacted by yield expansion in our earning asset portfolio, these increases were offset by increases in our total funding costs and declining levels of positive impact from purchase accounting.

During the year ended December 31, 2019, our earning asset yield increased by 7 basis points and 33 basis points, from the years ended December 31, 2018 and 2017, respectively, while total funding rates increased by 30 basis points and 42 basis points compared to the years ended December 31, 2018 and 2017, respectively. The increase in our funding costs was primarily caused by changes in the rate environment throughout all three periods presented, intense competition and increased use of and associated borrowing costs for noncore funding. The application of fair value accounting on the BNC accounts we acquired in our merger also positively impacted our net interest margin in 2019, 2018 and 2017, but will continue to become less impactful in future periods.

We continue to deploy various asset liability management strategies to manage our risk to interest rate fluctuations. Pricing for creditworthy borrowers and meaningful depositors is very competitive in our markets and this competition has adversely impacted, and may continue to adversely impact, our margins. We anticipate that this challenging competitive environment will continue during 2020. We also expect the positive impact of purchase accounting on our net interest income will lessen in future periods, which will negatively affect our net interest margin in 2020. We have sought to mitigate much of the negative impact that reductions in short-term interest rates would have on our net interest margin through restructuring a portion of our investment securities portfolio, purchasing loan interest rate floors, and unwinding fixed-to-floating loan interest rate swaps during 2019. However, our net interest margin could be additionally impacted by future interest rate cuts if we are not able to lower deposit rates at a pace necessary to offset declines in our earning asset yields. We seek to fund increased loan volumes by growing our core deposits, but will utilize noncore funding to fund shortfalls, if any. To the extent that our dependence on noncore funding sources increases during 2020 our net interest margin would likely be negatively impacted as we may not be able to reduce the rates we pay on these deposits as quickly as we can on core deposits.

Rate and Volume Analysis. Net interest income increased by \$29.8 million between the years ended December 31, 2018 and 2019 and by \$193.0 million between the years ended December 31, 2017 and 2018. The following is an analysis of the changes in our net interest income comparing the changes attributable to rates and those attributable to volumes (in thousands):

| | 2019 Compared to 2018 Increase (decrease) due to | | | | | | | | ompared to 2 (decrease) d | | | |
|--|---|----------|----|---------|----|---------|------|----------|------------------------------|---------|-----|---------|
| | | Rate | | Volume | | Net | Rate | | Volume | | Net | |
| Interest-earning assets: | | | | | | | | | | | | |
| Loans | \$ | 9,795 | \$ | 95,121 | \$ | 104,916 | \$ | 43,386 | \$ | 228,800 | \$ | 272,186 |
| Securities: | | | | | | | | | | | | |
| Taxable | | (1,226) | | (317) | | (1,543) | | 7,195 | | 1,937 | | 9,132 |
| Tax-exempt | | (662) | | 15,805 | | 15,143 | | (2,575) | | 24,858 | | 22,283 |
| Federal funds sold | | 100 | | 2,603 | | 2,703 | | 3,551 | | 3,427 | | 6,978 |
| Total interest-earning assets | _ | 8,007 | _ | 113,212 | _ | 121,219 | | 51,557 | _ | 259,022 | | 310,579 |
| Interest-bearing liabilities: | | | | | | | | | | | | |
| Interest-bearing deposits: | | | | | | | | | | | | |
| Interest checking | | 6,325 | | 1,809 | | 8,134 | | 12,509 | | 4,997 | | 17,506 |
| Savings and money market | | 23,967 | | 6,740 | | 30,707 | | 28,261 | | 12,326 | | 40,587 |
| Time deposits | | 24,489 | | 17,268 | | 41,757 | | 17,969 | | 15,397 | | 33,366 |
| Total deposits | | 54,781 | | 25,817 | | 80,598 | | 58,739 | | 32,720 | | 91,459 |
| Securities sold under agreements to repurchase | | 40 | | (58) | | (18) | | 138 | | 44 | | 182 |
| Federal Home Loan Bank advances | | 1,324 | | 8,177 | | 9,501 | | 6,134 | | 15,641 | | 21,775 |
| Subordinated debt and other borrowings | | (2,936) | | 4,274 | | 1,338 | | 1,643 | | 2,484 | | 4,127 |
| Total interest-bearing liabilities | | 53,209 | | 38,210 | | 91,419 | | 66,654 | | 50,889 | | 117,543 |
| Net interest income | \$ | (45,202) | \$ | 75,002 | \$ | 29,800 | \$ | (15,097) | \$ | 208,133 | \$ | 193,036 |

Changes in net interest income are attributed to either changes in average balances (volume change) or changes in average rates (rate change) for earning assets and sources of funds on which interest is received or paid. Volume change is calculated as change in volume times the previous rate while rate change is change in rate times the previous volume. The change attributed to rates and volumes (change in rate times change in volume) is considered above as a change in volume.

Provision for Loan Losses. The provision for loan losses represents a charge to earnings necessary to establish an allowance for loan losses that, in management's evaluation, we believe to be adequate to provide coverage for the inherent losses on outstanding loans. The provision for loan losses amounted to approximately \$27.3 million, \$34.4 million and \$23.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Impacting the provision for loan losses in any accounting period are several factors including the change in outstanding loan balances, the level of charge-offs and recoveries, the changes in the amount of impaired loans, results of regulatory examinations, credit quality comparison to peer banks, the industry at large, economic conditions both in our market areas and more broadly, and, ultimately, the results of our quarterly assessment of the inherent risks of our loan portfolio including past loan loss experience.

Provision expense for the year ended December 31, 2019 decreased as compared to 2018 and increased in 2018 as compared to 2017. Both the decrease in 2019 as compared to 2018 and the increase in 2018 as compared to 2017 were primarily impacted by organic growth in our loan portfolio and by our internal assessment of the credit quality of the loan portfolio which included charge-offs realized in our consumer portfolio, primarily related to non-prime automobile loans, and losses on loans to commercial borrowers in a variety of industries.

Our allowance for loan losses is adjusted to an amount deemed appropriate to adequately cover probable losses in the loan portfolio based on our allowance for loan loss methodology. Our allowance for loan losses as a percentage of loans increased from 0.47% at December 31, 2018 to 0.48% at December 31, 2019. The slight increase in the allowance as a percentage of total loans is primarily attributable to provision expense associated with organic loan growth as our acquired loans, with remaining purchase accounting discounts associated with them, are becoming less impactful to our portfolio mix. The absolute level of our allowance for loan losses is largely driven by continued favorable credit experience in our portfolios and we believe it is supported by the strong economies present in markets in which we currently operate.

Noninterest Income. Our noninterest income is composed of several components, some of which vary significantly between annual periods. Service charges on deposit accounts and other noninterest income generally reflect our growth, while investment services, fees from the origination of mortgage loans, swap fees and gains or losses on the sale of securities will often reflect market conditions and fluctuate from period to period.

The following is our noninterest income for the years ended December 31, 2019, 2018, and 2017 (in thousands):

| | Years Decem | | 2019-2018 Percent Increase | Year ended December 31, | 2018-2017 Percent Increase |
|---|----------------|---------------|----------------------------------|----------------------------|----------------------------------|
| | 2019 | 2018 | (Decrease) | 2017 | (Decrease) |
| Noninterest income: | | | | | |
| Service charges on deposit accounts | \$ 36,769 | \$ 36,088 | 1.89 % | \$ 31,499 | 14.57 % |
| Investment services | 24,187 | 21,985 | 10.02 % | 15,296 | 43.73 % |
| Insurance sales commissions | 9,344 | 9,331 | 0.14 % | 7,405 | 26.01 % |
| Gains on mortgage loans sold, net | 24,335 | 14,564 | 67.09 % | 18,625 | (21.80)% |
| Investment losses on sales and impairments, net | (5,941) | (2,254) | (163.58)% | (8,264) | 72.73 % |
| Trust fees | 14,184 | 13,143 | 7.92 % | 8,664 | 51.70 % |
| Income from equity method investment | 90,111 | 51,222 | 75.92 % | 37,958 | 34.94 % |
| Other noninterest income: | | | | | |
| Interchange and other consumer fees | 36,158 | 28,720 | 25.90 % | 18,443 | 55.72 % |
| Bank-owned life insurance | 17,361 | 12,535 | 38.50 % | 7,945 | 57.77 % |
| Loan swap fees | 4,758 | 4,043 | 17.68 % | 1,795 | 125.24 % |
| SBA loan sales | 4,933 | 4,604 | 7.15 % | 2,879 | 59.92 % |
| Gain on other equity investments | 2,789 | 2,778 | 0.40 % | 365 | 661.10 % |
| Other noninterest income | 4,838 | 4,091 | 18.26 % | 4,008 | 2.07 % |
| Total other noninterest income | 70,837 | 56,771 | 24.78 % | 35,435 | 60.21 % |
| Total noninterest income | \$ 263,826 | \$ 200,850 | 31.35 % | \$ 146,618 | 36.99 % |

The increase in service charges on deposit accounts in 2019 compared to 2018 and 2017 is primarily related to increased analysis fees due to an increase in the volume and number of commercial checking accounts resulting from organic growth in this product.

Income from our wealth management groups (investments, insurance and trust) is also included in noninterest income. For the year ended December 31, 2019, commissions and fees from investment services at our financial advisory unit, Pinnacle Asset Management, a division of Pinnacle Bank, were \$24.2 million, compared to \$22.0 million at December 31, 2018 and \$15.3 million at December 31, 2017, reflecting increases in brokerage assets and, for much of 2019, 2018 and 2017, year-over-year increases in the value of the stock market. At December 31, 2019, Pinnacle Asset Management was receiving commissions and fees in connection with approximately \$4.6 billion in brokerage assets compared to \$3.8 billion and \$3.3 billion at December 31, 2018 and 2017, respectively. Insurance commissions were approximately \$9.3 million during 2019 and 2018 compared to \$7.4 million during 2017. Additionally, at December 31, 2019, our trust department was receiving fees on approximately \$2.9 billion and \$1.7 billion of managed and custodied assets, respectively, compared to approximately \$2.1 billion and \$1.5 billion at December 31, 2018 and \$1.8 billion and \$1.1 billion at December 31, 2017. The growth in our wealth management businesses is attributable to our expanded distribution platform with the addition of associates across our footprint.

Gains on mortgage loans sold, net, consists of fees from the origination and sale of mortgage loans. These mortgage fees are for loans primarily originated in our current markets that are subsequently sold to third-party investors. Substantially all of these loan sales transfer servicing rights to the buyer. Generally, mortgage origination fees increase in lower interest rate environments and more robust housing markets and decrease in rising interest rate environments and more challenging housing markets. Mortgage origination fees will fluctuate from period to period as the rate environment changes. Gains on mortgage loans sold, net, were \$24.3 million, \$14.6 million and \$18.6 million, respectively, for the years ended December 31, 2019, 2018 and 2017. The year-over-year growth in 2019 and decline in 2018 in net gains on the sale of mortgage loans was attributable to the impact of the interest rate environment on mortgage production during each respective period. We hedge a portion of our mortgage pipeline as part of a mandatory delivery program. The hedge is not designated as a hedge for GAAP purposes and, as such, changes in its fair value are recorded directly through the income statement. There is positive correlation between the dollar amount of the mortgage pipeline and the value of this hedge. Therefore, the change in the outstanding mortgage pipeline at the end of any reporting period will directly impact the amount of gain recorded for mortgage loans held for sale during that reporting period. At December 31, 2019, the mortgage pipeline included \$124.2 million in loans expected to close in 2020 compared to \$77.0 million in loans at December 31, 2018 expected to close in 2019, respectively.

For the year ended December 31, 2019, investment gains (losses) on sales and impairments, net, represent a \$5.9 million pre-tax loss we recognized upon the sale of \$737.7 million of investment securities compared to a \$2.3 million net pre-tax loss on the sale of \$169.9 million of investment securities in 2018 and an \$8.3 million net pre-tax loss on the sale of \$363.9 million of investment securities in 2017 as we sought to restructure a portion of our securities portfolio in each period in preparation for changes in the yield curve during those periods. The loss recorded in 2017 also allowed us to capture an increased tax deduction in that period due to the reduction in corporate tax rates beginning in 2018 as a result of the passage of the Tax Act.

Income from equity-method investment. Income from equity-method investment is comprised solely of income from our 49% equitymethod investment in BHG. BHG is engaged in the origination of commerical and consumer loans primarily to healthcare providers and other professionals throughout the United States. The loans originated by BHG are either financed by secured borrowings or sold with limited or non-recourse to independent financial institutions and investors. BHG has expanded its operations to include commercial lending to other professional service firms such as attorneys, accountants and others. Through subsidiaries that it owns, it also has expanded into patient financing, which involves loans to individuals to finance medical expenses, particularly those to patients with high deductible health plans.

Income from this equity-method investment was \$90.1 million for the year ended December 31, 2019 compared to \$51.2 million and \$38.0 million for the years ended December 31, 2018 and 2017, respectively. The increased level of contribution we have experienced from BHG in 2019 when compared to 2018 and 2017 reflects the positive results BHG has experienced as a result of enhancements to its business model, including its marketing efforts. Historically, BHG has sold the majority of the loans it originates to a network of bank purchasers through a combination of online auctions, direct sales and its direct purchase option.

In the second half of 2019, BHG began retaining more loans on its balance sheet than historically had been the case in recent years. This change in its business model is likely to reduce BHG's revenue in 2020 compared to what it would have recognized had it continued to sell a larger percentage of its loans to its bank network of purchasers, however, we do anticipate an increase in revenues for BHG in 2020 when compared to 2019. We believe, however, over time this practice should produce a less volatile revenue stream than its gain on sale model going forward so long as credit losses remain in line with historical experience. This model of retaining more of the loans that it originates on its balance sheet will require BHG to access funding sources in amounts greater than were previously required under the gain on sale model. BHG has arranged warehouse line financing from multiple financial institutions to facilitate this shift in strategy but may require additional funding to expand its ability to retain more loans on its balance sheet. The

costs for this funding will likely reduce BHG's earnings in the near term in comparison to what it may have earned under its gain on sale model with similar origination volumes.

Income from equity-method investment is recorded net of amortization expense associated with customer lists and other intangible assets of \$1.9 million, \$2.8 million and \$3.3 million for the years ended December 31, 2019, 2018 and 2017, respectively. At December 31, 2019, there were \$8.8 million of these intangible assets that are expected to be amortized in lesser amounts over the next 16 years. Also included in income from equity-method investment, is accretion income associated with the fair value of certain of BHG's liabilities of \$2.6 million, \$2.9 million and \$3.1 million for the years ended December 31, 2019, 2018 and 2017, respectively. At December 31, 2019, there were \$4.8 million of these liabilities that are expected to be accreted into income in lesser amounts over the next seven years.

During the years ended December 31, 2019, 2018 and 2017, respectively, Pinnacle Financial and Pinnacle Bank received \$51.3 million, \$33.7 million and \$21.7 million in dividends in the aggregate from BHG, which reduced the carrying amount of our investment in BHG while earnings from BHG increased the carrying amount of our investment in BHG. Our proportionate share of earnings from BHG are included in our consolidated tax return. Profits from intercompany transactions are eliminated. Earnings from BHG may fluctuate from period-to-period.

As our ownership interest in BHG is 49% and our representatives do not occupy a majority of the seats on BHG's board of managers, we do not consolidate BHG's results of operations or financial position into our financial statements but record the net result of BHG's activities at our percentage ownership in income from equity-method investment in noninterest income. For the year ended December 31, 2019, BHG reported \$366.5 million in gross revenues, net of substitution losses of \$53.1 million, compared to \$220.3 million and \$160.2 million, respectively, for the years ended December 31, 2018 and 2017, net of substitution losses of \$43.7 million and \$42.5 million, respectively. The following discussion considers BHG's results of operations for 2019, 2018 and 2017 prior to consideration of our ownership interest.

- Approximately \$291.1 million, or 79.4%, of these revenues for the year ended December 31, 2019 related to gains on the sale of commercial loans BHG had previously issued primarily to doctor, dentist and other medical practices compared to \$175.8 million, or 79.8%, for the year ended December 31, 2018 and \$127.2 million, or 79.4%, for the year ended December 31, 2017. BHG refers to this activity as its core product and at December 31, 2019 and 2018, BHG had loans held for sale totaling \$208.1 million and \$163.5 million, respectively. BHG typically funds these loans from cash reserves on its balance sheet. Subsequently, these core product loans are sold with no recourse to BHG to a network of community banks and other financial institutions at a premium to the par value of the loan. The purchaser may access a BHG cash reserve account of up to 3% of the loan balance to support loan payments. BHG retains no servicing or other responsibilities related to the core product loan once sold. As a result, this gain on sale premium represents BHG's compensation for absorbing the costs to originate the loan as well as marketing expenses associated with maintaining its business model.
- At December 31, 2019 and 2018, there were \$2.5 billion and \$1.9 billion, respectively, in core product loans previously sold by BHG that were actively serviced by BHG's network of bank purchasers. BHG, at its sole option, may also provide purchasers of these core product loans the ability to substitute the acquired loan with another more recently-issued BHG loan should the previously-acquired loan become at least 90-days past due as to its monthly payments. This substitution is subject to the purchaser having adhered to the standards of its purchase agreement with BHG. Additionally, all substitutions are subject to the approval by BHG's board of managers. As a result, the reacquired loans are deemed purchase credit impaired and recorded on BHG's balance sheet at the net present value of the loan's anticipated cash flows. BHG will then initiate collection efforts and attempt to restore the reacquired loan to performing status. As a result, BHG maintained a liability as of December 31, 2019 and 2018 of \$118.0 million and \$88.9 million, respectively, that represents an estimate of the future inherent losses for the outstanding core portfolio that may be subject to future substitution. This liability represents 4.7% of core product loans previously sold by BHG that remain outstanding as of both December 31, 2019 and 2018.
- BHG will maintain loans on its balance sheet for a period of time prior to sale or transfer to a purchaser. Alternatively, BHG may elect to keep certain loans on its balance sheet through maturity. From time to time, BHG may hold a higher volume of these loans depending upon the timing of loan originations, their loan pipeline and market demand as well as the deployment of their business strategy. As previously discussed, BHG recently realigned their business model to retain more of their originated loans on their balance sheet. At December 31, 2019, BHG reported balance sheet loans totaling \$454.7 million compared to \$151.4 million as of December 31, 2018. A portion of these loans do not qualify for sale accounting and accordingly an offsetting secured borrowing liability has been recorded. At December 31, 2019 and 2018, BHG had \$316.7 million and \$150.4 million of secured borrowings associated with loans held for investment which did not qualify for sale accounting. Interest income and fees and amounted to \$60.6 million, \$32.5 million and \$19.6 million for the years ended December 31, 2019, 2018 and 2017, respectively.

• BHG also sometimes refers loans to other financial institutions and, based on an agreement with the institution, earn a fee for doing so. Typically, these are loans that BHG believes would either be classified as consumer-type loans rather than commercial loans, fail to meet the credit underwriting standards of BHG but another institution will accept the loans or are to borrowers in certain geographic locations where BHG has elected not to do business. For the years ended December 31, 2019, 2018 and 2017, BHG recognized fee income of \$2.3 million, \$1.5 million and \$6.5 million, respectively, from these activities.

Included in other noninterest income are interchange and other consumer fees, gains from bank-owned life insurance, swap fees earned for the facilitation of derivative transactions for our clients, SBA loan sales, gains or losses on other equity investments and other noninterest income items. Interchange revenues increased in 2019 as a result of increased debit and credit card transactions as compared to the comparable periods in 2018 and 2017 resulting from the increase in customers during the respective periods. Other noninterest income included changes in the cash surrender value of bank-owned life insurance which was \$17.4 million for the year ended December 31, 2019 compared to \$12.5 million and \$7.9 million for the years ended December 31, 2018 and 2017, respectively. The increase in earnings on these bank-owned life insurance policies resulted primarily from the purchase of \$100.0 million of new policies during 2018 and \$110.0 million of new policies purchased in 2019. The assets that support these policies) on these policies is dependent upon the crediting rates applied by the insurance carriers, which are subject to change at the discretion of the carriers, subject to any applicable floors. Earnings on these policies generally are not taxable. Loan swap fees and SBA loan sales are all included in other noninterest income and fluctuate based on the current market environment. Additionally, the carrying values of other equity investments are adjusted either upwards or downwards from the transaction price to reflect expected exit values as evidenced by financing and sale transactions with third parties, or when determination of a valuation adjustment is confirmed through ongoing reviews by senior investment managers.

Noninterest Expense. The following is our noninterest expense for the years ended December 31, 2019, 2018, and 2017 (in thousands):

| | Years ended December 31, | | | 2019-2018 Percent Increase | Year ended December 31, | | 2018-2017 Percent Increase | |
|--------------------------------------|-----------------------------|---------|----|----------------------------------|----------------------------|------|----------------------------------|------------|
| | 2019 | | | 2018 | (Decrease) | 2017 | | (Decrease) |
| Noninterest expense: | | | | | | | | |
| Salaries and employee benefits: | | | | | | | | |
| Salaries | \$ | 185,845 | \$ | 161,229 | 15.27 % | \$ | 130,929 | 23.14 % |
| Commissions | | 13,797 | | 12,644 | 9.12 % | | 7,573 | 66.96 % |
| Cash and equity incentives | | 68,023 | | 53,990 | 25.99 % | | 40,693 | 32.68 % |
| Employee benefits and other | | 45,694 | | 43,810 | 4.30 % | | 30,467 | 43.79 % |
| Total salaries and employee benefits | | 313,359 | | 271,673 | 15.34 % | | 209,662 | 29.58 % |
| Equipment and occupancy | | 84,582 | | 74,276 | 13.88 % | | 54,092 | 37.31 % |
| Other real estate expense | | 4,228 | | 723 | 484.79 % | | 1,079 | (32.99)% |
| Marketing and business development | | 13,251 | | 11,712 | 13.14 % | | 8,321 | 40.75 % |
| Postage and supplies | | 8,144 | | 7,815 | 4.21 % | | 5,736 | 36.24 % |
| Amortization of intangibles | | 9,908 | | 10,549 | (6.08)% | | 8,816 | 19.66 % |
| Merger-related expenses | | _ | | 8,259 | (100.00)% | | 31,843 | (74.06)% |
| Other noninterest expense: | | | | | | | | |
| Deposit related expenses | | 17,017 | | 22,768 | (25.26)% | | 13,098 | 73.83 % |
| Lending related expenses | | 24,573 | | 19,428 | 26.48 % | | 13,403 | 44.95 % |
| Wealth management related expenses | | 1,986 | | 1,837 | 8.11 % | | 1,271 | 44.53 % |
| Audit, exam and insurance expense | | 9,194 | | 7,791 | 18.01 % | | 5,785 | 34.68 % |
| Administrative and other expenses | | 18,906 | | 16,036 | 17.90 % | | 13,454 | 19.19 % |
| Total other noninterest expense | | 71,676 | | 67,860 | 5.62 % | | 47,011 | 44.35 % |
| Total noninterest expense | \$ | 505,148 | \$ | 452,867 | 11.54 % | \$ | 366,560 | 23.55 % |

The increase in total salaries and employee benefits expense in 2019 over 2018 and 2017 is primarily the result of an increase in the number of employees in 2019 over 2018 and 2017 and annual merit increases to base salaries. At December 31, 2019, our associate base had expanded to 2,487.0 full-time equivalent associates as compared to 2,297.0 and 2,132.0 at December 31, 2018 and 2017, respectively, primarily resulting from our efforts to continue to hire experienced bankers and other associates throughout our footprint. We expect salary and employee benefit expenses will continue to rise as we continue to hire experienced bankers and other associates across our franchise, including in the Atlanta, Georgia market in which we entered late in the fourth quarter of 2019. We also expect salaries and benefits expense will increase in 2020 when compared to 2019 due to our increased associate base and annual merit increases given in the first quarter of each fiscal year and as we continue to enhance the infrastructure around our operations to account for our increased size and geographic reach.

Commissions expense represents compensation paid to our wealth management lines of business including investment services, trust, insurance and capital markets. Commissions expense for the year ended December 31, 2019 was 9.1% greater than in 2018 which was 67.0% greater than in 2017. The increase in 2019 as compared to 2018 and 2018 as compared to 2017 is primarily related to growth in our investment portfolio commissions. Commissions expense incurred related to the production of residential mortgages is recorded net of the related mortgage revenues.

We believe that cash and equity incentives are a valuable tool in motivating an employee base that is focused on providing our clients effective financial advice and increasing shareholder value. As a result, and unlike many other financial institutions, historically all of our non-commissioned associates have participated in our annual cash incentive plan with a minimum targeted bonus equal to 10% of each associate's annual salary, and all of our associates participate in our equity compensation plans. Advocate Capital's associates did not participate in our company-wide plan in 2019 and will participate in an Advocate Capital plan in 2020. Under the 2019 annual cash incentive plan, the targeted level of incentive payments requires achievement of a certain soundness threshold and a targeted level of revenues and diluted earnings per share (subject to certain adjustments). To the extent that the soundness threshold is met and revenues and earnings are above or below the targeted amount, the aggregate incentive payments are increased or decreased. Historically, we have paid between 0% and 125% of our targeted incentives. In 2019, our cash incentives represented 120% of targeted incentive compensation compared to 100% in 2018 and 105% in 2017. Cash incentives for 2019 totaled \$46.8 million, compared to \$36.4 million in 2018 and \$24.1 million in 2017. The increase in 2019 when compared to 2018 was primarily the result of the increase in the percentage of target of the payout from 100% in 2018 to 120% in 2019 as well as certain new associates that we had hired being able to participate in the annual cash incentive plan. The increase in 2018 when compared to 2017 was primarily the result of certain new associates that we had hired being able to participate in the annual cash incentive plan. The increase in 2018 when compared to 2017 was primarily the result of certain new associates that we had hired being able to participate in the annual cash incentive plan, particularly the BNC associates that did not participate

Also, included in cash and equity incentives for the years ended December 31, 2019, 2018 and 2017, were approximately \$11.9 million, \$12.0 million and \$10.3 million, respectively, of compensation expenses related to equity-based restricted share awards and approximately \$9.3 million, \$5.7 million and \$6.3 million, respectively, of compensation expenses related to equity-based restricted share units with performance-based vesting criteria. We have not issued stock options since 2008. Under our equity incentive plans, we provide a broad-based equity incentive program for all associates. We believe that equity incentives provide a vehicle for all associates to become meaningful shareholders of Pinnacle Financial over an extended period of time and create a shareholder-centric culture throughout our organization. Our compensation expense associated with equity awards for 2019 increased when compared to 2018 and 2017 as a result of the additional associates we hired in those periods, including associates obtained in connection with the acquisitions of Advocate Capital and BNC as well as increases in the amount of performance units awarded to our senior associates. We expect our compensation expense associated with equity awards to increase in 2020 when compared to 2019 as a result of our intention to hire additional expense associated with equity awards to increase in 2020 when compared to 2019 as a result of our intention to hire additional experienced financial advisors in 2020 as well as increases in the amount of performance units awarded to our senior associates.

Employee benefits and other expenses include costs associated with our 401k plan, health insurance, payroll taxes and contract labor. These expenses increased by \$1.9 million in 2019 compared to 2018 which increased by \$13.3 million when compared to 2017. The increase in 2019 as compared to 2018 and 2018 as compared to 2017 was primarily the result of the increase in full-time equivalent associates in each respective period.

Equipment and occupancy expense for the year ended December 31, 2019 was 13.9% greater than in 2018 which was 37.3% greater than in 2017. Included in the year ended December 31, 2019 increase was a \$3.2 million non-cash impairment charge incurred during the second quarter of 2019 related to the consolidation of five offices across our footprint. Additionally, we experienced increased expenses associated with technology improvements to enhance the infrastructure of our firm during the comparable periods and expect to incur additional costs in future periods as we continue to enhance our cybersecurity and operational infrastructure. The increase in 2018 as compared to 2017 is primarily due to our BNC merger, including the completion and opening of an office in North Carolina in 2018, and two new locations opened in our Tennessee markets in the latter part of 2017. We believe the number of our locations will increase over an extended period of time across our franchise and we have identified a location for our initial office in the Atlanta, Georgia metro area. In future periods, these expansions may lead to higher equipment and occupancy expenses as well as related increases in salaries and benefits expense.

Other real estate expense for the year ended December 31, 2019 was \$4.2 million compared to \$723,000 in 2018 and \$1.1 million in 2017. The increase in 2019 as compared to 2018 was primarily the result of a \$2.4 million write-down in the second quarter of 2019 of facilities and land acquired in the BNC acquisition that previously had been held for potential expansion. The decrease in 2018 compared to 2017 is related to the \$12.7 million decrease in other real estate owned during the year ended December 31, 2018.

Marketing and business development expense for the year ended December 31, 2019 was 13.1% greater than in 2018 which was 40.8% greater than in 2017. The primary source of the increases in 2019 as compared to 2018 is the associated marketing and business development expenses necessary to support the growth of our firm across our entire franchise in Tennessee, the Carolinas and Virginia. The primary source of the increase in 2018 as compared to 2017 is related to our merger with BNC and the associated marketing and business development expenses to support that expansion. We expect our marketing and business development expenses will increase in 2020, including as a result of our expansion into the Atlanta, Georgia metro market.

Noninterest expense related to the amortization of intangibles was \$9.9 million for the year ended December 31, 2019 compared to \$10.5 million and \$8.8 million for the years ended December 31, 2018 and 2017, respectively. The increase in amortization expense in 2018 was attributable to an increase in amortizing intangibles resulting from our acquisitions in 2017 and 2016, respectively. The following table outlines our amortizing intangible assets, their initial valuations and their intangible lives as of December 31, 2019:

| | Year acquired | Initial Valuation (in millions) | Amortizable Life (in years) | Remaining Value (in millions) |
|--------------------------------|------------------|---------------------------------------|-----------------------------------|-------------------------------------|
| Core Deposit Intangible: | | | | |
| CapitalMark | 2015 | \$ 6.2 | 7 | \$ 0.9 |
| Magna Bank | 2015 | 3.2 | 6 | 0.3 |
| Avenue | 2016 | 8.8 | 9 | 3.3 |
| BNC | 2017 | 48.1 | 10 | 30.6 |
| Book of Business Intangible: | | | | |
| Miller Loughry Beach Insurance | 2008 | 1.3 | 20 | 0.2 |
| CapitalMark | 2015 | 0.3 | 16 | 0.1 |
| BNC Insurance | 2017 | 0.4 | 20 | 0.3 |
| BNC Trust | 2017 | 1.9 | 10 | 1.4 |
| Advocate Capital | 2019 | 13.6 | 13 | 12.7 |

These assets are being amortized on an accelerated basis which reflects the anticipated life of the underlying assets. Amortization expense related to these assets is estimated to decrease from \$9.8 million per year to \$5.4 million per year over the next five years with lesser amounts for the remaining amortization period.

No merger-related expenses were recorded during the year ended December 31, 2019. During the years ended December 31, 2018 and 2017, merger-related expenses of \$8.3 million and \$31.8 million, respectively, were incurred associated with our acquisitions which occurred in, or prior to, those respective periods. Merger-related expenses in 2018 included costs to finalize the cultural and technical integrations related to our acquisition of BNC and associate retention packages. Merger-related expenses in 2017 primarily included the cost of the technical and cultural integration, lease termination fees, costs associated with the BNC branch rationalization plan we executed in 2017, the cost of certain assumed equity awards that vested upon the change in control, and retention bonuses paid to former BNC associates for their services during the conversion. Merger-related expenses for the years ended December 31, 2018, and 2017, also include the costs of technical conversions which were completed during, or prior to, those periods. Certain associate-related expenses such as retention bonuses are also included in these expenses.

Total other noninterest expenses increased by \$3.8 million to \$71.7 million during 2019 when compared to 2018 and by \$20.8 million to \$67.9 million during 2018 when compared to 2017. Included in other noninterest expenses are deposit and lending related expenses, investment and trust sales expenses, audit, exam and insurance expense and administrative expenses. Deposit expenses decreased by \$5.8 million in 2019 when compared to 2018 and increased by \$9.7 million in 2018 when compared to 2017. The decrease in 2019 when compared to 2017 was largely related to reduced FDIC premiums, partially offset by an increase in volumes. The increase in 2018 when compared to 2017 was largely the result of increased volumes. Lending expenses increased by \$5.1 million and \$6.0 million, respectively, in 2019 when compared to 2018 and 2018 when compared to 2017 each as a result of increased volumes in those respective periods. Audit, exam and insurance expense is comprised of the fees associated with ongoing audit and regulatory exams of our operations as well as the cost of our corporate insurance. Increases in audit, exam and insurance expense in 2019 as compared to 2017 is primarily related to increased regulation of our operations as a result of our increased asset size in each of the respective periods. Administrative and other expenses increased by \$2.9 million to \$18.9 million during 2019 when compared to 2018

and by \$2.6 million to \$16.0 million during 2018 when compared to 2017. A portion of that change resulted from franchise tax expense which increased \$1.1 million in 2019 when compared to 2018 and by \$1.4 million in 2018 when compared to 2017. The increased franchise tax expense is primarily the result our expanded tax base.

Our efficiency ratio (the ratio of noninterest expense to the sum of net interest income and noninterest income) was 49.1%, 48.3%, and 53.3% for the three years ended December 31, 2019, 2018 and 2017, respectively. The efficiency ratio for the year ended December 31, 2019 compared to 2018 was negatively impacted by \$1.5 million of losses on the sale of our non-prime automobile portfolio, a \$4.2 million write-down of facilities and land acquired in the BNC acquisition that previously had been held for potential expansion, and a \$3.2 million non-cash impairment charge related to the consolidation of five offices across our footprint during the year ended December 31, 2019. Net gains and losses on sales of securities impacted our efficiency ratios in all periods, 2019, 2018 and 2017. Increased revenue from increased interest earning assets in the 2019 period over the 2018 and 2017 periods and the absence of merger-related expenses in 2019 positively impacted our efficiency ratio in the 2019 period when compared to 2018 and 2017 periods. The efficiency ratio improved in 2018 as compared to 2017 primarily due to the completion in 2018 of the integration and technology conversion associated with the acquisition of BNC and the growth in interest earning assets.

Income Taxes. During the year ended December 31, 2019, we recorded income tax expense of \$96.7 million compared to \$90.5 million and \$124.0 million in 2018 and 2017, respectively. As a result of the Tax Act, in 2017 we recorded a non-cash charge of \$31.5 million related to the revaluation of our net deferred tax assets due to the statutory federal income tax rate for corporate entities decreasing from 35 percent to 21 percent for 2018 and future periods. Our effective income tax rate was 19.4%, 20.1% and 41.6%, respectively, for the years ended December 31, 2019, 2018 and 2017. The reduction in 2018 was primarily due to the reduction in the federal statutory corporate tax rate following enactment of the Tax Act. Our effective tax rate differs from the combined federal and state income tax statutory rate in effect of 26.14% and 39.23%, during the respective periods, primarily due to our investments in bank-qualified municipal securities, tax benefits from our real estate investment trust and municipal investment subsidiaries, participation in Tennessee's Community Investment Tax Credit (CITC) program, tax benefits associated with share-based compensation, bank-owned life insurance and tax savings from our captive insurance subsidiary, offset in part by the limitation on deductibility of meals and entertainment expense, certain merger-related expenses and, in 2019 and 2018, non-deductible FDIC insurance premiums and non-deductible executive compensation. Impacting tax expense during the years ended December 31, 2019, 2018 and 2017, was also our adoption on January 1, 2017 of FASB Accounting Standards Update (ASU) 2016-09, Stock Compensation Improvements to Employee Share-Based Payment Activity, which represented a change in accounting for the tax effects related to vesting of common shares and the exercise of stock options previously granted to our employees through our various equity compensation plans. This change resulted in a reduction in tax expense of \$1.0 million, \$3.0 million and \$5.4 million, respectively, for the years ended December 31, 2019, 2018 and 2017 as the income tax effects related to settlements of share-based payment awards is now required to be reported as increases (or decreases) to income tax expense. Previously, income tax benefits at settlement of an award were reported as an increase (or decrease) to additional paid-in capital.

Financial Condition

Our consolidated balance sheet at December 31, 2019 reflects an increase of \$2.1 billion in outstanding loans to \$19.8 billion and an increase of \$1.3 billion in total deposits to \$20.2 billion from December 31, 2018. Total assets were \$27.8 billion at December 31, 2019 as compared to \$25.0 billion at December 31, 2018. We acquired loans of \$5.6 billion and deposits totaling \$6.2 billion upon our acquisition of BNC in 2017. We acquired loans of \$952.5 million and deposits totaling \$966.7 million upon our acquisition of Avenue in 2016. Collectively, we acquired \$1.3 billion in loans and \$1.4 billion in deposits upon our acquisitions of CapitalMark and Magna in 2015.

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|--------------------------------------|----|-------------|-----------|------------|------------|---------|----|------------|---------|--------------|---------|--------------|---------|--|
| | _ | 2019 | | | 2018 | | | 2017 | | 2016 | í | 2015 | | |
| | _ | Amount | Percent | _ | Amount | Percent | _ | Amount | Percent | Amount | Percent | Amount | Percent | |
| Commercial real estate - Mortgage | \$ | 7,709,218 | 39.0 % | \$ | 7,164,954 | 40.4 % | \$ | 6,669,610 | 42.7 % | \$ 3,193,496 | 37.8 % | \$ 2,275,483 | 34.8 % | |
| Consumer real estate - Mortgage | | 3,068,625 | 15.5 % | | 2,844,447 | 16.1 % | | 2,561,214 | 16.4 % | 1,185,917 | 14.0 % | 1,046,517 | 16.0 % | |
| Construction and land development | | 2,430,483 | 12.3 % | | 2,072,455 | 11.7 % | | 1,908,288 | 12.2 % | 912,673 | 10.8 % | 747,697 | 11.4 % | |
| Commercial and industrial | | 6,290,296 | 31.8 % | | 5,271,421 | 29.8 % | | 4,141,341 | 26.5 % | 2,891,710 | 34.2 % | 2,228,542 | 34.1 % | |
| Consumer and other | | 289,254 | 1.4 % | | 354,272 | 2.0 % | | 352,663 | 2.2 % | 266,129 | 3.2 % | 244,996 | 3.7 % | |
| Total loans | \$ | 19,787,876 | 100.0 % | \$ | 17,707,549 | 100.0 % | \$ | 15,633,116 | 100.0 % | \$ 8,449,925 | 100.0 % | \$ 6,543,235 | 100.0 % | |

Loans. The composition of loans at December 31 for each of the past five years and the percentage (%) of each segment to total loans are summarized as follows (dollars in thousands):

The composition of our loan portfolio changed due to our acquisition of BNC in 2017, which focused more on commercial real estate lending, including construction, than we did in our Tennessee markets. As we intend to focus on growth of the commercial and industrial segment across our franchise footprint, we continue to believe our commercial and industrial portfolio will again become a more substantial portion of our total loan portfolio. This focus was evident in 2018 and 2019, as the commercial and industrial segment represented 5.3% more of our total loan portfolio at December 31, 2019 than it did at December 31, 2017. We will continue to focus on the growth of this segment in 2020 and future periods.

The commercial real estate – mortgage category includes owner-occupied commercial real estate loans. At December 31, 2019, approximately 34.6% of the outstanding principal balance of our commercial real estate - mortgage loans was secured by owner-occupied commercial real estate is similar in many ways to our commercial and industrial lending in that these loans are generally made to businesses on the basis of the cash flows of the business rather than on the valuation of the real estate. Additionally, the construction and land development segment continues to be a meaningful portion of our portfolio and reflects the development in the local economies in which we operate and is diversified between commercial, residential and land.

The following table classifies our fixed and variable rate loans at December 31, 2019 according to contractual maturities of (1) one year or less, (2) after one year through five years, and (3) after five years. The table also classifies our variable rate loans pursuant to the contractual repricing dates of the underlying loans (dollars in thousands):

| | | Amoi | ints a | ut December 31 | , 201 | 9 | | |
|--------------------------------|----|----------------|--------|-------------------|-------|------------|-------------------------|-------------------------|
| | | Fixed Rates | | Variable Rates | | Totals | At December 31, 2019 | At December 31, 2018 |
| Based on contractual maturity: | | | | | | | | |
| Due within one year | \$ | 1,438,959 | \$ | 2,636,503 | \$ | 4,075,462 | 20.6 % | 18.9 % |
| Due in one year to five years | | 5,125,114 | | 4,800,173 | | 9,925,287 | 50.2 % | 49.7 % |
| Due after five years | _ | 2,920,460 | | 2,866,667 | | 5,787,127 | 29.2 % | 31.4 % |
| Totals | \$ | 9,484,533 | \$ | 10,303,343 | \$ | 19,787,876 | 100.0 % | 100.0 % |

| | Amoi | ints d | ut December 31 | | | | | | | | | | | | | | | | | | |
|---------------------------------------|-----------------|--------|-------------------|----|------------|---------|---------|--|--|--|--|--|--|--|--|--|--|--|--------|-------------------------|-------------------------|
| | Fixed Rates | | Variable Rates | | | | | | | | | | | | | | | | Totals | At December 31, 2019 | At December 31, 2018 |
| Based on contractual repricing dates: | | | | | | | | | | | | | | | | | | | | | |
| Daily floating rate | \$ _ | \$ | 2,658,381 | | 2,658,381 | 13.4 % | 15.6 % | | | | | | | | | | | | | | |
| Due within one year | 1,438,959 | | 6,994,584 | | 8,433,543 | 42.6 % | 39.0 % | | | | | | | | | | | | | | |
| Due in one year to five years | 5,125,114 | | 362,364 | | 5,487,478 | 27.7 % | 28.8 % | | | | | | | | | | | | | | |
| Due after five years | 2,920,460 | | 288,014 | | 3,208,474 | 16.2 % | 16.6 % | | | | | | | | | | | | | | |
| Totals | \$ 9,484,533 | \$ | 10,303,343 | \$ | 19,787,876 | 100.0 % | 100.0 % | | | | | | | | | | | | | | |

The above information does not consider the impact of scheduled principal payments.

Loan Origination Risk Management. We maintain lending policies and procedures designed to maximize lending opportunities within an acceptable level of risk. Management reviews and approves these policies and procedures on a regular basis. A reporting system supplements the review process by providing management with frequent reports related to loans in our portfolio, loan quality, concentrations of credit, loan delinquencies and non-performing loans. Diversification in the loan portfolio is measured and monitored as a means of managing risk associated with fluctuations in economic conditions.

Underwriting standards are designed to promote relationship banking rather than transactional banking. Management examines current and projected cash flows to determine the expected ability of a borrower to repay its obligations as agreed. Commercial and industrial loans are primarily underwritten based on the identified cash flows of the borrower and generally are collateralized by business assets and may have a personal guaranty of business principals. Collateral pledged may include the assets being financed or other assets such as accounts receivable, inventory or equipment. Some loans may be advanced on an unsecured basis. Commercial real estate-mortgage loans are subject to underwriting standards and processes similar to commercial and industrial loans. These loans are viewed primarily as cash flow loans and are underwritten based on the ability of the property (in the case of income producing property), or the borrower's business (if owner-occupied) to generate sufficient cash flow to amortize the debt. Secondary emphasis is placed upon collateral value and the financial strength of guarantors, if any. Commercial real estate loans may be adversely affected by conditions in the real estate markets or in the general economy. As detailed in the discussion of real estate loans below, the properties securing our commercial real estate portfolio generally are diverse in terms of type and industry and we measure and monitor concentrations regularly. We believe this diversity helps reduce our exposure to adverse economic events that affect any single industry or type of real estate product. Management monitors and evaluates commercial real estate loans based on cash flow, collateral, geography and risk grade criteria. We also utilize third-party experts to provide insight and guidance about economic conditions and trends affecting market areas we serve.

Construction loans are underwritten utilizing independent appraisals, sensitivity analysis of absorption and lease rates, financial analysis of the developers and property owners, and expectations of the permanent mortgage market, among other items. Construction loans are generally based upon estimates of costs and appraised value associated with the completed project, which may be inaccurate. Construction loans involve the disbursement of funds during construction with repayment substantially dependent on the success of the ultimate project. Sources of repayment for these types of loans may be sales of developed property, refinancing in the permanent mortgage market, or an interim loan commitment from us until permanent financing is obtained. These loans are closely monitored by on-site inspections and are considered to have higher risks than other real estate loans because their ultimate repayment depends on the satisfactory completion of construction and is sensitive to interest rate changes, governmental regulation of real property, general economic conditions and the availability of long-term financing.

We also originate consumer loans, including consumer real-estate loans, where we typically use a computer-based credit scoring analysis to supplement the underwriting process. To monitor and manage consumer loan risk, policies and procedures are developed and modified, as needed, jointly by line and staff personnel. This activity, coupled with relatively small loan amounts that are spread across many individual borrowers, seeks to minimize risk. Additionally, trend and outlook reports are reviewed by management on a regular basis. Underwriting standards for home equity loans are heavily influenced by statutory requirements.

We also maintain an independent loan review department that reviews and validates the credit risk program on a periodic basis. Results of these reviews are presented to management and the audit and risk committees of our board of directors. The loan review process complements and reinforces the risk identification and assessment decisions made by lenders and credit personnel, as well as our policies and procedures.

Lending Concentrations. We periodically analyze our loan portfolio to determine if a concentration of credit risk exists to any one or more industries. We use broadly accepted industry classification systems in order to classify borrowers into various industry classifications. We have a credit exposure (loans outstanding plus unfunded commitments) exceeding 25% of Pinnacle Bank's total risk-based capital to borrowers in the following industries at December 31, 2019 and 2018 (in thousands):

| | utstanding cipal Balances | Unfunded Commitments | | Total exposure | Fotal Exposure at December 31, 2018 |
|-------------------------------------|------------------------------|-------------------------|----|----------------|--|
| Lessors of nonresidential buildings | \$ 3,681,897 | \$ 896,219 | \$ | 4,578,116 | \$ 3,932,059 |
| Lessors of residential buildings | 951,295 | 648,542 | | 1,599,837 | 1,484,697 |
| New housing for-sale builders | 530,345 | 560,258 | | 1,090,603 | 1,100,989 |
| Hotels and motels | 805,957 | 161,814 | | 967,771 | 920,001 |

Banking regulations have established guidelines for the construction ratio of less than 100% of total risk-based capital and for the nonowner occupied ratio of less than 300%. Should a bank's ratios be in excess of these guidelines, banking regulations generally require an increased level of monitoring in these lending areas by bank management. Both ratios are calculated by dividing certain types of loan balances for each of the two categories by Pinnacle Bank's total risk-based capital. At December 31, 2019 and 2018, Pinnacle Bank's construction and land development loans as a percentage of total risk-based capital was 83.6% and 85.2%, respectively. Nonowner occupied commercial real estate and multifamily loans (including construction and loan development loans) was 268.3% and 277.7% for December 31, 2019 and 2018, respectively. Pinnacle Bank was within the 100% and 300% guidelines throughout 2019 and has established what it believes to be appropriate controls to monitor its lending in these areas as it aims to keep the level of these loans to below the 100% and 300% thresholds though there may be periods where we exceed these levels if loan growth is more heavily weighted to these types of loans. *Performing Loans in Past Due Status.* The following table is a summary of our accruing loans that were past due at least 30 days but less than 89 days and 90 days or more past due as of December 31, 2019 and 2018 (dollars in thousands):

| Accruing loans past due 30 to 89 days: | December 31, 2019 | Dec | ember 31, 2018 |
|--|-----------------------|-----|----------------|
| Commercial real estate – mortgage | \$ 11,158 | \$ | 11,756 |
| Consumer real estate – mortgage | 8,162 | | 18,059 |
| Construction and land development | 2,087 | | 3,759 |
| Commercial and industrial | 10,312 | | 21,451 |
| Consumer and other | 2,168 | | 3,276 |
| Total accruing loans past due 30 to 89 days | \$ 33,887 | \$ | 58,301 |
| Accruing loans past due 90 days or more: | | | |
| Commercial real estate – mortgage | \$ | \$ | |
| Consumer real estate – mortgage | 168 | | |
| Construction and land development | | | |
| Commercial and industrial | 946 | | 1,082 |
| Consumer and other | 501 | | 476 |
| Total accruing loans past due 90 days or more | \$ 1,615 | \$ | 1,558 |
| Ratios: | | | |
| Accruing loans past due 30 to 89 days as a percentage of total loans | 0.17 % | | 0.33 % |
| Accruing loans past due 90 days or more as a percentage of total loans | 0.01 % | | 0.01 % |
| Total accruing loans in past due status as a percentage of total loans | 0.18 % | | 0.34 % |

Potential Problem Loans. Potential problem loans amounted to approximately \$276.0 million, or 1.4% of total loans outstanding at December 31, 2019, compared to \$176.3 million, or 1.0% of total loans outstanding at December 31, 2018. Potential problem loans, which are not included in nonperforming loans, represent those loans with a well-defined weakness and where information about possible credit problems of borrowers has caused management to have doubts about the borrower's ability to comply with present repayment terms. This definition is believed to be substantially consistent with the standards established by Pinnacle Bank's primary regulators for loans classified as substandard or worse, but not considered nonperforming loans. Approximately \$8.5 million of potential problem loans were past due at least 30 but less than 90 days as of December 31, 2019.

Non-Performing Assets and Troubled Debt Restructurings. At December 31, 2019, we had \$91.1 million in nonperforming assets compared to \$103.2 million at December 31, 2018. Included in nonperforming assets were \$61.6 million in nonperforming loans and \$29.5 million in other real estate owned and other nonperforming assets at December 31, 2019 and \$87.8 million in nonperforming loans and \$15.4 million in other real estate owned and other nonperforming assets at December 31, 2018. At December 31, 2019 and 2018, there were \$4.9 million and \$5.9 million, respectively, of troubled debt restructurings that were performing as of the restructured date and remain on accrual status but are considered impaired loans pursuant to U.S. GAAP.

All nonaccruing loans are reassigned to a special assets officer who was not responsible for originating the loan. The special assets officer is responsible for developing an action plan designed to minimize our future losses. Typically, these special assets officers review our loan files, interview prior officers assigned to the relationship, meet with borrowers, inspect collateral, reappraise collateral and/or consult with legal counsel. The special assets officer then recommends an action plan to a committee of senior associates including lenders and workout specialists, which could include foreclosing on collateral, restructuring the loan, issuing demand letters or other actions.

We discontinue the accrual of interest income when (1) there is a significant deterioration in the financial condition of the borrower and full repayment of principal and interest is not expected or (2) the principal or interest is more than 90 days past due, unless the loan is both well-secured and in the process of collection. During 2019, 2018 and 2017, respectively, we recognized \$176,000, \$469,000 and \$95,000 of interest income from nonperforming loans, reflecting cash payments received from the borrower and our belief, at the time of payment, that the underlying collateral supported the carrying amount of the loans.

Due to the weakening credit status of a borrower, we may elect to formally restructure certain loans to facilitate a repayment plan that seeks to minimize the potential losses, if any, that we might incur. These loans are considered troubled debt restructurings and are considered to be impaired loans pursuant to U.S. GAAP. If on nonaccruing status as of the date of restructuring, any restructured loan is included in the nonperforming loan balances as discussed above and is classified as an impaired loan. Loans that have been restructured that are on accrual status as of the restructure date are not included in nonperforming loans; however, such loans are still considered impaired.

At December 31, 2019, we owned \$29.5 million in other real estate which we had acquired, usually through foreclosure, or by deed in lieu of foreclosure, from borrowers compared to \$15.2 million at December 31, 2018; the majority of this real estate is located within our principal markets. At December 31, 2019, OREO included \$6.9 million of properties we acquired in connection with our acquisition of BNC that had previously been held for future expansion that were transferred to OREO in 2019.

Allowance for Loan Losses (allowance). We maintain the allowance at a level that our management deems appropriate to adequately cover the probable losses inherent in the loan portfolio. As of December 31, 2019 and 2018, our allowance for loan losses was \$94.8 million and \$83.6 million, respectively, which our management deemed to be adequate at each of the respective dates. Our allowance for loan loss as a percentage of total loans has remained relatively flat from 0.47% at December 31, 2018 to 0.48% at December 31, 2019. The slight change in the allowance as a percentage of total loans is primarily attributable to provision expense associated with organic loan growth during 2019 when compared to 2018. The absolute level of our allowance for loan losses is largely driven by continued favorable credit experience in our larger portfolios and we believe it is supported by the strong economies present in the markets in which we currently operate.

Also impacting the overall balance of our allowance for loan losses is fair value accounting on our acquired loan portfolios as no allowance for loan losses is assigned to acquired loans as of the date of acquisition; however, an allowance for loan losses is recorded for purchased loans that have experienced credit deterioration subsequent to acquisition or increases in balances outstanding. Our accounting policy is to compare the computed allowance for loan losses on a loan-by-loan basis for purchased loans to the remaining fair value adjustment. If the computed allowance at the loan level is greater than the remaining fair value adjustment, the excess is added to the allowance for loan losses by a charge to the provision for loan losses. The judgments and estimates associated with our allowance determination are described under "Critical Accounting Estimates" above. As of December 31, 2019, net loans included a net fair value discount of \$55.1 million. For the years ended December 31, 2019 and 2018, respectively, the net fair value discount changed as follows:

| | A | Accretable Yield ⁽¹⁾ | No | onaccretable Yield ⁽²⁾ | Total |
|---|----|------------------------------------|----|--------------------------------------|-----------|
| December 31, 2017 | \$ | (132,002) | \$ | (31,537) \$ | (163,539) |
| Year-to-date accretion and settlements | | 53,720 | | 14,143 | 67,863 |
| December 31, 2018 | \$ | (78,282) | \$ | (17,394) \$ | (95,676) |
| Reclassification from nonaccretable to accretable | | (7,505) | | 7,505 | |
| Year-to-date accretion and settlements | | 34,465 | | 6,061 | 40,526 |
| December 31, 2019 | \$ | (51,322) | \$ | (3,828) \$ | (55,150) |

(1) The accretable yield will be recorded as a component of interest income using the level-yield method based on the life of the underlying loans.

(2) The nonaccretable yield is reduced as purchase credit impaired loans are settled. On January 1, 2020, any remaining nonaccretable yield will be reclassified to the allowance for credit losses in accordance with FASB ASC 2016-13 (CECL).

The following table sets forth, based on management's best estimate, the allocation of the allowance to types of loans as well as the unallocated portion as of December 31 for each of the past five years and the percentage of loans in each category to total loans (in thousands):

| | | At December 31, | | | | | | | | | |
|-----------------------------------|----|-----------------|------------|--------|------------|--------|------------|--------|------------|----------|---------|
| | _ | 201 | 9 | 201 | 8 | 201 | 17 | 201 | !6 | 201 | 5 |
| | | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent | Amount | Percent |
| Commercial real estate -Mortgage | \$ | 33,369 | 39.0 % \$ | 26,946 | 40.4 % \$ | 21,188 | 42.7 % \$ | 13,655 | 37.8 % \$ | 5 15,513 | 34.8 % |
| Consumer real estate - Mortgage | | 8,054 | 15.5 % | 7,670 | 16.1 % | 5,031 | 16.4 % | 6,564 | 14.0 % | 7,220 | 16.0 % |
| Construction and land development | | 12,662 | 12.3 % | 11,128 | 11.7 % | 8,962 | 12.2 % | 3,624 | 10.8 % | 2,903 | 11.4 % |
| Commercial and industrial | | 36,112 | 31.8 % | 31,731 | 29.8 % | 24,863 | 26.5 % | 24,743 | 34.2 % | 23,643 | 34.1 % |
| Consumer and other | | 3,595 | 1.4 % | 5,423 | 2.0 % | 5,874 | 2.2 % | 9,520 | 3.2 % | 15,616 | 3.7 % |
| Unallocated | | 985 | NA | 677 | NA | 1,322 | NA | 874 | NA | 537 | NA |
| Total allowance for loan losses | \$ | 94,777 | 100.0 % \$ | 83,575 | 100.0 % \$ | 67,240 | 100.0 % \$ | 58,980 | 100.0 % \$ | 65,432 | 100.0 % |

The allocation of the allowance for loan losses by category is determined based on historical loss experience for that category and qualitative factors applicable to each category of loans. The allocated loan loss attributable to impaired loans is included in the respective category above. The unallocated category is intended to allow for losses that are inherent in our portfolio that we have not yet identified or attributed to a specific risk factor and for modeling imprecision. Additional information on the allocation of the allowance between performing and impaired loans is provided in Note 5, "Loans and Allowance for Loan Losses", to the Notes to Consolidated Financial Statements, elsewhere in this Annual Report on Form 10-K.

The following is a summary of changes in the allowance for loan losses for each of the years in the five-year period ended December 31, 2019 and the ratio of the allowance for loan losses to total loans as of the end of each period (in thousands):

| | 2019 | 2018 | 2017 | 2016 | 2015 |
|--|----------------|--------------|--------------|--------------|--------------|
| Balance at beginning of period | \$ 83,575 | \$ 67,240 | \$ 58,980 | \$ 65,432 | \$ 67,359 |
| Provision for loan losses | 27,283 | 34,377 | 23,664 | 18,328 | 9,188 |
| Charged-off loans: | | | | | |
| Commercial real estate - Mortgage | (1,700) | (3,030) | (633) | (276) | (384) |
| Consumer real estate - Mortgage | (1,335) | (1,593) | (1,461) | (788) | (365) |
| Construction and land development | (18) | (74) | (137) | (231) | (190) |
| Commercial and industrial | (19,208) | (13,175) | (4,297) | (5,801) | (2,207) |
| Consumer and other | (6,206) | (12,528) | (15,518) | (24,016) | (18,002) |
| Total charged-off loans | (28,467) | (30,400) | (22,046) | (31,112) | (21,148) |
| Recoveries of previously charged-off loans: | | | | | |
| Commercial real estate - Mortgage | 2,232 | 2,096 | 671 | 208 | 85 |
| Consumer real estate - Mortgage | 1,827 | 2,653 | 1,516 | 546 | 874 |
| Construction and land development | 682 | 1,863 | 1,136 | 545 | 1,479 |
| Commercial and industrial | 6,473 | 3,035 | 1,317 | 2,138 | 1,730 |
| Consumer and other loans | 1,172 | 2,711 | 2,002 | 2,895 | 5,865 |
| Total recoveries of previously charged-off loans | 12,386 | 12,358 | 6,642 | 6,332 | 10,033 |
| Net charge-offs | \$ (16,081) | (18,042) | (15,404) | (24,780) | (11,115) |
| Balance at end of period | \$ 94,777 | \$ 83,575 | \$ 67,240 | \$ 58,980 | \$ 65,432 |
| Ratio of allowance for loan losses to total loans outstanding at end of period | 0.48 % | 0.47 % | 0.43 % | 0.70 % | 1.00 % |
| Ratio of net charge-offs to average loans outstanding for the period | 0.08 % | 0.11 % | 0.13 % | 0.33 % | 0.21 % |

The decrease in the allowance for loan loss as a percentage of total loans over the last several years is primarily as a result of recording our acquired portfolios at fair value upon acquisition. Net charge-offs in the commercial and industrial portfolio are largely due to loans that were reported as nonperforming assets as of December 31, 2018, and for which further deterioration resulted in charge-offs during the year ended December 31, 2019.

As noted in our critical accounting policies, management assesses the adequacy of the allowance at the end of each calendar quarter. This assessment includes procedures to estimate the allowance and test the adequacy and appropriateness of the resulting balance. The level of the allowance is based upon management's evaluation of the loan portfolios, past loan loss experience, known and inherent risks in the portfolio, the views of Pinnacle Bank's regulators, adverse situations that may affect the borrower's ability to repay (including the timing of future payments), the estimated value of any underlying collateral, composition of the loan portfolio, economic conditions, industry and peer bank loan quality indications and other pertinent factors. This evaluation is inherently subjective as it requires material estimates including the amounts and timing of future cash flows expected to be received on impaired loans that may be susceptible to significant change.

Based upon our evaluation of the loan portfolio, we believe the allowance for loan losses to be adequate to absorb our estimate of inherent losses existing in the loan portfolio at December 31, 2019. While our policies and procedures used to estimate the allowance for loan losses, as well as the resultant provision for loan losses charged to operations, are considered adequate by management, they are necessarily approximate and imprecise. There are factors beyond our control, such as conditions in the local and national economy, local real estate market or a particular industry or borrower which may negatively impact, materially, our asset quality and the adequacy of our allowance for loan losses and, thus, the resulting provision for loan losses.

Investments. Our investment portfolio, consisting primarily of Federal agency bonds, state and municipal securities and mortgagebacked securities, amounted to \$3.73 billion and \$3.28 billion billion at December 31, 2019 and 2018, respectively. Our investment to asset ratio has increased from 13.1% at December 31, 2018 to 13.4% at December 31, 2019. Our investment portfolio serves many purposes including serving as a stable source of income, collateral for public funds and as a potential liquidity source. During 2019, Pinnacle sold \$737.7 million of investment securities for a net pre-tax loss of \$5.9 million compared to \$169.9 million of investment securities for a net pre-tax loss of \$2.3 million during 2018 and \$363.9 million of investment securities for a net pre-tax loss of \$8.3 million during 2017. These sales were implemented as part of our efforts to reposition our investment portfolio to provide our balance sheet more protection from the rate environment in each respective period. The timing of the sales in 2017 also allowed us to capture an increased tax deduction in 2017 due to the reduction in corporate tax rates beginning in 2018 as a result of the passage of the Tax Act. During the third quarter of 2018, Pinnacle Financial transferred, at fair value, \$179.8 million of municipal securities from the available-for-sale portfolio to the held-to-maturity portfolio to mitigate the impact of changes in fair value on our tangible book equity. The related net unrealized after tax losses of \$2.2 million remained in accumulated other comprehensive income (loss) and will be amortized over the remaining life of the securities, offsetting the related amortization of discount on the transferred securities. No gains or losses were recognized at the time of transfer.

A summary of certain aspects of our investment portfolio at December 31, 2019 and 2018 follows:

| | December | r 31, |
|-------------------------|------------|------------|
| | 2019 | 2018 |
| Weighted average life | 6.55 years | 7.23 years |
| Effective duration (*) | 4.75 % | 3.62 % |
| Weighted average coupon | 3.63 % | 3.67 % |
| Tax equivalent yield | 2.85 % | 3.22 % |

^(*) The metric is presented net of fair value hedges tied to certain investment portfolio holdings. The effective duration of the investment portfolio without the fair value hedges as of December 31, 2019 was 5.89%.

The following table shows the carrying value of investment securities according to contractual maturity classifications of (1) one year or less, (2) after one year through five years, (3) after five years through ten years, and (4) after ten years. Actual maturities may differ from contractual maturities of mortgage-backed and asset-backed securities because the mortgages or other assets underlying the securities may be called or prepaid with or without penalty. Therefore, these securities are not included in the maturity categories but are listed below these categories as of December 31, 2019 and 2018 (in thousands):

| | U.S. Tr secui | | U.S. gove agency se | rnment curities | State and M securit | | Corpo securi | | Total | 5 |
|-------------------------------------|------------------|--------|------------------------|--------------------|------------------------|--------|-----------------|--------|--------------|--------|
| | Amount | Yield | Amount | Yield | Amount | Yield | Amount | Yield | Amount | Yield |
| At December 31, 2019: | | | | | | | | | | |
| Securities available-for-sale: | | | | | | | | | | |
| Due in one year or less | \$ 72,365 | 1.76 % | \$ | 0.00 % | 50 | 5.47 % | \$ 501 | 1.81 % | \$ 72,916 | 1.76 % |
| Due in one year to five years | 502 | 2.08 % | 2,232 | 2.26 % | 2,767 | 4.22 % | 7,582 | 4.25 % | 13,083 | 3.82 % |
| Due in five years to ten years | — | 0.00 % | 38,202 | 2.71 % | 23,952 | 3.46 % | 41,430 | 4.02 % | 103,584 | 3.41 % |
| Due after ten years | | 0.00 % | 39,258 | 1.86 % | 1,687,684 | 4.60 % | 6,591 | 4.43 % | 1,733,533 | 4.54 % |
| | \$ 72,867 | 1.76 % | \$ 79,692 | 2.27 % | \$1,714,453 | 4.59 % | \$ 56,104 | 4.08 % | 1,923,116 | 4.36 % |
| Mortgage-backed securities | | | | | | | | | 1,463,907 | 2.43 % |
| Asset-backed securities | | | | | | | | | 152,972 | 3.13 % |
| Total available-for-sale securities | 3 | | | | | | | | \$ 3,539,995 | 3.49 % |
| Securities held-to-maturity: | | | | | | | | | | |
| Due in one year or less | \$ | 0.00 % | \$ | 0.00 % | \$ 1,062 | 1.67 % | \$ — | 0.00 % | \$ 1,062 | 1.67 % |
| Due in one year to five years | | 0.00 % | _ | 0.00 % | | 0.00 % | _ | 0.00 % | _ | 0.00 % |
| Due in five years to ten years | | 0.00 % | — | 0.00 % | 5,772 | 3.13 % | — | 0.00 % | 5,772 | 3.13 % |
| Due after ten years | | 0.00 % | _ | 0.00 % | 182,162 | 4.36 % | | 0.00 % | 182,162 | 4.36 % |
| | \$ _ | 0.00 % | \$ — | 0.00 % | \$ 188,996 | 4.31 % | \$ — | 0.00 % | 188,996 | 4.31 % |
| Mortgage-backed securities | | | | | | | | | | 0.00 % |
| Asset-backed securities | | | | | | | | | | 0.00 % |
| Total held-to-maturity securities | | | | | | | | | \$ 188,996 | 4.31 % |
| At December 31, 2018: | | | | | | | | | | |
| Securities available-for-sale: | | | | | | | | | | |
| Due in one year or less | \$ 29,805 | 2.33 % | \$ 9,911 | 2.70 % | 2,835 | 1.91 % | \$ 4,923 | 2.39 % | \$ 47,474 | 2.39 % |
| Due in one year to five years | 495 | 2.08 % | 3,083 | 2.27 % | 24,936 | 4.96 % | 16,411 | 4.58 % | 44,925 | 4.60 % |
| Due in five years to ten years | _ | 0.00 % | 13,549 | 2.16 % | 44,883 | 3.09 % | 39,993 | 4.65 % | 98,425 | 3.61 % |
| Due after ten years | | 0.00 % | 43,616 | 2.78 % | 1,157,000 | 4.49 % | 5,719 | 4.49 % | 1,206,335 | 4.43 % |
| | \$ 30,300 | 2.32 % | \$ 70,159 | 2.63 % | \$1,229,654 | 4.44 % | \$ 67,046 | 4.46 % | 1,397,159 | 4.31 % |
| Mortgage-backed securities | | | | | | | | | 1,310,945 | 2.78 % |
| Asset-backed securities | | | | | | | | | 375,582 | 3.42 % |
| Total available-for-sale securities | 3 | | | | | | | | \$ 3,083,686 | 3.55 % |
| Securities held-to-maturity: | | | | | | | | | | |
| Due in one year or less | \$ — | 0.00 % | \$ | 0.00 % | \$ 325 | 5.06 % | \$ | 0.00 % | \$ 325 | 5.06 % |
| Due in one year to five years | — | 0.00 % | _ | 0.00 % | 5,710 | 2.35 % | _ | 0.00 % | 5,710 | 2.35 % |
| Due in five years to ten years | | 0.00 % | | 0.00 % | 7,980 | 2.88 % | _ | 0.00 % | 7,980 | 2.88 % |
| Due after ten years | | 0.00 % | | 0.00 % | 180,267 | 4.35 % | | 0.00 % | 180,267 | 4.35 % |
| | \$ — | 0.00 % | \$ | 0.00 % | \$ 194,282 | 4.23 % | \$ — | 0.00 % | \$ 194,282 | 4.23 % |
| Mortgage-backed securities | | | | | | | | | | 0.00 % |
| Asset-backed securities | | | | | | | | | | 0.00 % |
| Total held-to-maturity securities | | | | | | | | | \$ 194,282 | 4.23 % |

We computed yields using coupon interest, adding discount accretion or subtracting premium amortization, as appropriate, on a ratable basis over the life of each security. We computed the weighted average yield for each maturity range using the acquisition price of each security in that range.

Deposits and Other Borrowings. We had approximately \$20.2 billion of deposits at December 31, 2019 compared to \$18.8 billion billion at December 31, 2018. Our deposits consist of noninterest and interest-bearing demand accounts, savings accounts, money market accounts and time deposits. Additionally, we entered into agreements with certain customers to sell certain of our securities under agreements to repurchase the security the following day. These agreements (which are typically associated with comprehensive treasury management programs for our commercial clients and provide the client with short-term returns for their excess funds) amounted to \$126.4 million at December 31, 2019 and \$104.7 million at December 31, 2018. Average balances for these repurchase agreements were \$117.5 million in 2019 and \$129.9 million in 2018. Additionally, at December 31, 2019, we had borrowed \$2.1 billion in advances from the Federal Home Loan Bank of Cincinnati (FHLB Cincinnati) compared to \$1.4 billion billion at December 31, 2018. At December 31, 2019, we had an estimated \$2.1 billion in additional borrowing capacity with the FHLB Cincinnati; however, incremental borrowings are made via a formal request by us and the subsequent approval by the FHLB Cincinnati.

Generally, we have classified our funding base as either core funding or non-core funding as shown in the table below. The following table represents the balances of our deposits and other funding and the percentage of each type to the total at December 31, 2019 and 2018 (in thousands):

| | December 31, 2019 | Percent | December 31, 2018 | Percent |
|--|----------------------|------------|----------------------|----------|
| Core funding: | | | | |
| Noninterest-bearing deposit accounts | \$ 4,795,47 | 6 20.74 % | \$ 4,309,067 | 20.63 % |
| Interest-bearing demand accounts | 3,135,58 | 1 13.56 % | 3,097,110 | 14.83 % |
| Savings and money market accounts | 6,807,82 | 5 29.45 % | 6,805,186 | 32.59 % |
| Time deposit accounts less than \$250,000 | 1,674,97 | 0 7.24 % | 1,605,983 | 7.69 % |
| Reciprocating demand deposit accounts (1) | 302,61 | 0 1.31 % | 162,410 | 0.78 % |
| Reciprocating savings accounts ⁽¹⁾ | 717,14 | 9 3.10 % | 418,230 | 2.00 % |
| Reciprocating CD accounts ⁽¹⁾ | 183,86 | 8 0.80 % | 91,187 | 0.44 % |
| Total core funding | 17,617,47 | 9 76.20 % | 16,489,173 | 78.96 % |
| Non-core funding: | | | | |
| Relationship based non-core funding: | | | | |
| Other time deposits | 850,18 | 9 3.68 % | 687,427 | 3.29 % |
| Securities sold under agreements to repurchase | 126,35 | 4 0.55 % | 104,741 | 0.50 % |
| Total relationship based non-core funding | 976,54 | 3 4.23 % | 792,168 | 3.79 % |
| Wholesale funding: | | | | |
| Brokered deposits | 480,94 | 2 2.08 % | 588,861 | 2.82 % |
| Brokered time deposits | 1,232,41 | 8 5.33 % | 1,083,646 | 5.19 % |
| Federal Home Loan Bank advances | 2,062,53 | 4 8.92 % | 1,443,589 | 6.91 % |
| Subordinated debt and other funding | 749,08 | 0 3.24 % | 485,130 | 2.33 % |
| Total wholesale funding | 4,524,97 | 4 19.57 % | 3,601,226 | 17.25 % |
| Total non-core funding | 5,501,51 | 7 23.80 % | 4,393,394 | 21.04 % |
| Totals | \$ 23,118,99 | 6 100.00 % | \$ 20,882,567 | 100.00 % |
| | | | | |

(1) The reciprocating categories consists of deposits we receive from a bank network (the Promontory network) in connection with deposits of our customers in excess of our FDIC coverage limit that we place with the Promontory network.

As noted in the table above, our core funding as a percentage of total funding decreased from 79.0% at December 31, 2018 to 76.2% at December 31, 2019 primarily as a result of increased levels of brokered time deposits, advances from FHLB Cincinnati and subordinated debt.

When wholesale funding is necessary to complement the company's core deposit base, management determines which source is best suited to address both liquidity risk management and interest rate risk management objectives. We increased our exposure to brokered deposits and brokered time deposits in 2019 as a measure to diversify wholesale funding sources. Our Asset Liability Management Policy imposes limitations on overall wholesale funding reliance and on brokered deposits were specifically. Both our overall reliance on wholesale funding and exposure to brokered deposits and brokered time deposits were within those policy limitations as of December 31, 2019.

Our funding policies impose limits on the amount of non-core funding we can utilize based on the non-core funding dependency ratio which is calculated pursuant to regulatory guidelines. Periodically, we may exceed our policy limitations, at which time management will develop plans to bring our funding sources back into compliance with our core funding ratios. At December 31, 2019 and December 31, 2018, we were in compliance with our core funding policies. Though growing our core deposit base is a key strategic objective of our firm, our current growth plans contemplate that we may temporarily increase our non-core funding amounts from current levels, but we do not currently anticipate that such increases will exceed our internal policies.

The amount of time deposits as of December 31, 2019 amounted to 3.9 billion. The following table, which includes core, non-core and reciprocal deposits, shows our time deposits in denominations of under 100,000 and those of denominations of 100,000 and greater by category based on time remaining until maturity of (1) three months or less, (2) over three but less than six months, (3) over six but less than twelve months and (4) over twelve months and the weighted average rate for each category (in thousands):

| | Balances | Weighted Avg. Rate |
|------------------------------------|-----------------|--------------------|
| Denominations less than \$100,000 | | |
| Three months or less | \$ 519,079 | 2.21 % |
| Over three but through six months | 568,690 | 2.12 % |
| Over six but through twelve months | 568,380 | 2.06 % |
| Over twelve months | 200,490 | 2.09 % |
| | 1,856,639 | 2.13 % |
| Denomination \$100,000 and greater | | |
| Three months or less | 352,248 | 1.93 % |
| Over three but through six months | 527,896 | 2.28 % |
| Over six but through twelve months | 785,462 | 2.18 % |
| Over twelve months | 419,200 | 2.55 % |
| | 2,084,806 | 2.24 % |
| Totals | \$ 3,941,445 | 2.19 % |

Subordinated debt and other borrowings. Pinnacle Bank receives advances from the FHLB Cincinnati, pursuant to the terms of various borrowing agreements, which assist it in the funding of its home mortgage and commercial real estate loan portfolios. Under the borrowing agreements with the FHLB Cincinnati, Pinnacle Bank has pledged certain qualifying residential mortgage loans and, pursuant to a blanket lien, all qualifying commercial mortgage loans as collateral. At December 31, 2019 and 2018, Pinnacle Financial had received advances from the FHLB Cincinnati totaling \$2.1 billion and \$1.4 billion, respectively. At December 31, 2019, the scheduled maturities of FHLB Cincinnati advances and interest rates are as follows (in thousands):

| | Scheduled Maturities | Weighted average interest rates |
|--------------------------------|-------------------------|---------------------------------------|
| 2020 | \$ 622,518 | 1.88 % |
| 2021 | 423,750 | 2.14 % |
| 2022 | 41,250 | 2.85 % |
| 2023 | — | <u> %</u> |
| 2024 | 200,000 | 1.59 % |
| Thereafter | 775,016 | 2.15 % |
| | \$ 2,062,534 | |
| Weighted average interest rate | | 2.02 % |

(1) Some FHLB Cincinnati advances include variable interest rates and could increase in the future. The table reflects rates in effect as of December 31, 2019.

We have entered into and acquired a number of statutory business trusts which were established to issue 30-year trust preferred securities and related junior subordinated debt instruments, certain other subordinated debt agreements and a \$75.0 million revolving credit facility. These instruments are outlined below (in thousands):

| Name | Date Established | Maturity | Total Debt Outstanding | Interest Rate at December 31, 2019 | Coupon Structure |
|--|--------------------|--------------------|---------------------------|--|---------------------------|
| Trust preferred securities | | · | | | • |
| Pinnacle Statutory Trust I | December 29, 2003 | December 30, 2033 | \$ 10,310 | 4.70 % | 30-day LIBOR + 2.80% |
| Pinnacle Statutory Trust II | September 15, 2005 | September 30, 2035 | 20,619 | 3.36 % | 30-day LIBOR + 1.40% |
| Pinnacle Statutory Trust III | September 07, 2006 | September 30, 2036 | 20,619 | 3.59 % | 30-day LIBOR + 1.65% |
| Pinnacle Statutory Trust IV | October 31, 2007 | September 30, 2037 | 30,928 | 4.74 % | 30-day LIBOR + 2.85% |
| BNC Capital Trust I | April 03, 2003 | April 15, 2033 | 5,155 | 5.24 % | 30-day LIBOR + 3.25% |
| BNC Capital Trust II | March 11, 2004 | April 07, 2034 | 6,186 | 4.84 % | 30-day LIBOR + 2.85% |
| BNC Capital Trust III | September 23, 2004 | September 23, 2034 | 5,155 | 4.39 % | 30-day LIBOR + 2.40% |
| BNC Capital Trust IV | September 27, 2006 | December 31, 2036 | 7,217 | 3.66 % | 30-day LIBOR + 1.70% |
| Valley Financial Trust I | June 26, 2003 | June 26, 2033 | 4,124 | 5.06 % | 30-day LIBOR + 3.10% |
| Valley Financial Trust II | September 26, 2005 | December 15, 2035 | 7,217 | 3.38 % | 30-day LIBOR + 1.49% |
| Valley Financial Trust III | December 15, 2006 | January 30, 2037 | 5,155 | 3.67 % | 30-day LIBOR + 1.73% |
| Southcoast Capital Trust III | August 05, 2005 | September 30, 2035 | 10,310 | 3.46 % | 30-day LIBOR + 1.50% |
| Subordinated Debt | | | | | |
| Pinnacle Bank Subordinated Notes | July 30, 2015 | July 30, 2025 | 60,000 | 4.88 % | Fixed (1) |
| Pinnacle Bank Subordinated Notes | March 10, 2016 | July 30, 2025 | 70,000 | 4.88 % | Fixed (1) |
| Avenue Subordinated Notes | December 29, 2014 | December 29, 2024 | 20,000 | 6.75 % | Fixed (2) |
| Pinnacle Financial Subordinated Notes | November 16, 2016 | November 16, 2026 | 120,000 | 5.25 % | Fixed (3) |
| Pinnacle Financial Subordinated Notes | September 11, 2019 | September 15, 2029 | 300,000 | 4.13 % | Fixed (4) |
| BNC Subordinated Notes | September 25, 2014 | October 01, 2024 | 60,000 | 5.69 % | 3-month LIBOR + 3.59% (2) |
| Other Borrowings | | | | | |
| Revolving credit facility(5) | April 25, 2019 | April 24, 2020 | | 3.19 % | 30-day LIBOR + 1.50% |
| Debt issuance costs and fair value adjustr | nent | | (13,915) |) | |
| Total subordinated debt and other borrow | ings | | \$ 749,080 | _ | |

(1) Migrates to three month LIBOR + 3.128% beginning July 30, 2020 through the end of the term.

(2) Effective January 1, 2020, these subordinated notes were redeemed in full by Pinnacle Financial.

(3) Migrates to three month LIBOR + 3.884% beginning November 16, 2021 through the end of the term.

(4) Migrates to three month LIBOR + 2.775% beginning September 15, 2024 through the end of the term.

(5) Borrowing capacity on the revolving credit facility is \$75.0 million. An unused fee of 0.35% is assessed on the average daily unused amount of the loan.

On September 11, 2019, we issued \$300.0 million aggregate principal amount of 4.13% Fixed-to-Floating Rate Subordinated Notes due 2029 (the 2029 Notes) in a public offering. From, and including, the date of issuance to, but excluding, September 15, 2024, the 2029 Notes will bear interest at an initial fixed rate of 4.13% per annum, payable semi-annually in arrears on March 15 and September 15, commencing on March 15, 2020. Thereafter, from September 15, 2024 through the maturity date, September 15, 2029, or earlier redemption date, the 2029 Notes will bear interest at a floating rate equal to the then-current three month LIBOR, plus 277.5 basis points for each quarterly interest period (subject to certain provisions regarding use of an alternative base rate upon certain LIBOR transition events), payable quarterly in arrears on March 15, June 15, September 15 and December 15 of each year, commencing on September 15, 2024.

The offering and sale of the 2029 Notes yielded net proceeds of approximately \$296.5 million after deducting the underwriting discount and offering expenses payable by us. We used approximately \$8.8 million of such proceeds to redeem the previously outstanding Subordinated Note due October 15, 2023, which we assumed in the BNC merger and which carried an interest rate of 7.23% at the time of such redemption. We also used a portion of the net proceeds of this offering to redeem the outstanding principal and accrued interest of the \$20.0 million aggregate principal amount of Avenue subordinated notes and \$60.0 million aggregate principal amount of BNC subordinated notes effective January 1, 2020, each of which are listed in the table above as outstanding balances at December 31, 2019. We also intend to use the net proceeds of this offering to redeem the \$130.0 million aggregate

principal amount of subordinated notes issued by Pinnacle Bank listed in the table above after such notes become eligible for redemption on July 30, 2020. The redemption of the \$130.0 million aggregate principal amount of subordinated notes issued by Pinnacle Bank is subject to receipt of all regulatory permissions for such redemption, which we have not yet sought, and our ultimate determination to redeem such notes after they become eligible for redemption. Pinnacle Bank is under no obligation to redeem its subordinated notes. At December 31, 2019 the weighted average interest rate on our trust preferred securities and related junior subordinated debt instruments and other subordinated debt agreements was 4.62%. Had these actual and anticipated subordinated note redemptions occurred in 2019, the weighted average rate on the remaining debt instruments would have been 4.36% at December 31, 2019.

Capital Resources. At December 31, 2019 and 2018, our stockholders' equity amounted to \$4.4 billion and \$4.0 billion, respectively. The increase is primarily attributable to net income and other comprehensive income. At December 31, 2019, Pinnacle Bank's CET1 capital ratio was 11.2%, Tier 1 capital ratio was 11.2%, total capital ratio was 12.2% and Tier 1 leverage ratio was 10.5%, compared to 10.5%, 10.5%, 11.5% and 9.8% at December 31, 2018, respectively. At December 31, 2019, Pinnacle Financial's CET1 capital ratio was 9.7%, Tier 1 capital ratio was 9.7%, total capital ratio was 13.2% and Tier 1 leverage ratio was 9.1%, compared to 9.6%, 9.6%, 12.2% and 8.9% at December 31, 2018, respectively.

We and our bank subsidiary are subject to various regulatory capital requirements administered by federal banking agencies. Failure to meet minimum capital requirements can lead to certain mandatory, and possibly additional discretionary, actions by regulators that, if undertaken, could have a direct material effect on our financial condition or results of operations. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, we and our bank subsidiary must meet specific capital guidelines that involve quantitative measures of the assets, liabilities, and certain off-balance-sheet items as calculated under regulatory accounting practices. Our and Pinnacle Bank's capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require us and our bank subsidiary to maintain minimum amounts and ratios of CET1 capital to risk-weighted assets, Tier 1 capital to risk-weighted assets, total capital to risk-weighted assets and of Tier 1 capital to average assets.

The final rules implementing the Basel Committee on Banking Supervision's capital guidelines for U.S. banks (Basel III rules) became effective for us on January 1, 2015 with full compliance with all of the requirements being phased in over a multi-year schedule, and fully phased in by January 1, 2019. The minimum capital level requirements applicable to bank holding companies and banks subject to the rules are: (i) a CET1 capital ratio of 4.5%; (ii) a Tier 1 capital ratio of 6%; (iii) a total capital ratio of 8%; and (iv) a Tier 1 leverage ratio of 4% for all institutions. The Basel III rules, also establish a capital conservation buffer of 2.5% (that was phased in over three years) above the regulatory minimum risk-based capital ratios. The capital conservation buffer was phased in beginning in January 2016 at 0.625% and increased each year by a like percentage until fully implemented in January 2019. The net unrealized gain or loss on available-for-sale securities is not included in computing regulatory capital. Management believes, as of December 31, 2019, that we had met all capital adequacy requirements to which we are subject.

In December 2017, the Basel Committee on Banking Supervision published the last version of the Basel III accord, generally referred to as "Basel IV." The Basel Committee stated that a key objective of the revisions incorporated into the framework is to reduce excessive variability of risk-weighted assets ("RWA"), which will be accomplished by enhancing the robustness and risk sensitivity of the standardized approaches for credit risk and operational risk, which will facilitate the comparability of banks' capital ratios; constraining the use of internally modeled approaches; and complementing the risk-weighted capital ratio with a finalized leverage ratio and a revised and robust capital floor. Leadership of the federal banking agencies who are tasked with implementing Basel IV has indicated that it is considering how to appropriately apply these revisions in the United States. Although it is uncertain at this time, we anticipate some, if not all, of the Basel IV accord may be incorporated into the capital requirements framework applicable to us and Pinnacle Bank.

Share Repurchase Program. On November 13, 2018, Pinnacle Financial announced that its board of directors authorized a share repurchase program for up to \$100.0 million of Pinnacle Financial's outstanding common stock and increased it's authorization by \$100.0 million on October 15, 2019. The original repurchase program expires on March 31, 2020 and the new program expires on December 31, 2020. Pinnacle Financial repurchased 1,102,038 shares of its common stock at an aggregate cost of \$61.4 million in the fiscal year ended December 31, 2019. Share repurchases may be made from time to time, on the open market or in privately negotiated transactions, at the discretion of the management of Pinnacle Financial, after the board of directors of Pinnacle Financial authorizes a repurchase program. The approved share repurchase programs do not obligate Pinnacle Financial to repurchase any dollar amount or number of shares, and the program may be extended, modified, suspended, or discontinued at any time. Stock repurchases generally are affected through open market purchases, and may be made through unsolicited negotiated transactions. The timing of these repurchases will depend on market conditions and other requirements.

Dividends. Pursuant to Tennessee banking law, Pinnacle Bank may not, without the prior consent of the TDFI, pay any dividends to us in a calendar year in excess of the total of its retained net profits for that year plus the retained net profits for the preceding two years. During the year ended December 31, 2019, Pinnacle Bank paid dividends of \$114.0 million to us which was within the limits allowed by the TDFI.

During the year ended December 31, 2019, we paid \$50.2 million in dividends to common shareholders. On January 21, 2020 our board of directors declared a \$0.16 quarterly cash dividend to common shareholders of approximately \$12.3 million in aggregate that will be paid on February 28, 2020 to common shareholders of record as of the close of business on February 7, 2020. The amount and timing of all future dividend payments, if any, is subject to board discretion and will depend on our earnings, capital position, financial condition and other factors, including new regulatory capital requirements, as they become known to us.

Market and Liquidity Risk Management

Our objective is to manage assets and liabilities to provide a satisfactory, consistent level of profitability within the framework of established liquidity, loan, investment, borrowing, and capital policies. Our Asset Liability Management Committee (ALCO) is charged with the responsibility of monitoring these policies, which are designed to ensure acceptable composition of asset/liability mix. Two critical areas of focus for ALCO are interest rate sensitivity and liquidity risk management.

Interest Rate Sensitivity. In the normal course of business, we are exposed to market risk arising from fluctuations in interest rates. ALCO measures and evaluates the interest rate risk so that we can meet customer demands for various types of loans and deposits. ALCO determines the most appropriate amounts of on-balance sheet and off-balance sheet items. Measurements which we use to help us manage interest rate sensitivity include an earnings simulation model and an economic value of equity (EVE) model.

Our interest rate sensitivity modeling incorporates a number of assumptions for both earnings simulation and EVE, including loan and deposit re-pricing characteristics, the rate of loan prepayments, etc. ALCO periodically reviews these assumptions for accuracy based on historical data and future expectations. Our ALCO policy requires that the base scenario assumes rates remain flat and is the scenario to which all others are compared in order to measure the change in net interest income and EVE. Policy limits are applied to the results of certain modeling scenarios. While the primary policy scenarios focus is on a twelve month time frame for the earnings simulations model, longer time horizons are also modeled. All policy scenarios assume a static volume forecast where the balance sheet is held constant, although other scenarios are modeled.

Earnings simulation model. We believe interest rate risk is best measured by our earnings simulation modeling. Earning assets, interest-bearing liabilities and off-balance sheet financial instruments are combined with forecasts of interest rates for the next 12 months and are combined with other factors in order to produce various earnings simulations over that same 12-month period. To limit interest rate risk, we have policy guidelines for our earnings at risk which seek to limit the variance of net interest income in both gradual and instantaneous changes to interest rates.

While an instantaneous and severe shift in interest rates was used in our analysis presented below to provide an estimate of exposure under these scenarios, we believe that a gradual shift in interest rates would have a more modest impact. Further, the earnings simulation model does not take into account factors such as future balance sheet growth, changes in product mix, changes in yield curve relationships, hedging actions we might take, and changing product spreads that could mitigate any potential adverse impact of changes in interest rates.

For instantaneous upward and downward changes in rates from a flat interest rate forecast over the next twelve months, assuming a static balance sheet, the following estimated changes are calculated:

| Instantaneous Rate Change | December 31, 2019 | December 31, 2018 |
|---------------------------|-------------------|-------------------|
| 100 bps increase | (1.21)% | 4.20% |
| 200 bps increase | (0.61)% | 7.60% |
| 100 bps decrease | 0.56% | (5.40)% |

Estimated % Change in Net Interest Income Over 12 Months

During 2019, short-term interest rate movements reversed direction as there were three 0.25% cuts in the Federal Funds Rate. These cuts followed an approximate three year period where the Federal Funds Rate had increased by 2.25%. Management responded in 2019 by repositioning the balance sheet's sensitivity to market risk position so that it was better positioned for cuts in the short-term interest rate environment. That change in position is apparent when comparing the scenario results year-over-year in the table above. Management accomplished this change through the following actions, among others:

- Purchased \$2.8 billion of in-the-money interest rate floors for loans tied to the one-month LIBOR interest rate index;
- Unwound \$900 million of fair value hedges (receive variable rate/pay fixed rate) tied to our loan portfolio;
- Extended the effective duration of our securities portfolio as well as boosting the portfolio's level of protection against prepayment activity; and
- Shortened the duration of our wholesale funding portfolio.

The behavior of our deposit portfolio in the baseline forecast and in the alternate interest rate scenarios set out in the table above is a key assumption in our projected estimates of net interest income. The projected impact on net interest income in the table above assumes no change in deposit portfolio size or mix from the baseline forecast in alternative rate environments. In higher rate scenarios, any customer activity resulting in the replacement of low-cost or noninterest-bearing deposits with higher-yielding deposits or market-based funding would reduce the assumed benefit of those deposits. The projected impact on net interest income in the table above also assumes a "through-the-cycle" non-maturity deposit beta which may not be an accuracte predictor of actual deposit rate changes realized in scenarios of smaller and/or non-parallel interest rate movements.

At December 31, 2019, our earnings simulation model indicated we were in compliance with our policies for interest rate scenarios for which we model as required by our board approved Asset Liability Policy. The board has suspended the requirement to model the down 200, 300 and 400 bps scenarios while 10 year maturity Treasury rates are below 2.0%, which was the case as of December 31, 2019.

Economic value of equity model. While earnings simulation modeling attempts to determine the impact of a changing rate environment to our net interest income, our EVE model measures estimated changes to the economic values of our assets, liabilities and off-balance sheet items as a result of interest rate changes. Economic values are determined by discounting expected cash flows from assets, liabilities and off-balance sheet items, which establishes a base case EVE. We then shock rates as prescribed by our Asset Liability Policy and measure the sensitivity in EVE values for each of those shocked rate scenarios versus the base case. The Asset Liability Policy sets limits for those sensitivities. At December 31, 2019 and 2018, our EVE modeling calculated the following estimated changes in EVE due to instantaneous upward and downward changes in rates:

| Instantaneous Rate Change | December 31, 2019 | December 31, 2018 |
|---------------------------|-------------------|-------------------|
| 100 bps increase | (4.00)% | (1.20)% |
| 200 bps increase | (10.10)% | (4.00)% |
| 100 bps decrease | 2.80% | (1.80)% |

While an instantaneous and severe shift in interest rates was used in this analysis to provide an estimate of exposure under these scenarios, we believe that a gradual shift in interest rates would have a more modest impact. Since EVE measures the discounted present value of cash flows over the estimated lives of instruments, the change in EVE does not directly correlate to the degree that earnings would be impacted over a shorter time horizon (i.e., the current year). Further, EVE does not take into account factors such as future balance sheet growth, changes in product mix, changes in yield curve relationships, hedging activities we might take, and changing product spreads that could mitigate the adverse impact of changes in interest rates.

At December 31, 2019, our EVE model indicated we were in compliance with our policies for all interest rate scenarios for which we model as required by our board approved Asset Liability Policy. The board has suspended the requirement to model the down 200, 300 and 400 bps scenarios while 10 year maturity Treasury rates are below 2.0%, which was the case as of December 31, 2019.

Most likely earnings simulation models. We also analyze a most-likely earnings simulation scenario that projects the expected change in rates based on a forward yield curve adopted by management using expected balance sheet volumes forecasted by management. Separate growth assumptions are developed for loans, investments, deposits, etc. Other interest rate scenarios analyzed by management may include delayed rate shocks, yield curve steepening or flattening, or other variations in rate movements to further analyze or stress our balance sheet under various interest rate scenarios. Each scenario is evaluated by management and weighted to determine the most likely result. These processes assist management to better anticipate our financial results and, as a result, management may determine the need to invest in other operating strategies and tactics which might enhance results or better position the firm's balance sheet to reduce interest rate risk going forward.

Each of the above analyses may not, on its own, be an accurate indicator of how our net interest income will be affected by changes in interest rates. Income associated with interest-earning assets and costs associated with interest-bearing liabilities may not be affected uniformly by changes in interest rates. In addition, the magnitude and duration of changes in interest rates may have a significant impact on net interest income. For example, although certain assets and liabilities may have similar maturities or periods of repricing, they may react in different degrees to changes in market interest rates. Interest rates on certain types of assets and liabilities fluctuate in advance of changes in general market rates, while interest rates on other types may lag behind changes in general market rates. In addition, certain assets, such as adjustable rate mortgage loans, have features (generally referred to as interest rate caps and floors) which limit changes in interest rates. The ability of many borrowers to service their debts also may decrease during periods of rising interest rates. ALCO reviews each of the above interest rate sensitivity analyses along with several different interest rate scenarios as part of its responsibility to provide a satisfactory, consistent level of profitability within the framework of established liquidity, loan, investment, borrowing, and capital policies.

Management's model governance, model implementation and model validation processes and controls are subject to review in our regulatory examinations to ensure they are in compliance with the most recent regulatory guidelines and industry and regulatory practices. Management utilizes a respected, sophisticated third party asset liability modeling software to help ensure implementation of management's assumptions into the model are processed as intended in a robust manner. That said, there are numerous assumptions regarding financial instrument behavior that are integrated into the model. The assumptions are formulated by combining observations gleaned from our historical studies of financial instruments and our best estimations of how, if at all, these instruments may behave in the future given changes in economic conditions, technology, etc. These assumptions may prove to be inaccurate. Additionally, given the large number of assumptions built into the asset liability modeling software we and other firms utilize, it is difficult, to compare our results to other firms.

ALCO may determine that Pinnacle Financial should over time become more or less asset or liability sensitive depending on the underlying balance sheet circumstances and our conclusions as to anticipated interest rate fluctuations in future periods. At present, ALCO has determined that its "most likely" rate scenario considers two decreases in short-term interest rates in the second half of 2020. Our "most likely" rate forecast is based primarily on information we acquire from a service which includes a consensus forecast of numerous interest rate benchmarks. We may implement additional actions designed to achieve our desired sensitivity position which could change from time to time.

We have in the past used, and may in the future continue to use, derivative financial instruments as one tool to manage our interest rate sensitivity, including in our mortgage lending program, while continuing to meet the credit and deposit needs of our customers. For further details on the derivatives we currently use, see Note 14. "Derivative Instruments" in the Notes to our Consolidated Financial Statements elsewhere in this Annual Report on Form 10-K.

We may also enter into interest rate swaps to facilitate customer transactions and meet their financing needs. These swaps qualify as derivatives, even though they are not designated as hedging instruments.

Liquidity Risk Management. The purpose of liquidity risk management is to ensure that there are sufficient cash flows to satisfy loan demand, deposit withdrawals, and our other needs. Traditional sources of liquidity for a bank include asset maturities and growth in core deposits. A bank may achieve its desired liquidity objectives from the management of its assets and liabilities and by internally generated funding through its operations. Funds invested in marketable instruments that can be readily sold and the continuous maturing of other earning assets are sources of liquidity from an asset perspective. The liability base provides sources of liquidity through attraction of increased deposits and borrowing funds from various other institutions.

To assist in determining the adequacy of our liquidity, we perform a variety of liquidity stress tests including idiosyncratic, systemic and combined scenarios for both moderate and severe events. Liquidity is defined as the ability to convert assets into cash or cash equivalents without significant loss and to raise additional funds by increasing liabilities. Liquidity management involves maintaining our ability to meet the daily cash flow requirements of our customers, both depositors and borrowers. We seek to maintain a sufficiently liquid asset balance to ensure our ability to meet our obligations. The amount of the appropriate minimum liquid asset balance is determined through severe liquidity stress testing as measured by our liquidity coverage ratio calculation. At December 31, 2019, we were in compliance with our liquidity coverage ratio.

Changes in interest rates also affect our liquidity position. We currently price deposits in response to market rates, and our management intends to continue this policy. If deposits are not priced in response to market rates, a loss of deposits could occur which would negatively affect our liquidity position.

Scheduled loan payments are a relatively stable source of funds, but loan payoffs and deposit flows fluctuate significantly, being influenced by interest rates, general economic conditions and competition. Additionally, debt security investments are subject to prepayment and call provisions that could accelerate their payoff prior to stated maturity. We attempt to price our deposit products to meet our asset/liability objectives consistent with local market conditions. Our ALCO is responsible for monitoring our ongoing liquidity needs. Our regulators also monitor our liquidity and capital resources on a periodic basis.

As noted previously, Pinnacle Bank is a member of the FHLB Cincinnati and, pursuant to a borrowing agreement with the FHLB Cincinnati, has pledged certain assets pursuant to a blanket lien. As such, Pinnacle Bank may use the FHLB Cincinnati as a source of liquidity depending on the firm's ALCO strategies. Additionally, we may pledge additional qualifying assets or reduce the amount of pledged assets with the FHLB Cincinnati to increase or decrease our borrowing capacity at the FHLB Cincinnati. At December 31, 2019, we believe we had an estimated \$2.1 billion in additional borrowing capacity with the FHLB Cincinnati; however, incremental borrowings are made via a formal request by Pinnacle Bank and the subsequent approval by the FHLB Cincinnati.

Pinnacle Bank also has accommodations with upstream correspondent banks for unsecured short-term advances which aggregate \$195.0 million. These accommodations have various covenants related to their term and availability, and in most cases must be repaid within less than a month. There were no outstanding borrowings under these agreements at December 31, 2019, or during the year then ended, although we test the availability of these accommodations annually. Pinnacle Bank also had approximately \$3.4 billion in available Federal Reserve discount window lines of credit at December 31, 2019.

At each of December 31, 2019 and 2018, we had approximately \$1.7 billion in brokered deposits. Historically, we have issued brokered certificates through several different brokerage houses based on competitive bid. Typically, these funds have been for varying maturities of up to two years and were issued at rates which were competitive to rates that we would be required to pay to attract similar deposits within many of our local markets as well as rates for FHLB Cincinnati advances of similar maturities.

Banking regulators have defined additional liquidity guidelines, through the issuance of the Basel III Liquidity Coverage Ratio (LCR) and the Modified LCR. These regulatory guidelines became effective January 2015 with phase in over subsequent years and require these large institutions to follow prescriptive guidance in determining an absolute level of a high quality liquid asset (HQLA) buffer that must be maintained on their balance sheets in order to withstand a potential liquidity crisis event. Although Pinnacle Financial follows the principles outlined in the Interagency Policy Statement on Liquidity Risk Management, issued March 2010, to determine its HQLA buffer, Pinnacle Financial is not currently subject to these regulations. However, these formulas could eventually be imposed on smaller banks, such as Pinnacle Bank, and require an increase in the absolute level of liquidity on our balance sheet, which could result in lower net interest margins for us in future periods.

At December 31, 2019, we had no individually significant commitments for capital expenditures. But, we believe the number of our locations, including non-branch locations, will increase over an extended period of time across our footprint. In future periods, these expansions may lead to additional equipment and occupancy expenses as well as related increases in salaries and benefits expense. Additionally, we expect we will continue to incur costs associated with technology improvements to enhance the infrastructure of our firm.

Our short-term borrowings (borrowings which mature within the next fiscal year) consist primarily of securities sold under agreements to repurchase (these agreements are typically associated with comprehensive treasury management programs for our clients and provide them with short-term returns on their excess funds), FHLB Cincinnati advances and borrowings under our revolving credit facility. Information concerning our short-term borrowings as of and for each of the years in the three-year period ended December 31, 2019 is as follows (in thousands):

| | 2019 | 2018 | 2017 |
|--|---------------|---------------|---------------|
| Amounts outstanding at year-end: | | | |
| Securities sold under agreements to repurchase | \$ 126,354 | \$ 104,741 | \$ 135,262 |
| Federal funds purchased | | _ | |
| Federal Home Loan Bank short-term advances | 622,518 | 356,000 | 557,501 |
| Borrowings under credit facility | _ | 20,000 | - |
| Weighted average interest rates at year-end: | | | |
| Securities sold under agreements to repurchase | 0.43 % | 0.50 % | 0.35 % |
| Federal funds purchased | _ | _ | _ |
| Federal Home Loan Bank short-term advances | 1.88 % | 1.64 % | 1.46 % |
| Borrowings under credit facility | _ | 4.10 % | - |
| Maximum amount of borrowings at any month-end: | | | |
| Securities sold under agreements to repurchase | \$ 154,168 | \$ 143,686 | \$ 205,008 |
| Federal funds purchased | _ | _ | 50,000 |
| Federal Home Loan Bank short-term advances | 703,554 | 1,002,501 | 1,011,500 |
| Borrowings under credit facility | 20,000 | 20,000 | - |
| Average balances for the year: | | | |
| Securities sold under agreements to repurchase | \$ 117,518 | \$ 129,899 | \$ 115,573 |
| Federal funds purchased | 822 | 1,132 | 1,189 |
| Federal Home Loan Bank short-term advances | 590,027 | 604,646 | 528,042 |
| Borrowings under credit facility | 103 | 109 | - |
| Weighted average interest rates for the year: | | | |
| Securities sold under agreements to repurchase | 0.49 % | 0.45 % | 0.36 % |
| Federal funds purchased | 2.64 % | 1.87 % | 1.02 % |
| Federal Home Loan Bank short-term advances | 1.98 % | 1.76 % | 1.22 % |
| Borrowings under credit facility | 4.25 % | 3.48 % | — |

The following table presents additional information about our contractual obligations as of December 31, 2019, which by their terms have contractual maturity and termination dates subsequent to December 31, 2019 (in thousands):

| | | | Ai | t Dec | ember 31, 20 | 19 | | |
|---|----|-------------------|-----------------|-------|--------------|----|-----------------------|------------------|
| | _ | Next 12 months | 13-36 months | 37 | -60 months | М | ore than 60 months | Totals |
| Contractual obligations: | | | | | | | | |
| Certificates of deposit ⁽¹⁾ | \$ | 3,399,268 | \$ 667,649 | \$ | 18,003 | \$ | 1,907 | \$ 4,086,827 |
| Deposits without a stated maturity ⁽²⁾ | | 17,435,623 | _ | | _ | | _ | 17,435,623 |
| Securities sold under agreements to repurchase | | 126,354 | | | | | | 126,354 |
| Federal Home Loan Bank advances (3) | | 622,518 | 465,000 | | 200,000 | | 775,016 | 2,062,534 |
| Junior subordinated debentures (4) | | | | | | | 132,995 | 132,995 |
| Subordinated notes ⁽⁵⁾ | | _ | _ | | 80,000 | | 550,000 | 630,000 |
| Minimum operating lease commitments | | 13,070 | 23,071 | | 19,446 | | 44,507 | 100,094 |
| Capital lease obligations | | 470 | 940 | | 1,006 | | 2,021 | 4,437 |
| Commitments to fund low income housing tax credit partnerships ⁽⁶⁾ | | 43,285 | 36,056 | | 5,727 | | _ | 85,068 |
| Totals | \$ | 21,640,588 | \$ 1,192,716 | \$ | 324,182 | \$ | 1,506,446 | \$ 24,663,932 |

- (1) Includes interest through the contractual maturity.
- (2) Includes interest accrued and unpaid through December 31, 2019.
- (3) Represents principal payments on Federal Home Loan Bank Advances. See Note 8 "Federal Home Loan Bank Advances" in the Notes to our Consolidated Financial Statements, elsewhere in this Annual Report on Form 10-K for information on the interest rates paid on these advances.
- (4) Represents principal payments on junior subordinated debentures issued in connection with trust preferred securities sold by affiliated trusts. See Note 9 "Other Borrowings" in the Notes to our Consolidated Financial Statements, elsewhere in this Annual Report on Form 10-K for information on interest rates paid on these debentures.
- (5) See Note 9 "Other Borrowings" in the Notes to our Consolidated Financial Statements, elsewhere in this Annual Report on Form 10-K, for information on interest rates paid on these notes.
- (6) Commitments to fund investments in low income housing tax credit partnerships have scheduled funding dates that are contingent on events that have not yet occurred and may be subject to change.

Our management believes that we have adequate liquidity to meet all known contractual obligations and unfunded commitments, including loan commitments and reasonable borrower, depositor, and creditor requirements over the next twelve months. Our operating lease commitments are primarily related to our branch and headquarters facilities. The terms of these leases expire at various points ranging from 2020 through 2048. At December 31, 2019, our total minimum operating lease commitment was \$100.1 million. Effective January 1, 2019, Pinnacle Financial adopted FASB ASC 842, which requires the recognition of a right of use asset and a lease liability generally equal to the present value of these minimum operating lease commitments. See Note 1. "Summary of Significant Accounting Policies - Recently Adopted Accounting Pronouncements" in the Notes to our Consolidated Financial Statements elsewhere in this Form 10-K.

Off-Balance Sheet Arrangements. At December 31, 2019, we had outstanding standby letters of credit of \$203.6 million and unfunded loan commitments outstanding of \$7.9 billion. Because these commitments generally have fixed expiration dates and many will expire without being drawn upon, the total commitment level does not necessarily represent future cash requirements. If needed to fund these outstanding commitments, Pinnacle Bank has the ability to liquidate Federal funds sold or securities available-for-sale, or on a short-term basis to borrow and purchase Federal funds from other financial institutions. The following table presents additional information about our unfunded commitments as of December 31, 2019, which by their terms, have contractual maturity dates subsequent to December 31, 2019 (in thousands):

| | At December 31, 2019 | | | | | | | | | |
|-----------------------|----------------------|-------------------|----|-------------|----|-------------|----|-----------------------|----|-----------|
| | | Next 12 months | 13 | 8-36 months | 37 | 7-60 months | М | ore than 60 months | | Totals |
| Unfunded commitments: | | | | | | | | | | |
| Lines of credit | \$ | 2,935,249 | \$ | 2,120,588 | \$ | 1,583,086 | \$ | 1,299,418 | \$ | 7,938,341 |
| Letters of credit | | 158,820 | | 34,078 | | 10,431 | | 250 | | 203,579 |
| Totals | \$ | 3,094,069 | \$ | 2,154,666 | \$ | 1,593,517 | \$ | 1,299,668 | \$ | 8,141,920 |

We follow the same credit policies and underwriting practices when making these commitments as we do for on-balance sheet instruments. Each customer's credit worthiness is evaluated on a case-by-case basis and the amount of collateral obtained, if any, is based on management's credit evaluation of the customer. However, should the commitments be drawn upon and should our customers default on their resulting obligation to us, our maximum exposure to credit loss, without consideration of collateral, is represented by the contractual amount of those instruments. At December 31, 2019, we had accrued \$2.4 million for the inherent risks associated with off-balance sheet commitments.

Risk Management

As a financial institution, we take on a certain amount of risk in every business decision, transaction and activity. Risk management does not eliminate risk, but seeks to achieve an appropriate balance between risk and reward, including return, which is critical to optimizing shareholder value. Understanding our risks and managing them appropriately can enhance our ability to make better decisions, deliver on objectives, and improve performance.

Our board of directors and members of senior management have identified major categories of risk: credit risk, liquidity risk, strategic risk, reputational risk, operational risk (including IT, Cyber and BSA/AML), compliance risk, asset liability management risk, capital risk, HR employment practices risk and non-bank activities risk. In its oversight role of our risk management function, our board of directors, acting principally, but not exclusively, through a Risk Committee comprised solely of independent directors, focuses on the strategies, analyses and conclusions of management relating to identifying, understanding and managing risks so as to optimize total shareholder value, while balancing prudent business and safety and soundness considerations. The Risk Committee (or in some cases the full board of directors) fulfills the overarching oversight role for the risk management process, including approving risk appetite and tolerance levels, risk policies and limits, monitoring key and emerging risks, and reviewing risk assessment results. In addition, oversight of certain risk is allocated to other committees of the board of directors that meet regularly and report to our board of directors, including the Audit Committee and Human Resources and Compensation Committee.

The Chief Risk Officer reports to the Chief Executive Officer and provides overall vision, direction and leadership regarding the enterprise risk management framework. The framework includes an Enterprise Wide Risk Management Committee, chaired by the Chief Risk Officer, and various management-level risk committees that focus on specific areas of risk management. The Enterprise Wide Risk Management Committee, which is comprised of the Chief Executive Officer, Chief Financial Officer, Chief Administrative Officer, Chief Risk Officer, Chief Audit Executive, Chief Compliance Officer and Chief Credit Officer, provides management oversight of our enterprise-wide risk management program. Additional management-level risk committees are responsible for effective risk measurement, management and reporting of their respective risk categories. The Chief Risk Officer is an active member of each of the management-level risk committees.

Our board of directors has adopted a risk appetite statement that seeks to balance the amount of risk we are willing take as we seek to achieve our financial performance objectives, i.e. returns. As such, our board of directors, principally acting through the Risk Committee, routinely monitors a host of risk metrics from both business and operational units, as well as by risk category, in an effort to appropriately balance the manner in which our performance aligns with our risk appetite. The Risk Committee and members of senior management, including the Chief Risk Officer, review assessments of our risk ratings within each of our key areas of risk on a regular basis. The Chief Risk Officer's report to the Risk Committee includes the assessment of level and direction of risk within each key area, an assessment of critical factors that influence firm risks as well as the status of risk actions management is taking to mitigate and control key risks. These reviews are done in an effort to ensure performance alignment with our risk appetite, and where appropriate, trigger adjustments to applicable business strategies and tactics where risks approach our desired risk tolerance limits.

We support our risk management process through a governance structure involving our board of directors and senior management. The Risk Committee strives to ensure that business decisions are executed within appropriate risk tolerances. The Risk Committee is responsible for overseeing senior management's establishment and operation of our risk framework and our strategic and capital plans are aligned with the risk appetite approved by our board of directors. The Risk Committee serves as the primary point of contact between our board of directors and the Enterprise Wide Risk Management Committee. Management-level risk committees are responsible for effective risk measurement, managing and reporting of their respective risk categories.

Risk appetite is an integral element of our business and capital planning processes through our Risk Committee and Enterprise Wide Risk Management Committee. We use our risk appetite processes to promote appropriate alignment of risk, capital and performance tactics, while also considering risk capacity and appetite constraints from both financial and non-financial risks. Our Risk Committee, in collaboration with our Enterprise Wide Risk Management Committee, approves our risk appetite on an annual basis, or more frequently, as needed to reflect changes in the risk environment, with the goal of ensuring that our risk appetite remains consistent with our strategic plans and business operations, regulatory environment and our shareholders' expectations. Reports relating to our risk appetite and strategic plans, and our ongoing monitoring thereof, are regularly presented to our various management-level risk oversight and planning committees and periodically reported up to the Risk Committee of our board of directors.

As noted above, we have an Enterprise Wide Risk Management Committee comprised of key members of senior management. The purpose of this committee is to provide regular oversight of specific areas of risk within the tolerances and framework established by our Risk Committee and board of directors. The Enterprise Wide Risk Management Committee reports on a regular basis to the Risk Committee of our board of directors regarding our enterprise-wide risk profile and other significant risk management issues. Our Chief Risk Officer is responsible for the design and implementation of our enterprise-wide risk management strategy and framework and through his work with other senior associates seeks to ensure the coordinated and consistent implementation of risk management initiatives and strategies on a day-to-day basis.

Various departments within Pinnacle Bank, working with our Chief Risk Officer, are responsible for developing policies and procedures to effectively monitor risks within their areas. For instance, our compliance department is responsible for developing policies and procedures and monitoring compliance with applicable laws and regulations while our information technology department is responsible for maintaining a risk assessment of our information and cyber security risks and ensuring appropriate controls are in place to manage and control such risks, including designing appropriate testing plans to ensure the integrity of information and cyber security controls. Further, our audit function (including our internal audit function) performs an independent assessment of our internal controls environment and plays an integral role in testing the operation of the internal controls systems and reporting findings to management and our Audit Committee. Both the Risk Committee and Audit Committee of our board of directors regularly report on risk-related matters to the full board of directors. In addition, both the Risk Committee of our board of directors and our Enterprise Wide Risk Management Committee regularly assess our enterprise-wide risk profile and provide guidance on actions needed to address key and emerging risk issues.

Our board of directors believes that our enterprise-wide risk management process is effective and enables the board of directors to:

- assess the quality of the information we receive;
- understand the businesses, investments and financial, accounting, legal, regulatory and strategic considerations and the risks that we face;
- · oversee and assess how senior management evaluates and manages risk; and
- assess appropriately the quality of our enterprise-wide risk management process.

Impact of Inflation

The consolidated financial statements and related consolidated financial data presented herein have been prepared in accordance with U.S. generally accepted accounting principles and practices within the banking industry which require the measurement of financial position and operating results in terms of historical dollars without considering the changes in the relative purchasing power of money over time due to inflation. Unlike most industrial companies, virtually all the assets and liabilities of a financial institution are monetary in nature. As a result, interest rates have a more significant impact on a financial institution's performance than the effects of general levels of inflation.

Recently Adopted and Issued Accounting Pronouncements

See "Part II- Item 8. Financial Statements and Supplementary Data - Note 1. - Summary of Significant Accounting Policies" of this Report for further information.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The response to this Item is included in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations", on pages 46 through 78 and is incorporated herein by reference.

ITEM 8. FINANCIAL STATEMENTS

Pinnacle Financial Partners, Inc. and Subsidiaries

Consolidated Financial Statements

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MANAGEMENT REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Pinnacle Financial Partners, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) or 15d-15(f) promulgated under the Exchange Act. The Company's internal control over financial reporting is a process designed by, or under the supervision of, the Company's principal executive and principal financial officer and effected by the Company's Board of Directors, management and other personnel, 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 and includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Company's assets; (ii) 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 are being made only in accordance with authorizations of our management and directors; and (iii) 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. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. 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. The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013). We completed the acquisition of Advocate Capital on July 2, 2019. We are continuing the process of analyzing the systems of internal control over financial reporting of the business and other operations acquired in the Advocate Capital acquisition and integrating them within our broader framework of controls. In accordance with the SEC's rules which allow us to exclude Advocate Capital and its operations from our internal controls assessment in respect of periods ending on or prior to the first anniversary of the acquisition, we have excluded the business and other operations acquired in the Advocate Capital acquisition from management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2019. Advocate Capital and its operations represented approximately 0.69% of our total assets as of December 31, 2019, and the results of operations of Advocate Capital and its operations represented approximately 0.89% of our revenues for the year ended December 31, 2019. We plan to complete the integration of the business and other operations acquired in the Advocate Capital acquisition within our broader framework of internal controls during 2020 and include the business and other operations acquired in the Advocate Capital acquisition within management's assessment of our internal control over financial reporting in our next annual report on Form 10-K.

Based on our assessment we believe that, as of December 31, 2019, the Company's internal control over financial reporting is effective based on the criteria set forth by COSO.

The Company's independent registered public accounting firm has issued an audit report on the Company's internal control over financial reporting. This report appears on page 82 of this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

Stockholders and the Board of Directors of Pinnacle Financial Partners, Inc. Nashville, Tennessee

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Pinnacle Financial Partners, Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

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, 2019, based on criteria established in Internal Control – Integrated Framework: (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated February 25, 2020 expressed an unqualified opinion.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 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 Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the 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 financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinion on the critical audit matter or on the account or disclosures to which it relates.

Allowance and Provision for Loan Losses - Qualitative Factors

As described in Notes 1. Summary of Significant Accounting Policies, and 5. Loans and Allowance for Loan Losses to the consolidated financial statements, the Company's allowance for loan loss is a material accounting estimate that requires significant management judgment in the evaluation of credit quality and the application of qualitative factors. The allowance for loan loss balance was \$95 million at December 31, 2019, which is composed of the result of analyses pursuant to the provisions of ASC 450-20 analysis, Loss Contingencies and ASC 310-10-35, Receivables. The ASC 450-20 with a dollar balance of \$92 million is intended to quantify the reasonably estimable probable incurred losses in the performing loan portfolio. The ASC 310-10-35 includes an analysis of impaired loans, including those reported as nonaccrual, and troubled-debt restructurings. The last analysis is the purchase credit impaired allocation. The calculation of the allowance for loan losses involves significant estimates and subjective assumptions, which require a high degree of judgment. The level of the allowance is based upon management's evaluation of the loan portfolio, loan loss experience, asset quality trends, known and inherent risks in the portfolio, adverse situations that may affect the borrowers' ability to repay the loan (including the timing of future payment), the estimated value of any underlying collateral, composition of the loan portfolio, economic conditions, industry and peer bank loan quality indications and other pertinent factors, including regulatory recommendations. Changes in these assumptions could have a material effect on the Company's financial results.

The ASC 450-20 component of the allowance for loan losses utilizes a historical loss rate calculation for each loan pool with similar risk characteristics. The average loss rates are adjusted for qualitative factors and applied to the end of period loan portfolio balances to estimate probable incurred losses in the loan portfolio. The qualitative factors and measurements used to quantify the risks within each of these categories are subjectively selected by management, using certain objective measurements period over period. The current period measurements are evaluated and assigned a factor commensurate with the current level of risk within each loan pool. The qualitative factor is increased or decreased for each loan pool based on management's assessment of these qualitative factors: quarterly trend assessments in portfolio concentrations, policy exceptions, economic conditions, associate retention, independent loan review results, collateral considerations, credit quality, competition and regulatory requirements, enterprise wide risk assessments, and peer group credit quality. The evaluation of these factors contributes significantly to the ASC 450-20 component of the estimate for the allowance for loan losses. We identified auditing the estimate of the aggregate effect of the qualitative factors as a critical audit matter as it involved especially subjective auditor judgment. Auditing management's determination of qualitative factors involved especially subjective auditor judgment. Management's estimate relies on an inherently subjective analysis to determine the quantitative impact the factors have on the allowance. Management's analysis of these factors requires significant judgment.

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

- Testing the effectiveness of controls over the evaluation of the items used to estimate the qualitative factors, including controls addressing:
 - The reliability of data used as the basis for the adjustments relating to qualitative factors
 - Management's judgments related to the assessed level of risk and the qualitative factor used to adjust the average loss rates
 - The mathematical accuracy of the dollar amount applied to the qualitative factor
 - Management's review of trends and the movement within each qualitative factor and the overall allowance balance

Substantively testing management's process, including evaluating their judgments and assumptions, for developing the qualitative factors which include:

- Evaluation of the reliability and relevancy of data used as a basis for the adjustments relating to qualitative factors
- Evaluation of the reasonableness of management's judgments related to the qualitative and quantitative assessment of the data used in the determination of qualitative factors and the resulting allocation to the allowance
- Analytically evaluating the ASC 450-20 component year over year
- Verifying the mathematical of the adjustment factors for qualitative component
- Evaluating the reasonableness of the qualitative factor allowance allocation derived by management
- Recalculating the dollar amount of the reserve derived from the qualitative factor assessment
- Tracing the allowance allocation from the qualitative factor analysis to the overall allowance calculation

/s/ Crowe LLP

We have served as the Company's auditor since 2016.

Franklin, Tennessee February 25, 2020

Report of Independent Registered Public Accounting Firm

Stockholders and the Board of Directors of Pinnacle Financial Partners, Inc. Nashville, Tennessee

Opinion on the Internal Control over Financial Reporting

We have audited Pinnacle Financial Partners, Inc.'s (the "Company") internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control – Integrated Framework: (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control – Integrated Framework: (2013) issued by the Committee of Control – Integrated Framework: (2013) issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements") and our report dated February 25, 2020 expressed an unqualified opinion.

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 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 of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. As permitted, the Company has excluded the operations of Advocate Capital, Inc. acquired during 2019, which is described in Note 1 of the consolidated financial statements, from the scope of management's report on internal control over financial reporting. As such, it has also been excluded from the scope of our audit of internal control over financial reporting. Our audit also included 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/ Crowe LLP

Franklin, Tennessee February 25, 2020

PINNACLE FINANCIAL PARTNERS, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS (in thousands)

| | | Decem | ber | 31, |
|--|----|----------------------------|-----|-----------------------|
| ASSETS | | 2019 | | 2018 |
| Cash and noninterest-bearing due from banks | \$ | 157,901 | \$ | 137,433 |
| Restricted cash | | 137,045 | | 65,491 |
| Interest-bearing due from banks | | 210,784 | | 516,920 |
| Federal funds sold and other | | 20,977 | | 1,848 |
| Cash and cash equivalents | | 526,707 | | 721,692 |
| Securities available-for-sale, at fair value | | 3,539,995 | | 3,083,686 |
| Securities held-to-maturity (fair value of \$201.2 million and \$193.1 million at Dec. 31, 2019 and Dec. 31, 2018, respectively) | | 188,996 | | 194,282 |
| Consumer loans held-for-sale | | 81,820 | | 34,196 |
| Commercial loans held-for-sale | | 17,585 | | 15,954 |
| Loans | | 19,787,876 | | 17,707,549 |
| Less allowance for loan losses | | (94,777) | | (83,575) |
| Loans, net | | 19,693,099 | | 17,623,974 |
| | | - , , | | .,,. |
| Premises and equipment, net | | 273,932 | | 265,560 |
| Equity method investment | | 278,037 | | 239,237 |
| Accrued interest receivable | | 84,462 | | 79,657 |
| Goodwill | | 1,819,811 | | 1,807,121 |
| Core deposits and other intangible assets | | 51,130 | | 46,161 |
| Other real estate owned | | 29,487 | | 15,165 |
| Other assets | | 1,220,435 | | 904,359 |
| Total assets | \$ | 27,805,496 | \$ | 25,031,044 |
| | | | | |
| Deposits: | | | | |
| Non-interest-bearing | \$ | 4,795,476 | \$ | 4,309,067 |
| Interest-bearing | Ψ | 3,630,168 | Ψ | 3,464,001 |
| Savings and money market accounts | | 7,813,939 | | 7,607,796 |
| Time | | 3,941,445 | | 3,468,243 |
| Total deposits | _ | 20,181,028 | | 18,849,107 |
| Securities sold under agreements to repurchase | | 126,354 | | 104,741 |
| Federal Home Loan Bank advances | | 2,062,534 | | 1,443,589 |
| Subordinated debt and other borrowings | | 749,080 | | 485,130 |
| Accrued interest payable | | 42,183 | | 23,586 |
| Other liabilities | | 288,569 | | 158,951 |
| Total liabilities | | 23,449,748 | | 21,065,104 |
| Stockholders' equity: | | ,,, | | |
| Preferred stock, no par value; 10.0 million shares authorized; no shares issued and outstanding | | _ | | _ |
| Common stock, par value \$1.00; 180.0 million shares authorized at Dec. 31, 2019 and 2018; 76.5 million and 77.5 million shares issued and outstanding at Dec. 31, 2019 and 2018, respectively | | 76,564 | | 77,484 |
| | | 3,064,467 | | 3,107,431 |
| Additional paid-in capital | | | | , , |
| Retained earnings | | 1,184,183 | | 833,130 |
| Accumulated other comprehensive income (loss), net of taxes | _ | <u>30,534</u> 4,355,748 | | (52,105) 3,965,940 |
| Total stockholders' equity Total liabilities and stockholders' equity | \$ | | ¢ | 25,031,044 |
| | \$ | 27,805,496 | 3 | 23,031,044 |

PINNACLE FINANCIAL PARTNERS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME (in thousands)

| (In thousa | inds) | | | | | | |
|--|-----------|------------|---------|------------|---------|------------|--|
| nterest income: Loans, including fees Securities: Taxable Tax-exempt Federal funds sold and other Total interest income nterest expense: Deposits Securities sold under agreements to repurchase Federal Home Loan Bank advances and other borrowings Total interest expense Net interest income rovision for loan losses let interest income after provision for loan losses let interest income: Service charges on deposit accounts Investment services Insurance sales commissions Gains on mortgage loans sold, net Investment losses on sales, net Trust fees Income from equity method investment Other noninterest income Total noninterest income Total noninterest income Total noninterest income Some from equity method investment Other noninterest income Total noninterest income Total noninterest income Some from equity method investment Other noninterest income Total noninterest income Total noninterest income | | • | ears | ended Dece | | | |
| Interest income: | | 2019 | | 2018 | | 2017 | |
| | \$ | 955,388 | \$ | 850,472 | \$ | 578,286 | |
| | ψ | 755,500 | Ψ | 050,472 | Ψ | 576,200 | |
| | | 46,649 | | 48,192 | | 39,060 | |
| | | 51,138 | | 35,995 | | 13,712 | |
| | | 14,761 | | 12,058 | | 5,080 | |
| | | 1,067,936 | | 946,717 | - | 636,138 | |
| | | | | | | | |
| Interest expense: | | | | | | | |
| | | 231,641 | | 151,043 | | 59,584 | |
| Securities sold under agreements to repurchase | | 570 | | 588 | | 406 | |
| Federal Home Loan Bank advances and other borrowings | | 69,583 | | 58,744 | | 32,842 | |
| Total interest expense | | 301,794 | | 210,375 | | 92,832 | |
| Net interest income | | 766,142 | | 736,342 | | 543,306 | |
| Provision for loan losses | | 27,283 | | 34,377 | | 23,664 | |
| Net interest income after provision for loan losses | | 738,859 | | 701,965 | | 519,642 | |
| Noninterest income | | | | | | | |
| | | 36,769 | | 24,906 | | 20,034 | |
| • • | | 24,187 | | 21,175 | | 14,315 | |
| | | 9,344 | | 9,331 | | 7,405 | |
| | | 24,335 | | 14,564 | | 18,625 | |
| | | (5,941) | | (2,254) | | (8,265) | |
| | | 14,184 | | 13,143 | | 8,664 | |
| | | 90,111 | | 51,222 | | 37,958 | |
| | | 70,837 | | 68,783 | | 46,168 | |
| | | 263,826 | | 200,870 | _ | 144,904 | |
| | | 205,820 | | 200,070 | | 147,704 | |
| Noninterest expense: | | | | | | | |
| Salaries and employee benefits | | 313,359 | | 271,673 | | 209,662 | |
| Equipment and occupancy | | 84,582 | | 74,276 | | 54,092 | |
| Other real estate expense, net | | 4,228 | | 723 | | 1,079 | |
| Marketing and other business development | | 13,251 | | 11,712 | | 8,321 | |
| Postage and supplies | | 8,144 | | 7,815 | | 5,736 | |
| Amortization of intangibles | | 9,908 | | 10,549 | | 8,816 | |
| Merger related expenses | | | | 8,259 | | 31,843 | |
| Other noninterest expense | | 71,676 | | 67,880 | | 47,011 | |
| Total noninterest expense | | 505,148 | | 452,887 | | 366,560 | |
| Income before income taxes | | 497,537 | | 449,948 | | 297,986 | |
| Income tax expense | | 96,656 | | 90,508 | | 124,007 | |
| Net income | <u>\$</u> | 400,881 | <u></u> | 359,440 | <u></u> | 173,979 | |
| Per share information: | | | | | | | |
| Basic net income per common share | \$ | 5.25 | \$ | 4.66 | \$ | 2.73 | |
| Diluted net income per common share | \$ | | \$ | 4.64 | \$ | 2.70 | |
| Weighted average common shares outstanding: | | | | | | | |
| Basic | 7 | 76,364,303 | | 77,111,372 | | 63,760,578 | |
| Diluted | | 76,763,903 | | 77,449,917 | _ | 64,328,189 | |
| | | | _ | | _ | | |

PINNACLE FINANCIAL PARTNERS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (in thousands)

| | Year | r Eno | led Decembe | r 31, | , |
|---|---------------|-------|-------------|-------|---------|
| | 2019 | | 2018 | | 2017 |
| Net income: | \$ 400,881 | \$ | 359,440 | \$ | 173,979 |
| Other comprehensive income (loss), net of tax: | | | | | |
| Changes in fair value on available-for-sale securities, net of tax | 81,658 | | (51,464) | | 3,036 |
| Changes in fair value of cash flow hedges, net of tax | (5,179) | | 2,660 | | 2,487 |
| Amortization (accretion) of net unrealized losses (gains) on securities transferred from available-for-sale to held-to-maturity, net of tax | 184 | | (73) | | (208) |
| Loss (gain) on cash flow hedges reclassified from other comprehensive income into net income, net of tax | 1,588 | | (657) | | (347) |
| Net loss on sale of investment securities reclassified from other comprehensive income into net income, net of tax | 4,388 | | 1,665 | | 5,022 |
| Total other comprehensive income (loss), net of tax | 82,639 | | (47,869) | | 9,990 |
| Total comprehensive income | \$ 483,520 | \$ | 311,571 | \$ | 183,969 |

PINNACLE FINANCIAL PARTNERS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in thousands)

For the each of the years in the three-year period ended December 31, 2019

| | Commor | n Stock | | | | |
|--|-----------|-------------|----------------------------------|----------------------|--|----------------------------------|
| | Shares | Amount | Additional Paid-in Capital | Retained Earnings | Accumulated Other Comprehensive Income (Loss) | Total Stockholders' Equity |
| December 31, 2016 | 46,359 \$ | 6 46,359 \$ | 1,083,491 | \$ 381,072 | \$ (14,226) | \$ 1,496,696 |
| Exercise of employee common stock options and stock appreciation rights | 276 | 276 | 5,209 | _ | _ | 5,485 |
| Common dividends paid (\$0.14 per share) | | — | — | (35,907) | — | (35,907) |
| Issuance of restricted common shares, net of forfeitures | 272 | 272 | (272) | _ | _ | _ |
| Issuance of common stock | 3,220 | 3,220 | 188,974 | | _ | 192,194 |
| Common stock issued in conjunction with BNC acquisition, net of issuance costs | 27,687 | 27,687 | 1,823,281 | _ | _ | 1,850,968 |
| Restricted shares withheld for taxes | (74) | (74) | (4,917) | | — | (4,991) |
| Compensation expense for restricted shares | | | 19,538 | | _ | 19,538 |
| Net income | | — | _ | 173,979 | — | 173,979 |
| Other comprehensive income | _ | _ | _ | _ | 9,990 | 9,990 |
| December 31, 2017 | 77,740 \$ | 5 77,740 \$ | 3,115,304 | \$ 519,144 | \$ (4,236) | \$ 3,707,952 |
| Exercise of employee common stock options | 98 | 98 | 1,753 | | _ | 1,851 |
| Repurchase of common stock | (405) | (405) | (20,289) | — | — | (20,694) |
| Common dividends paid (\$0.16 per share) | _ | — | _ | (45,454) | — | (45,454) |
| Issuance of restricted common shares, net of forfeitures | 157 | 157 | (157) | _ | _ | _ |
| Restricted shares withheld for taxes | (106) | (106) | (6,816) | | _ | (6,922) |
| Compensation expense for restricted shares | | _ | 17,636 | — | — | 17,636 |
| Net income | | _ | | 359,440 | _ | 359,440 |
| Other comprehensive loss | | _ | | | (47,869) | (47,869) |
| December 31, 2018 | 77,484 \$ | 5 77,484 \$ | 3,107,431 | \$ 833,130 | \$ (52,105) | \$ 3,965,940 |
| Exercise of employee common stock options | 59 | 59 | 1,210 | — | — | 1,269 |
| Repurchase of common stock | (1,102) | (1,102) | (60,314) | | _ | (61,416) |
| Common dividends paid (\$0.16 per share) | | — | — | (49,828) | — | (49,828) |
| Issuance of restricted common shares, net of forfeitures | 211 | 211 | (211) | _ | _ | _ |
| Restricted shares withheld for taxes | (88) | (88) | (4,875) | | — | (4,963) |
| Compensation expense for restricted shares | | _ | 21,226 | | | 21,226 |
| Net income | _ | _ | _ | 400,881 | _ | 400,881 |
| Other comprehensive income | | | | | 82,639 | 82,639 |
| December 31, 2019 | 76,564 \$ | 5 76,564 \$ | 3,064,467 | \$ 1,184,183 | \$ 30,534 | \$ 4,355,748 |

PINNACLE FINANCIAL PARTNERS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

| (in thousands) | For the years ended December 31, | | | | | | |
|---|----------------------------------|--|-------------|--|--|--|--|
| | 2019 | 2018 | 2017 | | | | |
| Operating activities: | * * * * * * * * * * | * • • • • • • • • • • • • • • • • • • • | ¢ | | | | |
| Net income | \$ 400,881 | \$ 359,440 | \$ 173,979 | | | | |
| Adjustments to reconcile net income to net cash provided by operating activities: | 20.204 | 10 1 4 1 | 12 9 47 | | | | |
| Net amortization/accretion of premium/discount on securities | 20,294 | 19,141 | 12,847 | | | | |
| Depreciation, amortization and accretion | 8,342 | (23,604) | (23,618) | | | | |
| Provision for loan losses | 27,283 | 34,377 | 23,664 | | | | |
| Gains on mortgage loans sold, net | (24,335) | (14,564) | (18,625) | | | | |
| Investment losses on sales, net | 5,941 | 2,254 | 8,265 | | | | |
| Stock-based compensation expense | 21,226 | 17,636 | 19,538 | | | | |
| Deferred tax expense | 14,696 | 11,765 | 28,165 | | | | |
| Revaluation of deferred tax assets and liabilities | | | 31,486 | | | | |
| Losses (gains) on disposition of other real estate and other investments | 2,927 | 84 | (203) | | | | |
| Income from equity method investment | (90,111) | (51,222) | (37,958) | | | | |
| Dividends received from equity method investment | 51,312 | 33,651 | 21,650 | | | | |
| Excess tax benefit from stock compensation | (1,011) | (2,966) | (5,366) | | | | |
| Gains on other loans sold, net | (3,624) | (3,287) | (1,488) | | | | |
| Commercial loans held for sale originated | (402,623) | (356,597) | (177,434) | | | | |
| Commercial loans held for sale sold | 404,615 | 369,387 | 176,062 | | | | |
| Consumer loans held for sale originated | (1,396,968) | (1,195,435) | (1,100,866) | | | | |
| Consumer loans held for sale sold | 1,373,678 | 1,234,551 | 1,090,489 | | | | |
| Increase in other assets | (57,499) | (24,471) | (37,023) | | | | |
| Increase (decrease) in other liabilities | 79,264 | 60,617 | (17,700) | | | | |
| Net cash provided by operating activities | 434,288 | 470,757 | 165,864 | | | | |
| Investing activities: | | | | | | | |
| Activities in securities available-for-sale: | | | | | | | |
| Purchases | (1,455,073) | (1,314,721) | (1,290,717) | | | | |
| Sales | 737,717 | 169,850 | 363,898 | | | | |
| Maturities, prepayments and calls | 372,300 | 323,571 | 323,235 | | | | |
| Activities in securities held-to-maturity: | | | | | | | |
| Purchases | (3,822) | _ | _ | | | | |
| Maturities, prepayments and calls | 8,300 | 5,775 | 4,115 | | | | |
| Increase in loans, net | (1,927,811) | (1,995,424) | (1,558,646) | | | | |
| Purchases of premises and equipment and software | (42,153) | (23,739) | (53,499) | | | | |
| Purchase of BOLI | (110,000) | (100,000) | (55,000) | | | | |
| Proceeds from BOLI settlement | 321 | 3,467 | (| | | | |
| Proceeds from sales of software, premises, and equipment | 66 | 2,967 | 23 | | | | |
| Acquisitions, net of cash acquired | (44,594) | _,, , , | 155,142 | | | | |
| Proceeds from sale of other real estate | 8,446 | 16,088 | 3,725 | | | | |
| Payments related to derivative instruments | (106,832) | 10,000 | 5,725 | | | | |
| | | (56.019) | (7 804) | | | | |
| Increase in other investments | (55,926) | (56,918) | (7,804) | | | | |
| Net cash used in investing activities | (2,619,061) | (2,969,084) | (2,115,528) | | | | |
| Financing activities: | 1 222 401 | 2 200 405 | 1 400 074 | | | | |
| Net increase in deposits | 1,332,491 | 2,399,407 | 1,488,274 | | | | |
| Net increase (decrease) in repurchase agreements | 21,613 | (30,521) | (12,754) | | | | |
| Advances from Federal Home Loan Bank: Issuances | 2,672,500 | 1,664,906 | 1,964,750 | | | | |
| Advances from Federal Home Loan Bank: Payments | (2,053,555) | (1,541,212) | (1,051,067) | | | | |
| Proceeds from subordinated debt and other borrowings, net of issuance costs | 316,078 | 19,850 | _ | | | | |
| Repayment of other borrowings | (184,175) | (620) | (220) | | | | |
| Principal payments of capital lease obligation | (226) | (168) | (149) | | | | |
| Proceeds from common stock issuance | | _ | 192,194 | | | | |
| Exercise of common stock options and stock appreciation rights, net of shares surrendered for taxes | (3,694) | (5,071) | 494 | | | | |
| Repurchase of common stock | (61,416) | (20,694) | — | | | | |
| Common stock dividends paid | (49,828) | (45,454) | (35,907) | | | | |
| Net cash provided by financing activities | 1,989,788 | 2,440,423 | 2,545,615 | | | | |
| Net increase (decrease) in cash, cash equivalents, and restricted cash | (194,985) | (57,904) | 595,951 | | | | |
| Cash, cash equivalents, and restricted cash, beginning of year | 721,692 | 779,596 | 183,645 | | | | |
| Cash, cash equivalents, and restricted cash, end of year | \$ 526,707 | \$ 721,692 | \$ 779,596 | | | | |

PINNACLE FINANCIAL PARTNERS, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Summary of Significant Accounting Policies

Nature of Business — Pinnacle Financial Partners, Inc. (Pinnacle Financial) is a financial holding company whose primary business is conducted by its wholly-owned subsidiary, Pinnacle Bank (Pinnacle Bank). Pinnacle Bank is a commercial bank headquartered in Nashville, Tennessee. Pinnacle Financial completed its acquisitions of CapitalMark Bank & Trust (CapitalMark), Magna Bank (Magna), Avenue Financial Holdings, Inc. (Avenue) and BNC Bancorp (BNC) on July 31, 2015, September 1, 2015, July 1, 2016 and June 16, 2017, respectively. Pinnacle Financial and Pinnacle Bank also collectively hold a 49% interest in Bankers Healthcare Group, LLC (BHG), a company that primarily serves as a full-service commercial loan provider to healthcare and other professional practices. Pinnacle Bank provides a full range of banking services, including investment, mortgage, and insurance services, and comprehensive wealth management services, in its 12 primarily urban markets within Tennessee, the Carolinas, Virginia and beginning in December 2019, Georgia.

On July 2, 2019, Pinnacle Bank acquired all of the outstanding stock of Advocate Capital, Inc. (Advocate Capital) for a cash price of \$59.0 million. Advocate Capital's \$134.3 million of indebtedness on the acquisition date was also paid off in connection with consummation of the acquisition. Advocate Capital is a finance firm headquartered in Nashville, TN which supports the financial needs of legal firms through both case expense financing and working capital lines of credit. Pinnacle Financial accounted for the acquisition of Advocate Capital under the acquisition method in accordance with ASC Topic 805. Accordingly, the purchase price is allocated to the fair value of the assets acquired and liabilities acquired as of the date of acquisition. Determining the fair value of assets and liabilities, particularly illiquid assets and liabilities, is a complicated process involving significant judgment regarding estimates and assumptions used to calculate estimated fair value. Fair value adjustments based on updated estimates could materially affect the goodwill recorded on the Advocate Capital acquisition. At the acquisition date, Advocate Capital's net assets, including identifiable intangible assets, were initially recorded at a fair value of approximately \$45.6 million, consisting mainly of loans receivable. The purchase price allocations for the acquisition of Advocate Capital are preliminary and will be finalized upon the receipt of final valuations on certain assets and liabilities.

Basis of Presentation — These consolidated financial statements include the accounts of Pinnacle Financial and its direct and indirect wholly-owned subsidiaries. Certain statutory trust affiliates of Pinnacle Financial, as noted in Note 9. Other Borrowings are included in these consolidated financial statements pursuant to the equity method of accounting. Significant intercompany transactions and accounts are eliminated in consolidation.

Use of Estimates — The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as of the balance sheet dates and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Material estimates that are particularly susceptible to significant change in the near term include the determination of the allowance for loan losses, determination of any impairment of goodwill or intangible assets.

Impairment — Long-lived assets, including purchased intangible assets subject to amortization, such as core deposit intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. Pinnacle Financial had \$51.1 million and \$46.2 million of long-lived intangibles at December 31, 2019 and 2018, respectively.

Goodwill is evaluated for impairment at least annually and more frequently if events and circumstances indicate that the asset might be impaired. The Accounting Standards Codification (ASC) 350, *Goodwill and Other*, regarding testing goodwill for impairment provides an entity the option to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If an entity does a qualitative assessment and determines that this is the case, or if a qualitative assessment is not performed, it is required to perform additional goodwill impairment testing to identify potential goodwill impairment and measure the amount of goodwill impairment loss to be recognized for that reporting unit (if any). Based on a qualitative assessment, if an entity determines that the fair value of a reporting unit is not required. Pinnacle Financial performed its annual assessment as of September 30, 2019. The results of the qualitative assessment indicated that the fair value of Pinnacle Financial's sole reporting unit was more than its carrying value, and accordingly, the two-step goodwill impairment test was not performed.

Should Pinnacle Financial's common stock price decline below book value per share and remain below book value per share for an extended duration or other impairment indicators become known, additional impairment testing of goodwill may be required. Should it be determined in a future period that the goodwill has become impaired, then a charge to earnings will be recorded in the period such determination is made. The following table presents activity for goodwill and other intangible assets (in thousands):

| | Goodwill | deposit and angible assets | Total |
|------------------------------|-----------------|----------------------------|-----------------|
| Balance at December 31, 2018 | \$ 1,807,121 | \$ 46,161 | \$ 1,853,282 |
| Acquisitions | 12,690 | 14,877 | 27,567 |
| Amortization | | (9,908) | (9,908) |
| Balance at December 31, 2019 | \$ 1,819,811 | \$ 51,130 | \$ 1,870,941 |

The following table presents the gross carrying amount and accumulated amortization for the core deposit and other intangible assets, which are subject to amortization (in thousands):

| | Decen | 1ber 31, 2019 | Decem | ber 31, 2018 |
|--------------------------|-------|---------------|-------|--------------|
| Gross carrying amount | \$ | 107,665 | \$ | 92,787 |
| Accumulated amortization | | (56,535) | | (46,626) |
| Net book value | \$ | 51,130 | \$ | 46,161 |

Cash Equivalents and Cash Flows — Cash on hand, cash items in process of collection, amounts due from banks, Federal funds sold, short-term discount notes and securities purchased under agreements to resell, with original maturities within ninety days, are included in cash and cash equivalents. The following supplemental cash flow information addresses certain cash payments and noncash transactions for each of the years in the three-year period ended December 31, 2019 as follows (in thousands):

| | | For the years ended December 31, | | | | |
|---|------|----------------------------------|------|---------|------|-----------|
| | 2019 | | 2018 | | 2017 | |
| Cash Payments: | | | | | | |
| Interest | \$ | 287,272 | \$ | 199,464 | \$ | 91,628 |
| Income taxes paid | | 86,960 | | 55,626 | | 81,539 |
| Noncash Transactions: | | | | | | |
| Loans charged-off to the allowance for loan losses | | 28,467 | | 30,400 | | 22,046 |
| Loans foreclosed upon with repossessions transferred to other real estate | | 17,937 | | 3,524 | | 6,228 |
| Loans foreclosed upon with repossessions transferred to other repossessed assets | | 93 | | 1,899 | | 646 |
| Other real estate sales financed | | 871 | | 891 | | 908 |
| Fixed assets transferred to other real estate | | 8,182 | | | | _ |
| Available-for-sale securities transferred to held-to-maturity portfolio | | — | | 179,763 | | _ |
| Held-for-sale loans transferred to held-for-investment loan portfolio | | — | | 44,980 | | — |
| Common stock issued in connection with acquisitions | | _ | | _ | | 1,850,968 |
| Right-of-use assets recognized in the period in exchange for lease obligations ⁽¹⁾ | | 90,927 | | — | | _ |

⁽¹⁾ Includes \$79.9 million recognized upon initial adoption of ASU 2016-02 on January 1, 2019.

Securities — Securities are classified based on management's intention on the date of purchase. All debt securities classified as available-for-sale are recorded at fair value with any unrealized gains and losses reported in accumulated other comprehensive income (loss), net of the deferred income tax effects. Securities that Pinnacle Financial has both the positive intent and ability to hold to maturity are classified as held-to-maturity and are carried at historical cost and adjusted for amortization of premiums and accretion of discounts.

Interest and dividends on securities, including amortization of premiums and accretion of discounts calculated under the effective interest method, are included in interest income. For certain securities, amortization of premiums and accretion of discounts is computed based on the anticipated life of the security which may be shorter than the stated life of the security. Realized gains and losses from the sale of securities are determined using the specific identification method and are recorded on the trade date of the sale.

Other-than-temporary Impairment — A decline in the fair value of any available-for-sale or held-to-maturity security below cost that is deemed to be other-than-temporary results in a reduction in the carrying amount of the security. To determine whether impairment is other-than-temporary, management considers whether the entity expects to recover the entire amortized cost basis of the security by reviewing the present value of the future cash flows associated with the security. The shortfall of the present value of the cash flows expected to be collected in relation to the amortized cost basis is referred to as a credit loss and is deemed to be other-than-temporary impairment. If a credit loss is identified, the credit loss is recognized as a charge to earnings and a new cost basis for the security is established. If management concludes that a decline in fair value of a security is temporary and a full recovery of principal and interest is expected and it is not more-likely-than-not that it will be required to sell the security before recovery of its amortized cost basis, then the security is not other-than-temporarily impaired and the shortfall is recorded as a component of equity.

Periodically, available-for-sale securities may be sold or the composition of the portfolio realigned to improve yields, quality or marketability, or to implement changes in investment or asset/liability strategy, including maintaining collateral requirements and raising funds for liquidity purposes. Additionally, if an available-for-sale security loses its investment grade, tax-exempt status, the underlying credit support is terminated or collection otherwise becomes uncertain based on factors known to management, Pinnacle will consider selling the security, but will review each security on a case-by-case basis as these factors become known. Resultantly, other-than-temporary charges may be incurred as management's intention related to a particular security changes.

The carrying values of Pinnacle Financial's investment securities could decline in the future if the financial condition of the securities' issuer deteriorates and management determines it is probable that Pinnacle Financial will not recover the entire amortized cost bases of the securities. As a result, there is a risk that other-than-temporary impairment charges may occur in the future. There is also a risk that other-than-temporary impairment charges may occur in the future if management's intention to hold these securities to maturity and/or recovery changes.

Loans held-for-sale — Loans originated and intended for sale are carried at the lower of cost or estimated fair value as determined on a loan-by-loan basis. Net unrealized losses, if any, are recognized through a valuation allowance by charges to income. Realized gains and losses are recognized when legal title to the loans has been transferred to the purchaser and sales proceeds have been received and are reflected in the accompanying consolidated statement of income in gains on mortgage loans sold, net of related costs such as compensation expenses, for mortgage loans, and as a component of other noninterest income for commercial loans held-forsale.

Loans — Pinnacle Financial has five loan segments for financial reporting purposes: commercial and industrial, commercial real estate mortgage, construction and land development, consumer and other and consumer real estate mortgage. The appropriate classification is determined based on the underlying collateral utilized to secure each loan. These classifications are consistent with those utilized in the Quarterly Report of Condition and Income filed by Pinnacle Bank with the Federal Deposit Insurance Corporation (FDIC).

Loans are reported at their outstanding principal balances, net of applicable purchase accounting and any deferred fees or costs on originated loans. Interest income on loans is accrued based on the principal balance outstanding. Loan origination fees, net of certain loan origination costs, are deferred and recognized as an adjustment to the related loan yield using a method which approximates the interest method. At December 31, 2019 and 2018, net deferred loan fees of \$13.7 million and \$7.4 million respectively, were included as a reduction to loans on the accompanying consolidated balance sheets.

As part of our routine credit monitoring process, commercial loans receive risk ratings by the assigned financial advisor and are subject to validation by our independent loan review department. Risk ratings are categorized as pass, special mention, substandard, substandard-nonaccrual or doubtful-nonaccrual. Pinnacle Financial believes that its categories follow those outlined by the FDIC, Pinnacle Bank's primary federal regulator. At December 31, 2019, approximately 80.3% of Pinnacle Financial's loan portfolio was assigned a specifically assigned risk rating. Certain consumer loans and commercial relationships that possess certain qualifying characteristics, including individually smaller balances, are generally not assigned an individual risk rating but are evaluated collectively for credit risk as a homogeneous pool of loans and individually as either accrual or nonaccrual based on the performance of the loan.

Loans are placed on nonaccrual status when there is a significant deterioration in the financial condition of the borrower, which generally is the case but is not limited to when the principal or interest is more than 90 days past due, unless the loan is both well-secured and in the process of collection. All interest accrued but not collected for loans that are placed on nonaccrual status is reversed against current interest income. Interest income is subsequently recognized only if certain cash payments are received while the loan is classified as nonaccrual, but interest income recognition is reviewed on a case-by-case basis to determine if the payment should be applied to interest or principal pursuant to regulatory guidelines. A nonaccrual loan is returned to accruing status once the loan has been brought current as to principal and interest and collection is reasonably assured or the loan has been well-secured through other techniques.

All loans that are placed on nonaccrual status are further analyzed to determine if they should be classified as impaired loans. A loan is considered to be impaired when it is probable Pinnacle Financial will be unable to collect all principal and interest payments due in accordance with the contractual terms of the loan. This determination is made using a variety of techniques, which include a review of the borrower's financial condition, debt-service coverage ratios, global cash flow analysis, guarantor support, other loan file information, meetings with borrowers, inspection or reappraisal of collateral and/or consultation with legal counsel as well as results of reviews of other similar industry credits (e.g. builder loans, development loans, church loans, etc.).

Loans are charged off when management believes that the full collectability of the loan is unlikely. As such, a loan may be partially charged-off after a "confirming event" has occurred which serves to validate that full repayment pursuant to the terms of the loan is unlikely.

Purchased Loans — Purchased loans, including loans acquired through a merger, are initially recorded at fair value on the date of purchase. Purchased loans that contain evidence of post-origination credit deterioration as of the purchase date are carried at the net present value of expected future cash flows. All other purchased loans are recorded at their initial fair value, and adjusted for subsequent advances, pay downs, amortization or accretion of any fair value premium or discount on purchase, charge-offs and any other adjustment to carrying value. Pursuant to U.S. generally accepted accounting principles (U. S. GAAP), management has up to 12 months following the date of the acquisition to finalize the fair values of acquired assets and assumed liabilities as of the acquisition date. Once management has finalized the fair values of acquired assets and assumed liabilities within this 12-month period, management considers such values to be the day 1 fair values (Day 1 Fair Values).

At the time of acquisition, management evaluates all purchased loans using a variety of factors such as current classification or risk rating, past due status and history as a component of the fair value determination. For those purchased loans without evidence of credit deterioration, management evaluates each reviewed loan using an internal grading system with a grade assigned to each loan at the date of acquisition. To the extent that any purchased loan is not specifically reviewed, such loan is assumed to have characteristics similar to the characteristics of the specifically reviewed acquired portfolio of purchased loans. The grade for each purchased loan without evidence of credit deterioration is reviewed subsequent to the date of acquisition any time a loan is renewed or extended or at any time information becomes available to Pinnacle Financial that provides material insight regarding the loan's performance, the borrower's capacity to repay or the underlying collateral.

In determining the Day 1 Fair Values of purchased loans without evidence of post-origination credit deterioration at the date of acquisition, management includes (i) no carryover of any previously recorded allowance for loan losses (allowance) and (ii) an adjustment of the unpaid principal balance to reflect an appropriate market rate of interest and expected loss, given the risk profile and risk rating assigned to each loan. This adjustment is accreted into earnings as a yield adjustment, using the effective yield method, over the remaining life of each loan.

Purchased loans that contain evidence of credit deterioration on the date of purchase are individually evaluated by management to determine the estimated fair value of each loan. This evaluation includes no carryover of any previously recorded allowance. In determining the estimated fair value of purchased loans with evidence of credit deterioration, management considers a number of factors including, among other things, the remaining life of the acquired loans, estimated prepayments, estimated loss ratios, estimated value of the underlying collateral, estimated holding periods, and net present value of cash flows expected to be received.

In determining the Day 1 Fair Values of purchased loans with evidence of credit deterioration, management calculates a nonaccretable difference (the credit risk component of the purchased loans) and an accretable difference (the yield component of the purchased loans). The non-accretable difference is the difference between the contractually required payments and the cash flows expected to be collected in accordance with management's determination of the Day 1 Fair Values. Subsequent increases in expected cash flows will result in an adjustment to accretable yield, which will have a positive impact on interest income. Subsequent decreases in expected cash flows will generally result in increased provision for loan losses. Subsequent increases in expected cash flows following any previous decrease will result in a reversal of the provision for loan losses to the extent of prior charges and then an adjustment to accretable yield. The accretable difference on purchased loans with evidence of credit deterioration is the difference between the expected cash flows and the net present value of expected cash flows. Such difference is accreted into earnings using the effective yield method over the term of the loans. For purchased loans with evidence of credit deterioration for which the expected cash flows cannot be forecasted, these loans are deemed to be collateral dependent, are recorded at their fair value and are placed on nonaccrual, with interest payments recorded on a cash basis, as appropriate. Allowance for Loan Losses (allowance) - Pinnacle Financial's management assesses the adequacy of the allowance prior to the end of each calendar quarter. This assessment includes procedures to estimate the allowance and test the adequacy and appropriateness of the resulting balance. The level of the allowance is based upon management's evaluation of the loan portfolio, loan loss experience, asset quality trends, known and inherent risks in the portfolio, adverse situations that may affect the borrowers' ability to repay the loan (including the timing of future payment), the estimated value of any underlying collateral, composition of the loan portfolio, economic conditions, industry and peer bank loan quality indications and other pertinent factors, including regulatory recommendations. The level of allowance maintained by management is believed adequate to absorb probable losses inherent in the loan portfolio at the balance sheet date. The allowance is increased by provisions charged to expense and decreased by charge-offs, net of recoveries of amounts previously charged-off. Allocation of the allowance may be made for specific loans, but the entire allowance is available for any loan that, in management's judgment, is deemed uncollectible.

Pinnacle Financial's allowance for loan loss assessment methodology was modified during the year ended December 31, 2017 to (i) extend the look-back period from 24 quarters to a period beginning January 1, 2006 to better capture the risk associated with this extended economic cycle, (ii) eliminate the use of risk ratings in the calculation of the loss rate and instead focus on loss rate by loan type and (iii) expand the economic variables used in the qualitative assessment to incorporate our expanded footprint. Pinnacle Financial also eliminated the use of a loss emergence period in light of the minimal population of losses available to evaluate that were previously being extrapolated to the full population of loans, and shifted the focus of its analysis to more of a quantitative model. There was no material impact on the adoption of the changes in the allowance for loan loss assessment methodology.

Pinnacle Financial's allowance for loan losses is composed of the result of two independent analyses pursuant to the provisions of ASC 450-20, *Loss Contingencies* and ASC 310-10-35, *Receivables*. The ASC 450-20 analysis is intended to quantify the inherent risks in its performing loan portfolio. The ASC 310-10-35 analysis includes a loan-by-loan analysis of impaired loans, including those reported as nonaccrual, troubled-debt restructurings and purchase credit impaired.

In assessing the adequacy of the allowance, Pinnacle Financial also considers the results of Pinnacle Financial's ongoing independent loan review process. Pinnacle Financial undertakes this process both to ascertain those loans in the portfolio with elevated credit risk and to assist in its overall evaluation of the risk characteristics of the entire loan portfolio. Its loan review process includes the judgment of management, independent internal loan reviewers, and reviews that may have been conducted by third-party reviewers including regulatory examiners. Pinnacle Financial incorporates relevant loan review results in the allowance.

The ASC 450-20 component of the allowance for loan losses begins with a historical loss rate calculation for each loan pool with similar risk characteristics. The losses realized over a rolling four-quarter cycle are utilized to determine an annual loss rate for each loan pool for each quarter-end in our look-back period. The look-back period in our loss rate calculation begins with January 1, 2006, as we believe the period from January 1, 2006 to present is more representative of this economic cycle. The loss rates for each category are then averaged and applied to the end of period loan portfolio balances to determine estimated losses. The loss rates provide a quantitative estimate of credit losses inherent in our end of period loan portfolio based on our actual loss experience.

The estimated loan loss allocation for all loan segments is then adjusted for management's estimate of probable losses for a number of qualitative factors that have not been considered in the quantitative analysis. The qualitative categories and the measurements used to quantify the risks within each of these categories are subjectively selected by management, but measured by objective measurements period over period. The data for each measurement may be obtained from internal or external sources. The current period measurements are evaluated and assigned a factor commensurate with the current level of risk relative to past measurements over time. The resulting factor is applied to the non-impaired loan portfolio. This amount represents estimated probable inherent credit losses which exist, but have not yet been identified either in its risk rating or impairment process, as of the balance sheet date, and is based upon quarterly trend assessments in portfolio concentrations, policy exceptions, economic conditions, associate retention, independent loan review results, collateral considerations, credit quality, competition, enterprise wide risk assessments, and peer group credit quality. The qualitative allowance allocation, as determined by the processes noted above, is increased or decreased for each loan segment based on the assessment of these various qualitative factors.

The allowance for loan losses for purchased loans is calculated similar to that utilized for legacy Pinnacle Bank loans. Pinnacle Financial's accounting policy is to compare the computed allowance for loan losses for each purchased loan to the remaining fair value adjustment at the individual loan level. If the computed allowance at the loan level is greater than the remaining fair value adjustment, the excess is added to the allowance for loan losses by a charge to the provision for loan losses.

The ASC 450-20 portion of the allowance includes a small unallocated component. Pinnacle Financial believes that the unallocated amount is warranted for inherent factors that cannot be practically assigned to individual loan categories, such as the imprecision in the overall loss allocation measurement process, the subjectivity risk of potentially not considering all relevant environmental categories and related measurements and imprecision in its credit risk ratings process. The appropriateness of the unallocated component of the allowance is assessed each quarter end based upon changes in the overall business environment not otherwise captured.

The impaired loan allowance is determined pursuant to ASC 310-10-35. Loans are impaired when, based on current information and events, it is probable that we will be unable to collect all amounts due according to the contractual terms of the loan agreement. Collection of all amounts due according to the contractual terms means collecting all interest and principal payments of a loan as scheduled in the loan agreement. This evaluation is inherently subjective as it requires material estimates including the amounts and timing of future cash flows expected to be received on impaired loans that may be susceptible to significant change. Loan losses are charged off when management believes that the full collectability of the loan is unlikely. A loan may be partially charged-off after a "confirming event" has occurred which serves to validate that full repayment pursuant to the terms of the loan is unlikely.

An impairment allowance is recognized if the fair value of the loan is less than the recorded investment in the loan (recorded investment in the loan is the principal balance plus any accrued interest, net of deferred loan fees or costs and unamortized premium or discount). The impairment is recognized through the provision for loan losses and is a component of the allowance for loan losses. Loans that are impaired are recorded at the present value of expected future cash flows discounted at the loan's effective interest rate, or if the loan is collateral dependent, at the fair value of the collateral, less estimated disposal costs. If the loan is cash flow dependent, a specific reserve is established as a component of the allowance. If the loan is collateral dependent, any portion of the loan confirmed to be uncollectible is charged off, and a specific reserve is established for any remaining impairment. The fair value of collateral dependent loans is derived primarily from collateral appraisals performed by independent third-party appraisers. This analysis is completed for all individual loans greater than \$1.0 million. The resulting allowance percentage by segment adjusted for specific trends identified, if applicable, is then applied to the remaining population of impaired loans.

Pursuant to the guidance set forth in ASU No. 2011-02, *A Creditor's Determination of Whether a Restructuring is a Troubled Debt Restructuring*, the above impairment methodology is also applied to those loans identified as troubled debt restructurings.

Sufficiency of the total computed allowance is then tested by comparison to historical trends and industry and peer information. Pinnacle Financial then evaluates the result of the procedures performed, including the results of its testing, and concludes on the appropriateness of the balance of the allowance in its entirety. The audit committee of Pinnacle Financial's board of directors reviews and approves the methodology and resultant allowance prior to the filing of quarterly and annual financial information.

While its policies and procedures used to estimate the allowance for loan losses, as well as the resultant provision for loan losses charged to income, are considered adequate by management and are reviewed from time to time by regulators, they are necessarily approximate and imprecise. There are factors beyond Pinnacle Financial's control, such as conditions in the local, national, and international economy, a local real estate market or particular industry conditions which may materially negatively impact asset quality and the adequacy of the allowance for loan losses and thus the resulting provision for loan losses.

As discussed more fully in the Recently Issued Not Yet Effective Accounting Standards, Pinnacle Financial adopted Accounting Standards Update 2016-13, Financial Instruments--Credit Losses: Measurement of Credit Losses on Financial Instruments (CECL) effective January 1, 2020.

Transfers of Financial Assets — Transfers of financial assets are accounted for as sales when control over the assets has been surrendered or in the case of a loan participation, a portion of the asset has been surrendered and meets the definition of a "participating interest". Control over transferred assets is deemed to be surrendered when (1) the assets have been isolated from Pinnacle Financial, (2) the transferre obtains the right (free of conditions that constrain it from taking advantage of that right) to pledge or exchange the transferred assets, and (3) Pinnacle Financial does not maintain effective control over the transferred assets through an agreement to repurchase them before maturity.

Premises and Equipment and Leaseholds — Premises and equipment are carried at cost less accumulated depreciation and amortization computed principally by the straight-line method over the estimated useful lives of the assets or the expected lease terms for leasehold improvements, whichever is shorter. Useful lives for all premises and equipment range between three and thirty years.

Pinnacle Financial, or a subsidiary of Pinnacle Financial, is the lessee with respect to multiple office locations. At December 31, 2019, all such leases were being accounted for as operating leases within the accompanying consolidated financial statements, with the exception of one lease agreement classified as a finance lease. Beginning January 1, 2019, Pinnacle Financial recognized right-of-use assets and lease liabilities reflecting the present value of future minimum lease payments under its lease agreements in accordance with Accounting Standards Update 2016-02, Leases, noted below under "Recently Adopted Accounting Pronouncements."

Other Real Estate Owned — Other real estate owned (OREO) represents real estate foreclosed upon or acquired by deed in lieu of foreclosure by Pinnacle Bank through loan defaults by customers as well as properties acquired in connection with the acquisition of BNC that had previously been held for future expansion but were transferred to OREO in 2019. Substantially all of these amounts relate to lots, homes and residential development projects that are either completed or are in various stages of construction for which Pinnacle Financial believes it has adequately supported the value recorded. Upon its acquisition by Pinnacle Bank, the property is recorded at fair value, based on appraised value, less selling costs estimated as of the date acquired. The difference from the loan balance related to the property, if any, is recognized as a charge-off through the allowance for loan losses. Additional OREO losses for subsequent downward valuation adjustments and expenses to maintain OREO are determined on a specific property basis and are included as a component of noninterest expense. Net gains or losses realized at the time of disposal are reflected in noninterest expense.

Included in the accompanying consolidated balance sheet at December 31, 2019 is \$30.3 million of OREO with related propertyspecific valuation allowances of \$772,000. At December 31, 2018, OREO totaled \$16.2 million with related property-specific valuation allowances of \$1.0 million. During the years ended December 31, 2019, 2018 and 2017, Pinnacle Financial had \$4.2 million, \$723,000 and \$1.1 million, respectively, of net foreclosed real estate expense.

Other Assets — Included in other assets as of December 31, 2019 and 2018, is approximately \$6.0 million and \$7.7 million, respectively, of computer software related assets, net of amortization. This software supports Pinnacle Financial's primary data systems and relates to amounts paid to vendors for installation and development of such systems. These amounts are amortized on a straight-line basis over periods of three to seven years. For the years ended December 31, 2019, 2018, and 2017, Pinnacle Financial's amortization expense was approximately \$2.7 million, \$3.0 million, and \$2.5 million, respectively. Software maintenance fees are capitalized in other assets and amortized over the term of the maintenance agreement.

Pinnacle Financial is required to maintain certain minimum levels of equity investments with certain regulatory and other entities in which Pinnacle Bank has outstanding borrowings, including the Federal Home Loan Bank of Cincinnati. At December 31, 2019 and 2018, the cost of these investments was \$80.4 million and \$70.2 million, respectively. Pinnacle Financial determined that cost approximates the fair value of these investments. Additionally, Pinnacle Financial has recorded certain investments in other non-public entities and funds at fair value, of \$38.2 million and \$26.4 million at December 31, 2019 and 2018, respectively. During 2019 and 2018, Pinnacle Financial recorded net gains of \$2.8 million and \$2.7 million, respectively, due to changes in the fair value of these investments. As more fully described in Note 9, Pinnacle Financial has an investment in twelve Trusts value at \$4.0 million as of December 31, 2019. The Trusts were established to issue preferred securities, the dividends for which are paid with interest payments Pinnacle Financial makes on subordinated debentures it issued to the Trusts.

Pinnacle Bank is the owner and beneficiary of various life insurance policies on certain key executives and certain current and former directors and associates, including policies that were acquired in its mergers. Collectively, these policies are reflected in other assets in the accompanying consolidated balance sheets at their respective cash surrender values. At December 31, 2019 and 2018, the aggregate cash surrender value of these policies was approximately \$652.7 million and \$525.7 million, respectively. Noninterest income related to these policies was \$17.4 million, \$12.5 million, and \$7.9 million, during the years ended December 31, 2019, 2018 and 2017, respectively.

Also, as part of our compliance with the Community Reinvestment Act, we have investments in low income housing entities totaling \$100.9 million and \$72.6 million, net, as of December 31, 2019 and 2018, respectively. Included in our CRA investments are investments of \$58.4 million and \$32.8 million at December 31, 2019 and 2018, respectively, net of amortization, that qualify for federal low income housing tax credits. The investments are accounted for under the proportional amortization method. Under the proportional amortization method, the initial cost of the investment is amortized in proportion to the tax credits and other tax benefits received. The amortization and benefits are recognized as a component of income tax expense in the consolidated statements of income. The investments are recorded using the cost method.

Derivative Instruments — In accordance with ASC Topic 815, *Derivatives and Hedging*, all derivative instruments are recorded on the accompanying consolidated balance sheet at their respective fair values. The accounting for changes in fair value (i.e., gains or losses) of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship. If the derivative instrument is not designated as a hedge, changes in the fair value of the derivative instrument are recognized in earnings in the period of change.

Pinnacle Financial enters into interest rate swaps (swaps) to facilitate customer transactions and meet their financing needs. Upon entering into these instruments to meet customer needs, Pinnacle Financial enters into offsetting positions with large U.S. financial institutions in order to minimize the risk to Pinnacle Financial. These swaps are derivatives, but are not designated as hedging instruments.

Pinnacle Financial enters into forward cash flow hedge relationships in the form of interest rate swap agreements to manage its future interest rate exposure. These derivative contracts have been designated as a hedge and, as such, changes in the fair value of the derivative instrument are recorded in other comprehensive income. Pinnacle Financial also enters into fair value hedge relationships to mitigate the effect of changing interest rates on the fair values of fixed rate securities and loans. The gain or loss on the derivative instrument as well as the offsetting loss or gain on the hedged asset or liability attributable to the hedged risk are recognized in current earnings. The gain or loss on the derivative instrument is presented on the same income statement line item as the earnings effect of the hedged item. Pinnacle Financial prepares written hedge documentation for all derivatives which are designated as hedges. The written hedge documentation includes identification of, among other items, the risk management objective, hedging instrument, hedged item and methodologies for assessing and measuring hedge effectiveness and ineffectiveness, along with support for management's assertion that the hedge will be highly effective.

For designated hedging relationships, Pinnacle Financial performs retrospective and prospective effectiveness testing using quantitative methods where required by accounting standards. For certain hedging relationships, effectiveness is tested through the matching of critical terms. Assessments of hedge effectiveness and measurements of hedge ineffectiveness are performed at least quarterly. The portion of the changes in the fair value of a derivative that is highly effective and that has been designated and qualifies as a cash flow hedge is initially recorded in accumulated other comprehensive income (AOCI) and will be reclassified to earnings in the same period that the hedged item impacts earnings; any ineffective portion is recorded in current period earnings.

Hedge accounting ceases on transactions that are no longer deemed effective, or for which the derivative has been terminated or de-designated.

Securities Sold Under Agreements to Repurchase — Pinnacle Financial routinely sells securities to certain treasury management customers and then repurchases these securities the next day. Securities sold under agreements to repurchase are reflected as a secured borrowing in the accompanying consolidated balance sheets at the amount of cash received in connection with each transaction.

Income Taxes — ASC 740, *Income Taxes*, defines the threshold for recognizing the benefits of tax return positions in the financial statements as "more-likely-than-not" to be sustained by the taxing authority. ASC 740 also provides guidance on the derecognition, measurement and classification of income tax uncertainties, along with any related interest and penalties, and includes guidance concerning accounting for income tax uncertainties in interim periods.

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. Accordingly, deferred tax assets that will be realized after December 31, 2017 were revalued using the tax rates enacted as a result of the 2017 Tax Cuts and Jobs Act resulting in a revaluation charge of \$31.5 million. The net deferred tax asset is reflected as a component of other assets on the consolidated balance sheet. A valuation allowance is required for deferred tax assets if, based on available evidence, it is more likely than not that all or some portion of the asset may not be realized due to the inability to generate sufficient taxable income in the period and/or of the character necessary to utilize the benefit of the deferred tax asset.

Income tax expense or benefit for the year is allocated among continuing operations and other comprehensive income (loss), as applicable. The amount allocated to continuing operations is the income tax effect of the pretax income or loss from continuing operations that occurred during the year, plus or minus income tax effects of (i) changes in certain circumstances that cause a change in judgment about the realization of deferred tax assets in future years, including the valuation of deferred tax assets due to changes in enacted income tax rates (ii) changes in income tax laws or rates, and (iii) changes in income tax status, subject to certain exceptions. The amount allocated to other comprehensive income (loss) is related solely to changes in the valuation allowance on items that are normally accounted for in other comprehensive income (loss) such as unrealized gains or losses on available-for-sale securities.

In accordance with ASC 740-10, *Accounting for Uncertainty in Income Taxes*, uncertain tax positions are recognized if it is more likely than not, based on technical merits, that the tax position will be realized or sustained upon examination. The term more likely than not means a likelihood of more than 50 percent; the terms realized or sustained upon examination also include resolution of the related appeals or litigation processes, if any. A tax position that meets the more likely than not recognition threshold is initially and subsequently measured as the largest amount of tax benefit that has a greater than 50 percent likelihood of being realized upon settlement with a taxing authority that has full knowledge of all relevant information. The determination of whether or not a tax position has met the more likely than not recognition threshold considers the facts, circumstances and information available at the reporting date.

Pinnacle Financial and its subsidiaries file consolidated U.S. Federal and state income tax returns. Each entity provides for income taxes based on its contribution to income or loss of the consolidated group. Pinnacle Financial has a Real Estate Investment Trust subsidiary that files a separate federal tax return, but its income is included in the consolidated group's return as required by the federal tax laws. Pinnacle Financial remains open to audit under the statute of limitations by the IRS and the states in which Pinnacle operates for the years ended December 31, 2016 through 2019.

Pinnacle Financial's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. No amounts were accrued for interest and/or penalties at December 31, 2019 or 2018. Pinnacle Financial's policy is to recognize interest and/or penalties related to income tax matters in income tax expense.

Income Per Common Share — Basic net income per common share (EPS) is computed by dividing net income by the weighted average common shares outstanding for the period. Diluted EPS reflects the dilution that could occur if securities or other contracts to issue common stock were exercised or converted. The difference between basic and diluted weighted average shares outstanding is attributable to common stock options, restricted share awards, and restricted share unit awards. The dilutive effect of outstanding options, restricted share unit awards is reflected in diluted EPS by application of the treasury stock method.

As of December 31, 2019, there were 119,274 stock options outstanding to purchase common shares. For the years ended December 31, 2019, 2018 and 2017, respectively, 399,600, 338,545 and 567,611 of dilutive stock options, dilutive restricted shares and restricted share units were included in the diluted earnings per share calculation under the treasury stock method. For the years ended December 31, 2019 and 2018, there were 160,492 and 253,193, respectively, restricted shares excluded from the calculation because they were deemed to be antidilutive. For the year ended December 31, 2017, there were no stock options, restricted shares and restricted share units excluded from the calculation because they were deemed to be antidilutive.

The following is a summary of the basic and diluted earnings per share calculation for each of the years in the three-year period ended December 31, 2019 (dollars in thousands except earnings per share):

| | Dece | mber 31, 2019 | Dec | ember 31, 2018 | Dec | cember 31, 2017 |
|--|------|---------------|-----|----------------|-----|-----------------|
| Basic earnings per share calculation: | | | | | | |
| Numerator - Net income | \$ | 400,881 | \$ | 359,440 | \$ | 173,979 |
| Denominator – Weighted average common shares outstanding | | 76,364,303 | | 77,111,372 | | 63,760,578 |
| Basic net income per common share | \$ | 5.25 | \$ | 4.66 | \$ | 2.73 |
| Diluted earnings per share calculation: | | | | | | |
| Numerator - Net income | \$ | 400,881 | \$ | 359,440 | \$ | 173,979 |
| Denominator – Weighted average common shares outstanding | | 76,364,303 | | 77,111,372 | | 63,760,578 |
| Dilutive shares contingently issuable | | 399,600 | | 338,545 | | 567,611 |
| Weighted average diluted common shares outstanding | | 76,763,903 | | 77,449,917 | | 64,328,189 |
| Diluted net income per common share | \$ | 5.22 | \$ | 4.64 | \$ | 2.70 |

Stock-Based Compensation — Stock-based compensation expense is recognized based on the fair value of the portion of stock-based payment awards that are ultimately expected to vest, reduced for estimated forfeitures. ASC 718-20, *Compensation – Stock Compensation Awards Classified as Equity* requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Service based awards with multiple vesting periods are expensed over the entire requisite period as if the award were a single award. For awards with performance vesting criteria, anticipated performance is projected to determine the number of awards expected to vest, and the corresponding aggregate expense is adjusted to reflect the elapsed portion of the applicable performance period.

Comprehensive Income (Loss) — Comprehensive income (loss) consists of the total of all components of comprehensive income (loss) including net income (loss). Other comprehensive income (loss) refers to revenues, expenses, gains and losses that under U.S. GAAP are included in comprehensive income (loss) but excluded from net income (loss). Currently, Pinnacle Financial's other comprehensive income (loss) consists primarily of unrealized gains and losses on securities available-for-sale, net of deferred tax expense (benefit) and unrealized gains (losses) on derivative hedging relationships.

Fair Value Measurement — ASC Topic 820, *Fair Value Measurements and Disclosures*, which defines fair value, establishes a framework for measuring fair value in U.S. GAAP and established required disclosures about fair value measurements. ASC 820 applies only to fair value measurements that are already required or permitted by other accounting standards and increases the consistency of those measurements. The definition of fair value focuses on the exit price, i.e., the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, not the entry price, (i.e., the price that would be paid to acquire the asset or received to assume the liability at the measurement date). The statement emphasizes that fair value is a market-based measurement; not an entity-specific measurement. Therefore, the fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability.

Pinnacle Financial has an established process for determining fair values. Fair value is based upon quoted market prices, where available. If listed prices or quotes are not available, fair value is based upon internally developed models or processes that use primarily market-based or independently-sourced market data, including interest rate yield curves, option volatilities and third party information such as prices of similar assets or liabilities. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value. Furthermore, while Pinnacle Financial believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

Recently Adopted Accounting Pronouncements — In February 2016, the FASB issued Accounting Standards Update 2016-02, Leases which requires recognition in the statement of financial position of lease right of use assets and lease liabilities by lessees for those leases classified as operating leases under previous GAAP guidance. The guidance requires that a lessee should recognize lease assets and lease liabilities as compared to previous GAAP guidance that did not require lease assets and lease liabilities to be recognized for operating leases. In July 2016, the FASB issued Accounting Standards Update 2018-10, Codification Improvements to Topic 842, Leases which provided technical corrections and improvements to ASU 2016-02. In July 2016, the FASB issued Accounting Standards Update 2018-11, Leases (Topic 842): Targeted Improvements which provided an optional transition method to adopt the new requirements of ASU 2016-02 as of the adoption date with no adjustment to the presentation or disclosure of comparative prior periods included in the financial statements in the period of adoption. Pinnacle Financial has elected this optional transition method and has presented periods prior to adoption under the prior lease guidance of ASC Topic 840. In December 2018, the FASB issued Accounting Standards Update 2018-20, Leases (Topic 842): Narrow-Scope Improvements for Lessors. ASU 2018-20 permits lessors to account for certain taxes as lessee costs, permits lessors to exclude from revenue certain lessor costs paid by lessees directly to third parties, and requires lessors to allocate certain variable payments to lease and non-lease components. In March 2019, the FASB issued Accounting Standards Update No. 2019-01, Leases (Topic 842): Codification Improvements. The amendments in this ASU (i) reinstate the exception in Topic 842 for lessors that are not manufacturers or dealers to use cost as the fair value of the underlying asset, (ii) state that lessors that are depository and lending institutions should present principal payments received under sales type and direct financing leases within investing activities, and (iii) exempt Topic 842 from certain transition related interim disclosure requirements. ASU 2016-02 and the subsequently issued ASUs related to Topic 842 became effective for Pinnacle Financial on January 1, 2019. As part of the adoption of these updates, Pinnacle Financial has elected the following practical expedients: 1) to not reassess whether existing contracts are or contain a lease, 2) to not reassess lease classification for existing leases, 3) to not reassess initial direct costs, 4) to not separate lease components from nonlease components for real estate leases, and 5) to not recognize short term leases (12 months or less) on the balance sheet. See Note 6 for additional detail related to lease amounts recognized as of December 31, 2019 under Topic 842.

In February 2018, the FASB issued Accounting Standards Update 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. The amendments in this ASU addressed the income tax accounting treatment of the stranded tax effects within other comprehensive income due to the lower federal corporate tax rate included in the Tax Cuts and Jobs Act issued December 22, 2017 (Tax Act). These amendments allow an entity to make a reclassification from other comprehensive income to retained earnings for the difference between the historical corporate income tax rate included in the Tax Act. The amendments are effective for fiscal years beginning after December 15, 2018, including interim periods within those years. Pinnacle Financial has elected not to adopt this standard due to its insignificant impact on Pinnacle Financial's consolidated financial position.

Newly Issued Not Yet Effective Accounting Standards — In December 2019, the FASB issued Accounting Standards Update No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes to simplify various aspects of the current guidance to promote consistent application of the standard among reporting entities by moving certain exceptions to the general principles. The amendments are effective for fiscal years beginning after December 15, 2020, with early adoption permitted. Pinnacle Financial does not plan to adopt this standard early. If this standard had been effective as of the date of the financial statements included in this report, there would have been no impact on Pinnacle Financial's consolidated financial statements.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment to simplify how entities other than private companies, such as public business entities and not-for-profit entities, are required to test goodwill for impairment by eliminating the comparison of the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. This standard became effective for Pinnacle Financial on January 1, 2020. If this standard had been effective as of the date of the financial statements included in this report, there would have been no impact on Pinnacle Financial's consolidated financial statements.

In June 2016, the FASB issued Accounting Standards Update 2016-13, Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments (CECL), which introduces the current expected credit losses methodology. Among other things, CECL requires the measurement of all expected credit losses for financial assets, including loans and held-to-maturity debt securities, held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The standard requires institutions to calculate all probable and estimable losses that are expected to be incurred through the financial asset's entire contractual life through a provision for credit losses, including loans obtained as a result of any acquisition not deemed to be purchased credit deteriorated (PCD). CECL also requires the allowance for credit losses for PCD loans to be determined in a manner similar to that of other financial assets measured at amortized cost; however, the initial allowance will be added to the purchase price rather than recorded as provision expense. The disclosure of credit quality indicators related to the amortized cost of financing receivables will be further disaggregated by year of origination (or vintage). Institutions are to apply the changes through a cumulative-effect adjustment to their retained earnings as of the beginning of the first reporting period in which the standard is effective. This standard became effective for Pinnacle Financial on January 1, 2020.

Pinnacle Financial has established a cross-functional CECL Steering Committee, which includes members from the accounting, treasury, credit and lending functions, with involvement from members of model risk management, independent loan review and internal audit. Pinnacle Financial leveraged both internal and external expertise in the development of the models that will be utilized in the determination of the allowance for credit losses pursuant to CECL. At this time, Pinnacle Financial is focused on refining economic forecasts and certain other key assumptions utilized in our model, finalizing model validations and internal controls, and the creation of the financial statement disclosures. Pinnacle Financial has concluded that the overall allowance for credit losses will increase upon adoption of CECL in order to provide for expected credit losses over the life of the loan portfolio. Pinnacle Financial expects the allowance for credit losses to increase from 0.48% as a percentage of total loans at December 31, 2019 to a range between 0.65% and 0.70% of total loans upon adoption of this standard, primarily resulting from the impact of adjusting from the incurred loss model to the expected loss model. The allowance for credit losses also increased due to the requirement to record an allowance on acquired loan portfolios, previously recorded at fair value. Once finalized, the cumulative effect adjustment, as a result of the adoption of this guidance, will be recorded, net of tax, as an adjustment to retained earnings effective January 1, 2020. This estimate is subject to change as key assumptions are refined and model validations are finalized.

Other than those pronouncements discussed above and those which have been recently adopted, we do not believe there were any other recently issued accounting pronouncements that are expected to materially impact Pinnacle Financial.

Reclassifications — Some items in the prior year financial statements were reclassified to conform to the current presentation. Reclassifications had no effect on prior year net income or stockholders' equity.

Subsequent Events — ASC Topic 855, Subsequent Events, establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued. Pinnacle Financial evaluated all events or transactions that occurred after December 31, 2019 through the date of the issued financial statements.

Note 2. Equity Method Investment

On February 1, 2015, Pinnacle Bank acquired a 30% interest in Bankers Healthcare Group, LLC (BHG) for \$75 million in cash. On March 1, 2016, Pinnacle Bank and Pinnacle Financial increased their investment in BHG by a combined 19%, for a total investment in BHG of 49%. The additional 19% interest was acquired pursuant to a purchase agreement whereby both Pinnacle Financial and Pinnacle Bank acquired 8.55% and an additional 10.45%, respectively, of the outstanding membership interests in BHG in exchange for \$74.1 million in cash and 860,470 shares of Pinnacle Financial common stock valued at \$39.9 million.

On March 1, 2016, Pinnacle Financial, Pinnacle Bank and the other members of BHG entered into an Amended and Restated Limited Liability Company Agreement of BHG that provides for, among other things, the following terms:

- the inability of any member of BHG to transfer its ownership interest in BHG without the consent of the other members of BHG until March 1, 2021, other than transfers to family members, trusts or affiliates of the transferring member, in connection with the acquisition of Pinnacle Financial or Pinnacle Bank or as a result of a change in applicable law that forces Pinnacle Financial and/or Pinnacle Bank to divest their ownership interests in BHG;
- the inability of the board of managers of BHG (of which Pinnacle Financial and Pinnacle Bank have the right to designate two of the five members (the Pinnacle Managers,) to approve a sale of BHG without the consent of one of the Pinnacle Managers until March 1, 2020;
- co-sale rights for Pinnacle Financial and Pinnacle Bank in the event the other members of BHG decide to sell all or a portion of their ownership interests and are permitted to do so pursuant to the Limited Liability Company Agreement; and
- a right of first refusal for BHG and the other members of BHG in the event that Pinnacle Financial and/or Pinnacle Bank

decide to sell all or a portion of their ownership interests and are permitted to do so pursuant to the Limited Liability Company Agreement, except in connection with a transfer of their ownership interests to an affiliate or in connection with the acquisition of Pinnacle Financial or Pinnacle Bank.

Pinnacle Financial accounts for this investment pursuant to the equity method for unconsolidated subsidiaries and will recognize its interest in BHG's profits and losses in noninterest income with corresponding adjustments to the BHG investment account. Because BHG has been determined to be a voting interest entity of which Pinnacle Financial and Pinnacle Bank together control less than a majority of the board seats following the closing of the additional investment in March 2016, this investment does not require consolidation and is accounted for pursuant to the equity method of accounting. Additionally, Pinnacle Financial did not recognize any goodwill or other intangible asset associated with these transactions as of the respective purchase dates, however, it will recognize accretion income and amortization expense associated with the fair value adjustments to the net assets acquired including the fair value of certain of BHG's liabilities which are recorded as a component of income from equity method investment, pursuant to the equity method of accounting.

At December 31, 2019, Pinnacle Financial has recorded technology, trade name and customer relationship intangibles, net of related amortization, of \$8.8 million compared to \$10.7 million as of December 31, 2018. Amortization expense of \$1.9 million was included in Pinnacle Financial's results for the year ended December 31, 2019 compared to \$2.8 million for 2018 and \$3.3 million for 2017. Accretion income of \$2.6 million was included in Pinnacle Financial's results for the year ended December 31, 2019, while \$2.9 million of accretion income was recorded in 2018 and \$3.1 million was recorded in 2017. Additionally, at December 31, 2019, Pinnacle Financial had recorded accretable discounts associated with certain liabilities of BHG of \$4.8 million compared to \$7.4 million as of December 31, 2018.

During the year ended December 31, 2019, Pinnacle Financial and Pinnacle Bank received dividends from BHG of \$51.3 million in the aggregate, compared to \$33.7 million during the year ended December 31, 2018 and \$21.7 million during the year ended December 31, 2017. Earnings from BHG are included in Pinnacle Financial's consolidated tax return. Profits from intercompany transactions are eliminated.

Pinnacle Bank has a revolving line of credit for the benefit of BHG in the amount of \$60.0 million. At December 31, 2019, the outstanding balance on the line was \$10.0 million. The line accrues interest at LIBOR plus 225 basis points and is secured by all assets of BHG. The credit agreement contains covenants requiring BHG to maintain certain financial ratios and satisfy certain other affirmative and negative covenants. At December 31, 2019, BHG represented to Pinnacle Bank that it was in compliance, in all material respects, with these covenants.

BHG partners with third party lenders, including Pinnacle Bank, to facilitate loan originations as part of BHG's alternative financing portfolio, whereby BHG acts as the marketing firm and refers loans to the third party lenders for funding. The third party lenders receive a fee for each loan funded and subsequently sold to BHG. These loans are ultimately sold through BHG's network of clients. During the years ended December 31, 2019, 2018 and 2017, respectively, BHG purchased \$337.8 million, \$129.8 million and \$10.3 million of loans originated by Pinnacle Bank, respectively. During the years ended December 31, 2019, 2018 and 2017, respectively, Pinnacle Bank purchased no loans from BHG.

The following summary of BHG's financial position and results of operations as of and for the years ended December 31, 2019 and 2018, respectively, are presented as unaudited due to BHG's fiscal year end being September 30 (unaudited, in thousands):

Banker's Healthcare Group

| | December 3 2019 | 1, December 31, 2018 |
|------------------------------|--------------------|-------------------------|
| Assets | \$ 840, | 398 \$ 459,816 |
| Liabilities | \$ 641, | 037 \$ 324,211 |
| Equity interests | 199, | 361 135,605 |
| Total liabilities and equity | \$ 840, | 398 \$ 459,816 |

| | For the | year | ended Dece | mbei | r 31 , |
|---------------------|------------------|------|------------|------|---------------|
| | 2019 2018 20 | | | | 2017 |
| Revenues | \$ 366,500 | \$ | 220,253 | \$ | 160,209 |
| Net income, pre-tax | \$ 182,462 | \$ | 104,297 | \$ | 77,941 |

Note 3. Restricted Cash Balances

Regulation D of the Federal Reserve Act requires that banks maintain reserve balances with the Federal Reserve Bank based principally on the type and amount of their deposits. At our option, Pinnacle Financial maintains additional balances to compensate for clearing and other services. For the years ended December 31, 2019 and 2018, the average daily balance maintained at the Federal Reserve was approximately \$330.9 million and \$329.6 million, respectively.

Restricted cash included on the consolidated balance sheets was \$137.0 million and \$65.5 million at December 31, 2019 and 2018, respectively. This restricted cash is maintained at banks as collateral primarily for our derivative portfolio.

Pinnacle Financial maintains some of its cash in bank deposit accounts at financial institutions other than Pinnacle Bank that, at times, may exceed federally insured limits. Pinnacle Financial may lose all uninsured balances if one of the correspondent banks fails without warning. Pinnacle Financial has not experienced any losses in such accounts. Pinnacle Financial believes it is not exposed to any significant credit risk on cash and cash equivalents.

Note 4. Securities

The amortized cost and fair value of securities available-for-sale and held-to-maturity at December 31, 2019 and 2018 are summarized as follows (in thousands):

| | A | mortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
|-----------------------------------|----|------------------|------------------------------|-------------------------------|-----------------|
| December 31, 2019 | | | | | |
| Securities available-for-sale: | | | | | |
| U.S Treasury securities | \$ | 72,862 | \$ 19 | \$ 14 | \$ 72,867 |
| U.S. Government agency securities | | 80,096 | 306 | 710 | 79,692 |
| Mortgage-backed securities | | 1,458,894 | 12,789 | 7,776 | 1,463,907 |
| State and municipal securities | | 1,669,606 | 52,096 | 7,249 | 1,714,453 |
| Asset-backed securities | | 153,963 | 302 | 1,293 | 152,972 |
| Corporate notes | | 56,212 | 635 | 743 | 56,104 |
| | \$ | 3,491,633 | \$ 66,147 | \$ 17,785 | \$ 3,539,995 |
| Securities held-to-maturity: | | | | | |
| State and municipal securities | | 188,996 | 12,221 | — | 201,217 |
| | \$ | 188,996 | \$ 12,221 | \$ _ | \$ 201,217 |
| December 31, 2018 | | | | | |
| Securities available-for-sale: | | | | | |
| U.S Treasury securities | \$ | 30,325 | \$ _ | \$ 25 | \$ 30,300 |
| U.S. Government agency securities | | 71,456 | 49 | 1,346 | 70,159 |
| Mortgage-backed securities | | 1,336,469 | 3,110 | 28,634 | 1,310,945 |
| State and municipal securities | | 1,259,267 | 1,126 | 30,739 | 1,229,654 |
| Asset-backed securities | | 379,107 | 820 | 4,345 | 375,582 |
| Corporate notes | | 69,399 | 170 | 2,523 | 67,046 |
| | \$ | 3,146,023 | \$ 5,275 | \$ 67,612 | \$ 3,083,686 |
| Securities held-to-maturity: | | | | | |
| State and municipal securities | | 194,282 | 152 | 1,303 | 193,131 |
| | \$ | 194,282 | \$ 152 | \$ 1,303 | \$ 193,131 |

In 2018, Pinnacle Financial transferred, at fair value, \$179.8 million of municipal securities from the available-for-sale portfolio to the held-to-maturity portfolio. The related net unrealized after tax losses of \$2.2 million remained in accumulated other comprehensive income (loss) and will be amortized over the remaining life of the securities, offsetting the related amortization of discount on the transferred securities. No gains or losses were recognized at the time of the transfer. At December 31, 2019, approximately \$1.1 billion of Pinnacle Financial's investment portfolio was pledged to secure public funds and other deposits and securities sold under agreements to repurchase. At December 31, 2019, repurchase agreements comprised of secured borrowings

totaled \$126.4 million and were secured by \$126.4 million of pledged U.S. government agency securities, municipal securities, asset backed securities, and corporate debentures. As the fair value of securities pledged to secure repurchase agreements may decline, Pinnacle Financial regularly evaluates its need to pledge additional securities for the counterparty to remain adequately secured.

The amortized cost and fair value of debt securities as of December 31, 2019 by contractual maturity are shown below. Actual maturities may differ from contractual maturities of mortgage-backed securities since the mortgages underlying the securities may be called or prepaid with or without penalty. Therefore, these securities are not included in the maturity categories in the following summary (in thousands):

| | | Availabl | e-fo | r-sale | Held-to-maturity | | | | |
|--------------------------------|----|-------------------|------|---------------|------------------|-------------------|----|---------------|--|
| | A | Amortized Cost | | Fair Value | | Amortized Cost | | Fair Value | |
| Due in one year or less | \$ | 72,914 | \$ | 72,916 | \$ | 1,062 | \$ | 1,062 | |
| Due in one year to five years | | 12,879 | | 13,083 | | _ | | _ | |
| Due in five years to ten years | | 103,099 | | 103,584 | | 5,772 | | 5,860 | |
| Due after ten years | | 1,689,884 | | 1,733,533 | | 182,162 | | 194,295 | |
| Mortgage-backed securities | | 1,458,894 | | 1,463,907 | | | | | |
| Asset-backed securities | | 153,963 | | 152,972 | | _ | | _ | |
| | \$ | 3,491,633 | \$ | 3,539,995 | \$ | 188,996 | \$ | 201,217 | |

At December 31, 2019 and 2018, included in securities were the following investments with unrealized losses. The information below classifies these investments according to the term of the unrealized loss of less than twelve months or twelve months or longer (in thousands):

| | Investments with an Unrealized Loss of less than 12 months | | | | | Investments with an Unrealized Loss of 12 months or longer | | | | Total Investments with an Unrealized Loss | | | |
|---------------------------------------|--|------------|----|----------------------|----|--|----|----------------------|------------|---|----|---------------------|--|
| | F | 'air Value | ι | Unrealized Losses | | Fair Value | | Jnrealized Losses | Fair Value | | U | nrealized Losses | |
| December 31, 2019 | | | | | | | | | | | | | |
| U.S. Treasury securities | \$ | 40,505 | \$ | 14 | \$ | _ | \$ | _ | \$ | 40,505 | \$ | 14 | |
| U.S. government agency securities | | 1,222 | | 1 | | 30,892 | | 709 | | 32,114 | | 710 | |
| Mortgage-backed securities | | 458,881 | | 5,102 | | 163,767 | | 2,674 | | 622,648 | | 7,776 | |
| State and municipal securities | | 204,958 | | 1,938 | | 244,884 | | 5,311 | | 449,842 | | 7,249 | |
| Asset-backed securities | | 75,488 | | 796 | | 59,816 | | 497 | | 135,304 | | 1,293 | |
| Corporate notes | | _ | | _ | | 16,908 | | 743 | | 16,908 | | 743 | |
| Total temporarily-impaired securities | \$ | 781,054 | \$ | 7,851 | \$ | 516,267 | \$ | 9,934 | \$ | 1,297,321 | \$ | 17,785 | |
| December 31, 2018 | | | | | | | | | | | | | |
| U.S. Treasury securities | \$ | 30,054 | \$ | 22 | \$ | 246 | \$ | 3 | \$ | 30,300 | \$ | 25 | |
| U.S. government agency securities | | 13,697 | | 328 | | 42,539 | | 1,018 | | 56,236 | | 1,346 | |
| Mortgage-backed securities | | 203,299 | | 2,134 | | 882,231 | | 26,500 | | 1,085,530 | | 28,634 | |
| State and municipal securities | | 1,044,757 | | 30,780 | | 198,610 | | 4,078 | | 1,243,367 | | 34,858 | |
| Asset-backed securities | | 268,677 | | 4,118 | | 11,828 | | 227 | | 280,505 | | 4,345 | |
| Corporate notes | | 26,272 | | 1,538 | | 25,915 | | 985 | | 52,187 | | 2,523 | |
| Total temporarily-impaired securities | \$ | 1,586,756 | \$ | 38,920 | \$ | 1,161,369 | \$ | 32,811 | \$ | 2,748,125 | \$ | 71,731 | |

The applicable date for determining when securities are in an unrealized loss position is December 31, 2019 and 2018. As such, it is possible that a security had a market value less than its amortized cost on other days during the twelve-month periods ended December 31, 2019 and 2018, but is not in the "Investments with an Unrealized Loss of less than 12 months" category above.

As shown in the table above, at December 31, 2019 and 2018, Pinnacle Financial had unrealized losses of \$17.8 million and \$71.7 million on \$1.3 billion and \$2.7 billion, respectively, of available-for-sale and held-to-maturity securities. The unrealized losses associated with the \$179.8 million of municipal securities transferred from the available-for-sale portfolio to the held-to-maturity portfolio in 2018 represent unrealized losses since the date of purchase, independent of the impact associated with changes in the cost basis upon transfer between portfolios.

The unrealized losses associated with the investment securities are primarily driven by changes in interest rates and typically are not due to the credit quality of the securities. The securities will continue to be monitored as a part of our ongoing impairment analysis, but are expected to perform even if the rating agencies reduce the credit rating of the bond issuers. Management evaluates the financial performance of the issuers on a quarterly basis to determine if it is probable that the issuers can make all contractual principal and interest payments. Because Pinnacle Financial currently does not intend to sell these securities and it is not more-likely-than-not that Pinnacle Financial will be required to sell the securities before recovery of their amortized cost bases, which may be maturity, Pinnacle Financial does not consider these securities to be other-than-temporarily impaired at December 31, 2019.

Periodically, available-for-sale securities may be sold or the composition of the portfolio realigned to improve yields, quality or marketability, or to implement changes in investment or asset/liability strategy, including maintaining collateral requirements and raising funds for liquidity purposes. Additionally, if an available-for-sale security loses its investment grade or tax-exempt status, the underlying credit support is terminated or collection otherwise becomes uncertain based on factors known to management, Pinnacle Financial will consider selling the security, but will review each security on a case-by-case basis as these factors become known. Consistent with the investment policy, in 2019 available-for-sale securities of approximately \$737.7 million were sold and net unrealized losses, net of tax, of \$4.4 million were reclassified from accumulated other comprehensive income into net income.

The carrying values of Pinnacle Financial's investment securities could decline in the future if the financial condition of the securities' issuers deteriorates and management determines it is probable that Pinnacle Financial will not recover the entire amortized cost bases of the securities. As a result, there is a risk that other-than-temporary impairment charges may occur in the future. Additionally, there is a risk that other-than-temporary impairment charges may occur in the future. Additionally, there is a naturity and/or recovery changes. Pinnacle Financial has entered into various fair value hedging transactions to mitigate the impact of changing interest rates on the fair values of available for sale securities. See Note 14. Derivative Instruments for disclosure of the gains and losses recognized on derivative instruments and the cumulative fair value hedging adjustments to the carrying amount of the hedged securities.

Note 5. Loans and Allowance for Loan Losses

For financial reporting purposes, Pinnacle Financial classifies its loan portfolio based on the underlying collateral utilized to secure each loan. This classification is consistent with those utilized in the Quarterly Report of Condition and Income filed by Pinnacle Bank with the Federal Deposit Insurance Corporation (FDIC).

Pinnacle Financial uses five loan categories: commercial real estate mortgage, consumer real estate mortgage, construction and land development, commercial and industrial, and consumer and other.

- Commercial real estate mortgage loans. Commercial real estate mortgage loans are categorized as such based on investor exposures where repayment is largely dependent upon the operation, refinance, or sale of the underlying real estate. Commercial real estate mortgage loans also includes owner-occupied commercial real estate which Pinnacle Financial believes shares a similar risk profile to Pinnacle Financial's commercial and industrial products.
- *Consumer real estate mortgage loans.* Consumer real estate mortgage consists primarily of loans secured by 1-4 family residential properties, including home equity lines of credit.
- *Construction and land development loans*. Construction and land development loans include loans where the repayment is dependent on the successful operation of the related real estate project. Construction and land development loans include 1-4 family construction projects and commercial construction endeavors such as warehouses, apartments, office and retail space and land acquisition and development.
- *Commercial and industrial loans*. Commercial and industrial loans include loans to business enterprises issued for commercial, industrial and/or other professional purposes.
- *Consumer and other loans*. Consumer and other loans include all loans issued to individuals not included in the consumer real estate mortgage classification. Examples of consumer and other loans are automobile loans, credit cards and loans to finance education, among others.

Commercial loans receive risk ratings by the assigned financial advisor subject to validation by Pinnacle Financial's independent loan review department. Risk ratings are categorized as pass, special mention, substandard, substandard-nonaccrual or doubtful-nonaccrual. Pass-rated loans include five distinct ratings categories for loans that represent specific attributes. Pinnacle Financial believes that its categories follow those outlined by Pinnacle Bank's primary regulators. At December 31, 2019, approximately 80.3% of our loan portfolio was analyzed as a commercial loan type with a specifically assigned risk rating in the allowance for loan loss assessment. Consumer loans and small business loans are generally not assigned an individual risk rating but are evaluated as either accrual or nonaccrual based on the performance of the individual loans. However, certain consumer real estate-mortgage loans and certain consumer and other loans receive a specific risk rating due to the loan proceeds being used for commercial purposes even though the collateral may be of a consumer loan nature.

Risk ratings are subject to continual review by a financial advisor and a senior credit officer. At least annually, our credit policy requires that every risk rated loan of \$1.0 million or more be subject to a formal credit risk review process. Each loan's risk rating is also subject to review by our independent loan review department, which reviews a substantial portion of our risk-rated portfolio annually. Included in the coverage are independent loan reviews of loans in targeted higher-risk portfolio segments such as certain commercial and industrial loans, highly leveraged transactions, land loans and/or loan types in certain geographies.

The following table presents our loan balances by primary loan classification and the amount within each risk rating category. Pass-rated loans include all credits other than those included in special mention, substandard, substandard-nonaccrual and doubtful-nonaccrual which are defined as follows:

- Special mention loans have potential weaknesses that deserve management's close attention. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects for the asset or in Pinnacle Financial's credit position at some future date.
- Substandard loans are inadequately protected by the current sound worth and paying capacity of the obligor or of the collateral pledged, if any. Assets so classified must have a well-defined weakness or weaknesses that jeopardize collection of the debt. Substandard loans are characterized by the distinct possibility that Pinnacle Financial will sustain some loss if the deficiencies are not corrected.
- Substandard-nonaccrual loans are substandard loans that have been placed on nonaccrual status.
- Doubtful-nonaccrual loans have all the characteristics of substandard-nonaccrual loans with 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 following table outlines the amount of each loan classification categorized into each risk rating category as of December 31, 2019 and 2018 (in thousands):

| December 31, 2019 | re | ommercial eal estate - mortgage | nsumer real estate - mortgage | onstruction and land evelopment | Commercial and industrial | | Consumer and other | | Total |
|------------------------|----|---------------------------------------|---|---------------------------------------|------------------------------|-----------|-----------------------|---------|------------------|
| Pass | \$ | 7,499,725 | \$ 3,019,203 | \$ 2,422,347 | \$ | 6,069,757 | \$ | 288,361 | \$ 19,299,393 |
| Special Mention | | 51,147 | 13,787 | 2,816 | | 79,819 | | 698 | 148,267 |
| Substandard | | 139,518 | 10,969 | 3,042 | | 125,035 | | 47 | 278,611 |
| Substandard-nonaccrual | | 18,828 | 24,666 | 2,278 | | 15,685 | | 148 | 61,605 |
| Doubtful-nonaccrual | | — | _ | _ | | _ | | _ | _ |
| Total loans | \$ | 7,709,218 | \$ 3,068,625 | \$ 2,430,483 | \$ | 6,290,296 | \$ | 289,254 | \$ 19,787,876 |

| December 31, 2018 | re | ommercial eal estate - mortgage | onsumer real estate - mortgage | Construction and land development | | Commercial nd industrial | Consumer and other | Total |
|------------------------|----|---------------------------------------|--|---|-----------|-----------------------------|-----------------------|------------------|
| Pass | \$ | 6,998,485 | \$ 2,787,570 | \$ | 2,059,376 | \$ 5,148,726 | \$ 352,516 | \$ 17,346,673 |
| Special Mention | | 55,932 | 7,902 | | 4,334 | 24,284 | 711 | 93,163 |
| Substandard | | 78,202 | 20,906 | | 5,358 | 75,351 | 62 | 179,879 |
| Substandard-nonaccrual | | 32,335 | 28,069 | | 3,387 | 23,060 | 983 | 87,834 |
| Doubtful-nonaccrual | | | | | | _ | _ | _ |
| Total loans | \$ | 7,164,954 | \$ 2,844,447 | \$ | 2,072,455 | \$ 5,271,421 | \$ 354,272 | \$ 17,707,549 |

At December 31, 2019 and 2018, all loans classified as nonaccrual were deemed to be impaired. The principal balances of impaired loans amounted to \$58.1 million and \$83.1 million at December 31, 2019 and 2018, respectively, and are included in the tables above. For the twelve months ended December 31, 2019, the average balance of impaired loans was \$76.9 million as compared to \$75.3 million for the twelve months ended December 31, 2018. Pinnacle Financial's policy is that the discontinuation of the accrual of interest income will occur when (1) there is a significant deterioration in the financial condition of the borrower and full repayment of principal and interest is not expected or (2) the principal or interest is more than 90 days past due, unless the loan is both well secured and in the process of collection. As such, at the date the above mentioned loans were placed on nonaccrual status, Pinnacle Financial reversed all previously accrued interest income against current year earnings. Had these nonaccruing loans been on accruing status, interest income would have been higher by \$3.0 million, \$4.2 million and \$2.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The following table provides a rollforward of purchased credit impaired loans from December 31, 2017 through December 31, 2019 (in thousands):

| | С | Gross arrying Value | Accretable Yield | Nonaccretable Yield | Carrying Value |
|--|----|---------------------------|---------------------|------------------------|-------------------|
| December 31, 2017 | \$ | 74,324 | \$ (132) | \$ (31,537) | \$ 42,655 |
| Acquisitions | | | — | — | |
| Settlements, net | | (31,487) | 18 | 14,143 | (17,326) |
| December 31, 2018 | | 42,837 | (114) | (17,394) | 25,329 |
| Acquisitions | | 1,883 | — | — | 1,883 |
| Reclassification of yield from nonaccretable to accretable | | | (7,505) | 7,505 | |
| Settlements, net | | (15,176) | 2,818 | 6,061 | (6,297) |
| December 31, 2019 | \$ | 29,544 | \$ (4,801) | \$ (3,828) | \$ 20,915 |

Certain of these loans have been deemed to be collateral dependent and, as such, no accretable yield has been recorded for these loans. Amounts are reclassified between accretable and nonaccretable yield as cash flow analyses performed on the individual loans indicate an increase or decrease in the amount of cash flows expected to be collected. The carrying value is adjusted for additional draws, pursuant to contractual arrangements, offset by loan paydowns. Year-to-date settlements include both loans that were charged-off as well as loans that were paid off, typically as a result of refinancings at other institutions.

Purchased credit impaired loans acquired during the three years ended December 31, 2019 for which it was probable at acquisition that all contractually required payments would not be collected are as follows (in thousands):

| | | December 31, | |
|--|----------------|--------------|--------|
| | 2019 | 2018 | 2017 |
| Contractually required payments receivable | \$ 4,420 \$ | — \$ | 94,312 |
| Cash flows expected to be collected at acquisition | 1,883 | — | 48,498 |
| Fair value of acquired loans at acquisition | 1,883 | — | 48,302 |

Impaired loans, as disclosed in the table below, include troubled debt restructurings, nonaccrual loans, and loans deemed to be impaired but that continue to accrue interest. The following tables detail the recorded investment, unpaid principal balance and related allowance of Pinnacle Financial's impaired loans at December 31, 2019, 2018 and 2017 by loan classification (in thousands):

| | | Dec | ember 31, 2019 |) | | For the year ended December 31, 2019 | | | |
|--------------------------------------|-------------------------|--------------------------------|----------------|----|----------------------|--------------------------------------|--------|--------|---|
| | ecorded vestment | Unpaid principal balance | | | Related allowance | Average recorded investment | | i i | ash basis nterest ncome cognized |
| Impaired loans with an allowance: | | | | | | | | | |
| Commercial real estate - mortgage | \$ 9,998 | \$ | 10,983 | \$ | 1,235 | \$ | 13,750 | \$ | |
| Consumer real estate – mortgage | 20,996 | | 23,105 | | 1,293 | | 20,909 | | _ |
| Construction and land development | 542 | | 654 | | 33 | | 578 | | — |
| Commercial and industrial | 4,074 | | 5,381 | | 711 | | 8,871 | | |
| Consumer and other | 148 | | 182 | | 9 | | 350 | | |
| Total | \$ 35,758 | \$ | 40,305 | \$ | 3,281 | \$ | 44,458 | \$ | _ |
| Impaired loans without an allowance: | | | | | | | | | |
| Commercial real estate – mortgage | \$ 8,124 | \$ | 8,891 | \$ | | \$ | 11,642 | \$ | 176 |
| Consumer real estate – mortgage | 4,022 | | 4,021 | | | | 7,509 | | _ |
| Construction and land development | 19 | | 17 | | | | 365 | | |
| Commercial and industrial | 10,221 | | 11,322 | | _ | | 12,945 | | _ |
| Consumer and other | _ | | | | | | _ | | _ |
| Total | \$ 22,386 | \$ | 24,251 | \$ | | \$ | 32,461 | \$ | 176 |
| Total impaired loans | \$ 58,144 | \$ | 64,556 | \$ | 3,281 | \$ | 76,919 | \$ | 176 |

| | | Dec | ember 31, 201 | 8 | | For the year ended December 31, 2018 | | | |
|--------------------------------------|-----------------------|--------------------------------|---------------|----|-------------------|---|--------------------------------|----------|---------------------------------------|
| | Recorded ivestment | Unpaid principal balance | | | Related allowance | | Average ecorded vestment | in ir | sh basis terest come ognized |
| Impaired loans with an allowance: | | | | | | | | | |
| Commercial real estate – mortgage | \$ 14,114 | \$ | 14,124 | \$ | 724 | \$ | 10,260 | \$ | — |
| Consumer real estate – mortgage | 19,864 | | 19,991 | | 1,443 | | 13,154 | | _ |
| Construction and land development | 581 | | 579 | | 28 | | 1,157 | | _ |
| Commercial and industrial | 9,252 | | 9,215 | | 1,441 | | 9,326 | | _ |
| Consumer and other | 983 | | 1,005 | | 328 | | 718 | | |
| Total | \$ 44,794 | \$ | 44,914 | \$ | 3,964 | \$ | 34,615 | \$ | |
| Impaired loans without an allowance: | | | | | | | | | |
| Commercial real estate – mortgage | \$ 14,724 | \$ | 14,739 | \$ | _ | \$ | 17,906 | \$ | 469 |
| Consumer real estate – mortgage | 7,247 | | 7,271 | | | | 5,477 | | _ |
| Construction and land development | 1,786 | | 1,786 | | | | 1,463 | | — |
| Commercial and industrial | 14,595 | | 14,627 | | | | 15,796 | | _ |
| Consumer and other | — | | | | | | _ | | _ |
| Total | \$ 38,352 | \$ | 38,423 | \$ | | \$ | 40,642 | \$ | 469 |
| Total impaired loans | \$ 83,146 | \$ | 83,337 | \$ | 3,964 | \$ | 75,257 | \$ | 469 |

| | | - | For the ye Decembe | | | | |
|--------------------------------------|----|---------------------|--------------------------------|-------------------|----|---------------------------------|----------------------------------|
| | | ecorded vestment | Unpaid principal balance | Related allowance | r | Average ecorded ivestment | Cash basis interest income |
| Impaired loans with an allowance: | | | | | | | |
| Commercial real estate – mortgage | \$ | 1,850 | \$ 1,863 | \$ 95 | \$ | 650 | \$ _ |
| Consumer real estate – mortgage | | 8,028 | 8,079 | 410 | | 4,990 | _ |
| Construction and land development | | 2,522 | 2,528 | 66 | | 567 | _ |
| Commercial and industrial | | 12,521 | 12,644 | 1,627 | | 10,559 | _ |
| Consumer and other | | — | — | — | | 425 | _ |
| Total | \$ | 24,921 | \$ 25,114 | \$ 2,198 | \$ | 17,191 | \$ |
| Impaired loans without an allowance: | | | | | | | |
| Commercial real estate – mortgage | \$ | 16,364 | \$ 16,514 | \$ — | \$ | 6,983 | \$ _ |
| Consumer real estate – mortgage | | 4,144 | 4,174 | _ | | 5,727 | _ |
| Construction and land development | | 2,645 | 2,650 | — | | 1,890 | 95 |
| Commercial and industrial | | 10,905 | 10,902 | | | 9,039 | _ |
| Consumer and other | | _ | — | — | | — | — |
| Total | \$ | 34,058 | \$ 34,240 | \$ _ | \$ | 23,639 | \$ 95 |
| Total impaired loans | \$ | 58,979 | \$ 59,354 | \$ 2,198 | \$ | 40,830 | \$ 95 |

Pinnacle Financial's policy is that once a loan is placed on nonaccrual status each subsequent payment is reviewed on a case-bycase basis to determine if the payment should be applied to interest or principal pursuant to regulatory guidelines. Pinnacle Financial recognized \$176,000 in interest income from cash payments received on nonaccrual loans during the year ended December 31, 2019 compared to \$469,000 and \$95,000 during the years ended December 31, 2018, and 2017, respectively. At December 31, 2019 and 2018, there were \$4.9 million and \$5.9 million, respectively, of troubled debt restructurings that were performing as of their restructure date and which are accruing interest. These troubled debt restructurings are considered impaired loans pursuant to U.S. GAAP. Troubled commercial loans are restructured by specialists within Pinnacle Bank's Special Assets Group, and all restructurings are approved by committees and credit officers separate and apart from the normal loan approval process. These specialists are charged with reducing Pinnacle Financial's overall risk and exposure to loss in the event of a restructuring by obtaining some or all of the following: improved documentation, additional guaranties, increase in curtailments, reduction in collateral release terms, additional collateral or other similar strategies.

The following table outlines the amount of each troubled debt restructuring by loan classification made during the years ended December 31, 2019, 2018 and 2017 (dollars in thousands):

| | Number of contracts | Pre Modification Outstanding Recorded Investment | Post Modification Outstanding Recorded Investment, net of related allowance |
|-----------------------------------|------------------------|--|---|
| December 31, 2019 | | | |
| Commercial real estate - mortgage | 1 | \$ 306 | \$ 287 |
| Consumer real estate – mortgage | 1 | 683 | 683 |
| Construction and land development | 1 | 19 | 19 |
| Commercial and industrial | 1 | 1,318 | 777 |
| Consumer and other | | _ | _ |
| | 4 | \$ 2,326 | \$ 1,766 |
| December 31, 2018 | | | |
| Commercial real estate - mortgage | — | \$ | \$ |
| Consumer real estate – mortgage | 3 | 1,967 | 1,967 |
| Construction and land development | 1 | 347 | 347 |
| Commercial and industrial | — | — | — |
| Consumer and other | | | |
| | 4 | \$ 2,314 | \$ 2,314 |
| December 31, 2017 | | | |
| Commercial real estate - mortgage | — | \$ | \$ |
| Consumer real estate – mortgage | 1 | 6 | 5 |
| Construction and land development | — | — | — |
| Commercial and industrial | 2 | 3,776 | 3,751 |
| Consumer and other | | | — |
| | 3 | \$ 3,782 | \$ 3,756 |

During the years ended December 31, 2019, 2018 and 2017, Pinnacle Financial had no troubled debt restructurings that subsequently defaulted within twelve months of the restructuring. A default is defined as an occurrence which violates the terms of the receivable's contract.

At December 31, 2019, 2018 and 2017, the allowance for loan losses included no amounts specifically related to accruing troubled debt restructurings. These accruing troubled debt restructurings are classified as impaired loans pursuant to U.S. GAAP; however, these loans continue to accrue interest at contractual rates.

In addition to the loan metrics above, Pinnacle Financial analyzes its commercial loan portfolio to determine if a concentration of credit risk exists to any industries. Pinnacle Financial utilizes broadly accepted industry classification systems in order to classify borrowers into various industry classifications. Pinnacle Financial has a credit exposure (loans outstanding plus unfunded lines of credit) exceeding 25% of Pinnacle Bank's total risk-based capital to borrowers in the following industries at December 31, 2019 with the comparative exposures for December 31, 2018 (in thousands):

| |] | utstanding Principal Balances | - | Unfunded mmitments | | Total exposure | tal Exposure at December 31, 2018 |
|-------------------------------------|----|-------------------------------------|----|-----------------------|----|-------------------|---|
| Lessors of nonresidential buildings | \$ | 3,681,897 | \$ | 896,219 | \$ | 4,578,116 | \$ 3,932,059 |
| Lessors of residential buildings | | 951,295 | | 648,542 | | 1,599,837 | 1,484,697 |
| New housing for-sale builders | | 530,345 | | 560,258 | | 1,090,603 | 1,100,989 |
| Hotels and motels | | 805,957 | | 161,814 | | 967,771 | 920,001 |
| Total | \$ | 5,969,494 | \$ | 2,266,833 | \$ | 8,236,327 | \$ 7,437,746 |

Additionally, Pinnacle Financial monitors two ratios regarding construction and commercial real estate lending as a part of its concentration management process. Both ratios are calculated by dividing certain types of loan balances for each of the two categories by Pinnacle Bank's total risk-based capital. At December 31, 2019, and December 31, 2018, Pinnacle Bank's construction and land development loans as a percentage of total risk-based capital were 83.6% and 85.2%, respectively. Non owner-occupied commercial real estate and multifamily loans (including construction and land development loans) as a percentage of total risk-based capital were 268.3% and 277.7% as of December 31, 2019 and December 31, 2018, respectively. Banking regulations have established guidelines for the construction ratio of less than 100% of total risk-based capital and for the non owner-occupied commercial real estate and multifamily ratio of less than 300% of total risk-based capital. When a bank's ratios are in excess of one or both of these guidelines, banking regulations generally require an increased level of monitoring in these lending areas by bank management. Pinnacle Bank was within the 100% and 300% guidelines as of December 31, 2019 and has established what it believes to be appropriate controls to monitor its lending in these areas as it aims to keep the level of these loans below the 100% and 300% guidelines though there may be periods where Pinnacle Bank exceeds these levels if loan growth is more heavily weighted to these types of loans.

The table below presents past due balances at December 31, 2019 and 2018, by loan classification and segment allocated between performing and nonperforming status (in thousands):

| | | | | | Accruing | | | | Nonac | cru | uing | | |
|-----------------------------------|--------|----------------------------|---------|--|-----------------------------------|------------------------|--------------------------------|----|--------------------------|-----|---|----|------------|
| December 31, 2019 | past d | 9 days lue and ruing | ma d | days or ore past ue and ccruing | Fotal past due and accruing | urrent and accruing | Purchase credit impaired | No | onaccrual ⁽¹⁾ | | lonaccruing purchase credit impaired | Т | otal loans |
| Commercial real estate: | | | | | | | | | | | | | |
| Owner-occupied | \$ | 4,361 | \$ | — | \$ 4,361 | \$ 2,650,385 | \$ 3,366 | \$ | 10,791 | \$ | 863 | \$ | 2,669,766 |
| All other | | 6,797 | | — | 6,797 | 5,020,227 | 5,254 | | 7,169 | | 5 | | 5,039,452 |
| Consumer real estate - mortgage | | 8,162 | | 168 | 8,330 | 3,032,615 | 3,014 | | 20,995 | | 3,671 | | 3,068,625 |
| Construction and land development | | 2,087 | | — | 2,087 | 2,424,832 | 1,286 | | 542 | | 1,736 | | 2,430,483 |
| Commercial and industrial | | 10,312 | | 946 | 11,258 | 6,263,024 | 329 | | 14,294 | | 1,391 | | 6,290,296 |
| Consumer and other | | 2,168 | | 501 | 2,669 | 286,437 | _ | | 148 | | _ | | 289,254 |
| Total | \$ | 33,887 | \$ | 1,615 | \$ 35,502 | \$ 19,677,520 | \$ 13,249 | \$ | 53,939 | \$ | 7,666 | \$ | 19,787,876 |

| | | | | | Accruing | | | | Nonaco | eru | ing | | |
|-----------------------------------|-----|----------------------------------|----|---|-----------------------------------|------------------------|--------------------------------|----|--------------------------|-----|--|----|------------|
| December 31, 2018 | pas | -89 days t due and ccruing | I | 0 days or nore past due and accruing | Total past due and accruing | urrent and accruing | Purchase credit impaired | N | onaccrual ⁽¹⁾ | | onaccruing purchase credit impaired | Т | otal loans |
| Commercial real estate: | | | | | | | | | | | | | |
| Owner-occupied | \$ | 10,170 | \$ | — | \$ 10,170 | \$ 2,623,700 | \$ 2,664 | \$ | 16,025 | \$ | 874 | \$ | 2,653,433 |
| All other | | 1,586 | | — | 1,586 | 4,488,840 | 5,659 | | 12,634 | | 2,802 | | 4,511,521 |
| Consumer real estate - mortgage | | 18,059 | | — | 18,059 | 2,794,630 | 3,689 | | 22,564 | | 5,505 | | 2,844,447 |
| Construction and land development | | 3,759 | | — | 3,759 | 2,063,201 | 2,108 | | 2,020 | | 1,367 | | 2,072,455 |
| Commercial and industrial | | 21,451 | | 1,082 | 22,533 | 5,225,205 | 623 | | 23,022 | | 38 | | 5,271,421 |
| Consumer and other | | 3,276 | | 476 | 3,752 | 349,537 | _ | | 983 | | _ | | 354,272 |
| Total | \$ | 58,301 | \$ | 1,558 | \$ 59,859 | \$ 17,545,113 | \$ 14,743 | \$ | 77,248 | \$ | 10,586 | \$ | 17,707,549 |

(1) Approximately \$35.8 million and \$52.5 million of nonaccrual loans as of December 31, 2019 and December 31, 2018, respectively, were performing pursuant to their contractual terms at those dates.

The following table details the changes in the allowance for loan losses from December 31, 2016 to December 31, 2017 to December 31, 2018 to December 31, 2019 by loan classification and the allocation of allowance for loan losses (in thousands):

| | r | ommercial eal estate - mortgage | r | Consumer eal estate - mortgage | Construction and land levelopment | Commercial nd industrial | Consumer and other | ι | Jnallocated | Tot | al |
|---|----|---------------------------------------|----|--------------------------------------|---|---------------------------------|-----------------------|----|-------------|-------|--------|
| Allowance for Loan Losses: | | | | | | | | | | | |
| Balance at December 31, 2016 | \$ | 13,655 | \$ | 6,564 | \$ 3,624 | \$ 24,743 | \$ 9,520 | \$ | 874 \$ | 5 | 58,980 |
| Charged-off loans | | (633) | | (1,461) | (137) | (4,297) | (15,518) | | — | (2 | 2,046) |
| Recovery of previously charged-off loans | | 671 | | 1,516 | 1,136 | 1,317 | 2,002 | | — | | 6,642 |
| Provision for loan losses | | 7,495 | | (1,588) | 4,339 | 3,100 | 9,870 | | 448 | 2 | 3,664 |
| Balance at December 31, 2017 | \$ | 21,188 | \$ | 5,031 | \$ 8,962 | \$ 24,863 | \$ 5,874 | \$ | 1,322 \$ | 6 | 57,240 |
| Collectively evaluated for impairment | \$ | 20,753 | \$ | 4,460 | \$ 8,879 | \$ 23,181 | \$ 5,874 | | \$ | 6 | 53,147 |
| Individually evaluated for impairment | | 95 | | 410 | 66 | 1,627 | — | | | | 2,198 |
| Loans acquired with deteriorated credit quality | | 340 | | 161 | 17 | 55 | _ | | | | 573 |
| Balance at December 31, 2017 | \$ | 21,188 | \$ | 5,031 | \$ 8,962 | \$ 24,863 | \$ 5,874 | \$ | 1,322 \$ | 6 | 57,240 |
| Loans: | | | | | | | | | | | |
| Collectively evaluated for impairment | \$ | 6,630,593 | \$ | 2,534,996 | \$ 1,896,553 | \$ 4,116,677 | \$ 352,663 | | \$ | 15,53 | 1,482 |
| Individually evaluated for impairment | | 18,214 | | 12,172 | 5,167 | 23,426 | _ | | | 5 | 8,979 |
| Loans acquired with deteriorated credit quality | | 20,803 | | 14,046 | 6,568 | 1,238 | _ | | | 4 | 2,655 |
| Balance at December 31, 2017 | \$ | 6,669,610 | \$ | 2,561,214 | \$ 1,908,288 | \$ 4,141,341 | \$ 352,663 | | \$ | 15,63 | 3,116 |

| | r | ommercial eal estate - mortgage | re | Consumer eal estate - mortgage | Construction and land development | Commercial nd industrial | Consumer and other | U | nallocated | Total |
|---|----|---------------------------------------|----|--------------------------------------|---|---------------------------------|-----------------------|----|------------|------------|
| Allowance for Loan Losses: | | | | | | | | | | |
| Balance at December 31, 2017 | \$ | 21,188 | \$ | 5,031 | \$ 8,962 | \$ 24,863 | \$ 5,874 | \$ | 1,322 \$ | 67,240 |
| Charged-off loans | | (3,030) | | (1,593) | (74) | (13,175) | (12,528) | | | (30,400) |
| Recovery of previously charged-off loans | | 2,096 | | 2,653 | 1,863 | 3,035 | 2,711 | | | 12,358 |
| Provision for loan losses | | 6,692 | | 1,579 | 377 | 17,008 | 9,366 | | (645) | 34,377 |
| Balance at December 31, 2018 | \$ | 26,946 | \$ | 7,670 | \$ 11,128 | \$ 31,731 | \$ 5,423 | \$ | 677 \$ | 83,575 |
| Collectively evaluated for impairment | \$ | 26,222 | \$ | 6,227 | \$ 11,100 | \$ 30,290 | \$ 5,095 | | \$ | 78,934 |
| Individually evaluated for impairment | | 724 | | 1,443 | 28 | 1,441 | 328 | | | 3,964 |
| Loans acquired with deteriorated credit quality | | _ | | _ | _ | _ | _ | | | _ |
| Balance at December 31, 2018 | \$ | 26,946 | \$ | 7,670 | \$ 11,128 | \$ 31,731 | \$ 5,423 | \$ | 677 \$ | 83,575 |
| Loans: | | | | | | | | | | |
| Collectively evaluated for impairment | \$ | 7,124,117 | \$ | 2,808,142 | \$ 2,066,613 | \$ 5,246,913 | \$ 353,289 | | \$ | 17,599,074 |
| Individually evaluated for impairment | | 28,838 | | 27,111 | 2,367 | 23,847 | 983 | | | 83,146 |
| Loans acquired with deteriorated credit quality | | 11,999 | | 9,194 | 3,475 | 661 | _ | | | 25,329 |
| Balance at December 31, 2018 | \$ | 7,164,954 | \$ | 2,844,447 | \$ 2,072,455 | \$ 5,271,421 | \$ 354,272 | | \$ | 17,707,549 |

| | re | ommercial eal estate - mortgage | r | Consumer eal estate - mortgage | Construction and land development | Commercial nd industrial | Consumer and other | I | Unallocated | Total |
|---|----|---------------------------------------|----|--------------------------------------|---|-----------------------------|-----------------------|----|-------------|------------------|
| Allowance for Loan Losses: | | | | | | | | | | |
| Balance at December 31, 2018 | \$ | 26,946 | \$ | 7,670 | \$ 11,128 | \$ 31,731 | \$ 5,423 | \$ | 677 | \$ 83,575 |
| Charged-off loans | | (1,700) | | (1,335) | (18) | (19,208) | (6,206) | | _ | (28,467) |
| Recovery of previously charged-off loans | | 2,232 | | 1,827 | 682 | 6,473 | 1,172 | | _ | 12,386 |
| Provision for loan losses | | 5,891 | | (108) | 870 | 17,116 | 3,206 | | 308 | 27,283 |
| Balance at December 31, 2019 | \$ | 33,369 | \$ | 8,054 | \$ 12,662 | \$ 36,112 | \$ 3,595 | \$ | 985 | \$ 94,777 |
| Collectively evaluated for impairment | \$ | 32,134 | \$ | 6,762 | \$ 12,629 | \$ 35,401 | \$ 3,586 | | | \$ 90,512 |
| Individually evaluated for impairment | | 1,235 | | 1,292 | 33 | 711 | 9 | | | 3,280 |
| Loans acquired with deteriorated credit quality | | _ | | _ | _ | _ | _ | | | |
| Balance at December 31, 2019 | \$ | 33,369 | \$ | 8,054 | \$ 12,662 | \$ 36,112 | \$ 3,595 | \$ | 985 | \$ 94,777 |
| Loans: | | | | | | | | | | |
| Collectively evaluated for impairment | \$ | 7,681,608 | \$ | 3,036,922 | \$ 2,426,901 | \$ 6,274,280 | \$ 289,106 | | | \$ 19,708,817 |
| Individually evaluated for impairment | | 18,122 | | 25,018 | 561 | 14,295 | 148 | | | 58,144 |
| Loans acquired with deteriorated credit quality | | 9,488 | | 6,685 | 3,021 | 1,721 | _ | | | 20,915 |
| Balance at December 31, 2019 | \$ | 7,709,218 | \$ | 3,068,625 | \$ 2,430,483 | \$ 6,290,296 | \$ 289,254 | | - | \$ 19,787,876 |

The adequacy of the allowance for loan losses is assessed at the end of each calendar quarter. The level of the allowance is based upon evaluation of the loan portfolio, current asset quality trends, known and inherent risks in the portfolio, adverse situations that may affect the borrowers' ability to repay (including the timing of future payment), the estimated value of any underlying collateral, composition of the loan portfolio, economic conditions, historical loss experience, industry and peer bank loan quality indications and other pertinent factors, including regulatory recommendations. The allowance for loan losses for purchased loans under the incurred loss model is calculated similarly to the method utilized for legacy Pinnacle Bank loans. Pinnacle Financial's accounting policy is to compare the computed allowance for loan losses for purchased loans on a loan-by-loan basis to any remaining fair value adjustment. If the computed allowance is greater than the remaining fair value adjustment, the excess is added to the allowance for loan losses by a charge to the provision for loan losses. Beginning January 1, 2020, Pinnacle Financial adopted the Current Expected Credit Loss framework which will result in an allowance being recorded on non-purchase credit deteriorated loans.

At December 31, 2019, Pinnacle Financial had granted loans and other extensions of credit amounting to approximately \$10.6 million to current directors, executive officers, and their related interests, of which \$6.8 million had been drawn upon. At December 31, 2018, Pinnacle Financial had granted loans and other extensions of credit amounting to approximately \$37.9 million to directors, executive officers, and their related interests, of which approximately \$18.3 million had been drawn upon. These loans and extensions of credit were made in the ordinary course of business. None of these loans to directors, executive officers, and their related entities were impaired at December 31, 2019 or 2018.

At December 31, 2019, Pinnacle Financial had approximately \$17.6 million in commercial loans held for sale compared to \$16.0 million at December 31, 2018, which primarily included commercial real estate and apartment loans originated for sale to a thirdparty as part of a multi-family loan program. Such loans are closed under a pass-through commitment structure wherein Pinnacle Bank's loan commitment to the borrower is the same as the third party's take-out commitment to Pinnacle Bank and the third party purchase typically occurs within thirty days of Pinnacle Bank closing with the borrowers.

Residential Lending

At December 31, 2019, Pinnacle Financial had approximately \$61.6 million of mortgage loans held-for-sale compared to approximately \$31.8 million at December 31, 2018. Total mortgage loan volumes sold during the year ended December 31, 2019 were approximately \$1.1 billion compared to approximately \$1.0 billion for the year ended December 31, 2018. During the year ended December 31, 2019, Pinnacle Financial recognized \$24.3 million in gains on the sale of these loans, net of commissions paid, compared to \$14.6 million and \$18.6 million, respectively, during the years ended December 31, 2018 and 2017.

These mortgage loans held-for-sale are originated internally and are primarily to borrowers in Pinnacle Bank's geographic markets. These sales are typically on a mandatory basis to investors that follow conventional government sponsored entities (GSE) and the Department of Housing and Urban Development/U.S. Department of Veterans Affairs (HUD/VA) guidelines.

Each purchaser of a mortgage loan held-for-sale has specific guidelines and criteria for sellers of loans and the risk of credit loss with regard to the principal amount of the loans sold is generally transferred to the purchasers upon sale. While the loans are sold

without recourse, the purchase agreements require Pinnacle Bank to make certain representations and warranties regarding the existence and sufficiency of file documentation and the absence of fraud by borrowers or other third parties such as appraisers in connection with obtaining the loan. If it is determined that the loans sold were in breach of these representations or warranties, Pinnacle Bank has obligations to either repurchase the loan for the unpaid principal balance and related investor fees or make the purchaser whole for the economic benefits of the loan. To date, Pinnacle Bank's liability pursuant to the terms of these representations and warranties has been insignificant.

Note 6. Premises and Equipment and Lease Commitments

Premises and equipment at December 31, 2019 and 2018 are summarized as follows (in thousands):

| | Range of Useful Lives | 2019 | 2018 |
|---|------------------------------|------------------|---------|
| Land | Not applicable | \$ 64,814 \$ | 64,898 |
| Buildings | 15 to 30 years | 185,340 | 170,829 |
| Leasehold improvements | 15 to 20 years | 45,398 | 43,536 |
| Furniture and equipment | 3 to 20 years | 109,900 | 100,946 |
| | | 405,452 | 380,209 |
| Less: accumulated depreciation and amortization | | 131,520 | 114,649 |
| | | \$ 273,932 \$ | 265,560 |

Depreciation and amortization expense was approximately \$22.1 million, \$21.5 million, and \$13.7 million for the years ended December 31, 2019, 2018 and 2017, respectively

Pinnacle Financial has entered into various operating leases, primarily for office space and branch facilities. The leases are classified as operating or finance leases at commencement. Right-of-use assets representing the right to use the underlying asset and lease liabilities representing the obligation to make future lease payments are recognized on the balance sheet. These assets and liabilities are estimated based on the present value of future lease payments discounted using Pinnacle Financial's incremental secured borrowing rates as of the commencement date of the lease. Certain lease agreements contain renewal options which are considered in the determination of the lease term if they are deemed reasonably certain to be exercised. Pinnacle Financial has elected not to recognize leases with an original term of less than 12 months on the balance sheet.

Right-of-use assets and lease liabilities relating to Pinnacle Financial's operating and finance leases are as follows at December 31, 2019 (in thousands):

| Right-of-use assets: | |
|---------------------------|--------------|
| Operating leases | \$ 79,574 |
| Finance leases | 1,996 |
| Total right-of-use assets | \$ 81,570 |
| Lease liabilities: | |
| Operating leases | \$ 83,219 |
| Finance leases | 3,244 |
| Total lease liabilities | \$ 86,463 |

The total lease cost related to operating leases and short term leases is recognized on a straight-line basis over the lease term. For finance leases, right-of-use assets are amortized on a straight-line basis over the lease term and interest imputed on the lease liability is recognized using the effective interest method. The components of Pinnacle Financial's total lease cost were as follows for the year ended December 31, 2019 (in thousands):

| Operating lease cost | \$ 13,992 |
|------------------------------------|--------------|
| Short-term lease cost | 295 |
| Finance lease cost: | |
| Interest on lease liabilities | 243 |
| Amortization of right-of-use asset | 226 |
| Sublease income | (1,463) |
| Net lease cost | \$ 13,293 |

The weighted average remaining lease term and weighted average discount rate for operating and finance leases at December 31, 2019 are as follows:

| Weighted average remaining lease term | |
|---------------------------------------|-------------|
| Operating leases | 10.75 years |
| Finance leases | 8.84 years |
| Weighted average discount rate | |
| Operating leases | 3.07 % |
| Finance leases | 7.22 % |

Cash flows related to operating and finance leases during the year ended December 31, 2019 were as follows (in thousands):

| Operating cash flows related to operating leases | \$ 13,609 |
|--|--------------|
| Operating cash flows related to finance leases | \$ 243 |
| Financing cash flows related to finance leases | \$ 226 |

Future undiscounted lease payments for operating and finance leases with initial terms of more than 12 months are as follows at December 31, 2019 (in thousands):

| | Operating Leases | Finance Leases |
|-----------------------------------|---------------------|-------------------|
| 2020 | \$ 13,070 | \$ 470 |
| 2021 | 12,439 | 470 |
| 2022 | 10,632 | 470 |
| 2023 | 9,779 | 479 |
| 2024 | 9,667 | 527 |
| Thereafter | 44,507 | 2,021 |
| Total undiscounted lease payments | 100,094 | 4,437 |
| Less: imputed interest | (16,875 |) (1,193) |
| Net lease liabilities | \$ 83,219 | \$ 3,244 |

Note 7. Deposits

At December 31, 2019, the scheduled maturities of time deposits are as follows (in thousands):

| 2020 | \$ 3,321,755 |
|------------|----------------|
| 2021 | 510,028 |
| 2022 | 91,184 |
| 2023 | 9,889 6,943 |
| 2024 | 6,943 |
| Thereafter | 1,646 |
| | \$ 3,941,445 |

Additionally, at December 31, 2019 and 2018, approximately \$1.1 billion and \$976.3 million, respectively, of time deposits had been issued in denominations of \$100,000 but less than \$250,000, and \$995.3 million and \$819.3 million, respectively, had been issued in denominations of \$250,000 or greater.

At December 31, 2019 and 2018, Pinnacle Financial had \$1.9 million and \$1.7 million, respectively, of deposit accounts in overdraft status that have been reclassified to loans on the accompanying consolidated balance sheets.

Note 8. Federal Home Loan Bank Advances

Pinnacle Bank is a member of the Federal Home Loan Bank of Cincinnati (FHLB) and as a result, is eligible for advances from the FHLB pursuant to the terms of various borrowing agreements, which assist Pinnacle Bank in the funding of its home mortgage and commercial real estate loan portfolios. Pinnacle Bank has pledged certain qualifying residential mortgage loans and, pursuant to a blanket lien, certain qualifying commercial mortgage loans with an aggregate carrying value of approximately \$6.6 billion as collateral under the borrowing agreements with the FHLB.

At December 31, 2019 and 2018, Pinnacle Bank had received advances from the FHLB totaling \$2.1 billion and \$1.4 billion, respectively. The scheduled maturities of FHLB advances at December 31, 2019 and interest rates are as follows (in thousands):

| | Scheduled Maturities | Weighted average interest rates |
|--------------------------------|-------------------------|---------------------------------------|
| 2020 | \$ 622,518 | 1.88 % |
| 2021 | 423,750 | 2.14 % |
| 2022 | 41,250 | 2.85 % |
| 2023 | — | — % |
| 2024 | 200,000 | 1.59 % |
| Thereafter | 775,016 | 2.15 % |
| | \$ 2,062,534 | |
| Weighted average interest rate | | 2.02 % |

At December 31, 2019, Pinnacle Bank had accommodations which allow it to borrow from the Federal Reserve Bank of Atlanta's discount window and purchase Federal funds from several of its correspondent banks on an overnight basis at prevailing overnight market rates. These accommodations are subject to various restrictions as to their term and availability, and in most cases, must be repaid within less than a month. At December 31, 2019, Pinnacle Bank had approximately \$5.7 billion in borrowing availability with the FHLB, the Federal Reserve Bank discount window, and other correspondent banks with whom Pinnacle Bank has arranged lines of credit. At December 31, 2019, Pinnacle Bank was not carrying any balances with the Federal Reserve Bank discount window or correspondent banks under these arrangements.

Note 9. Other Borrowings

Pinnacle Financial has twelve wholly-owned subsidiaries that are statutory business trusts created for the exclusive purpose of issuing 30-year capital trust preferred securities. Pinnacle Financial also has a \$75.0 million revolving credit facility, of which it had no outstanding borrowings as of December 31, 2019. Additionally, Pinnacle Financial and Pinnacle Bank have entered into, or assumed in connection with acquisitions, certain other subordinated debt agreements as outlined below as of December 31, 2019 (in thousands):

| Name | Name Date Established Maturity | | otal Debt itstanding | Interest Rate at December 31, 2019 | Coupon Structure |
|---|--------------------------------|--------------------|-------------------------|------------------------------------|---|
| Trust preferred securities | | | | | |
| Pinnacle Statutory Trust I | December 29, 2003 | December 30, 2033 | \$ 10,310 | 4.70 % | 30-day LIBOR + 2.80% |
| Pinnacle Statutory Trust II | September 15, 2005 | September 30, 2035 | 20,619 | 3.36 % | 30-day LIBOR + 1.40% |
| Pinnacle Statutory Trust III | September 07, 2006 | September 30, 2036 | 20,619 | 3.59 % | 30-day LIBOR + 1.65% |
| Pinnacle Statutory Trust IV | October 31, 2007 | September 30, 2037 | 30,928 | 4.74 % | 30-day LIBOR + 2.85% |
| BNC Capital Trust I | April 03, 2003 | April 15, 2033 | 5,155 | 5.24 % | 30-day LIBOR + 3.25% |
| BNC Capital Trust II | March 11, 2004 | April 07, 2034 | 6,186 | 4.84 % | 30-day LIBOR + 2.85% |
| BNC Capital Trust III | September 23, 2004 | September 23, 2034 | 5,155 | 4.39 % | 30-day LIBOR + 2.40% |
| BNC Capital Trust IV | September 27, 2006 | December 31, 2036 | 7,217 | 3.66 % | 30-day LIBOR + 1.70% |
| Valley Financial Trust I | June 26, 2003 | June 26, 2033 | 4,124 | 5.06 % | 30-day LIBOR + 3.10% |
| Valley Financial Trust II | September 26, 2005 | December 15, 2035 | 7,217 | 3.38 % | 30-day LIBOR + 1.49% |
| Valley Financial Trust III | December 15, 2006 | January 30, 2037 | 5,155 | 3.67 % | 30-day LIBOR + 1.73% |
| Southcoast Capital Trust III | August 05, 2005 | September 30, 2035 | 10,310 | 3.46 % | 30-day LIBOR + 1.50% |
| Subordinated Debt | | | | | |
| Pinnacle Bank Subordinated Notes | July 30, 2015 | July 30, 2025 | 60,000 | 4.88 % | Fixed ⁽¹⁾ |
| Pinnacle Bank Subordinated Notes | March 10, 2016 | July 30, 2025 | 70,000 | 4.88 % | Fixed ⁽¹⁾ |
| Avenue Subordinated Notes | December 29, 2014 | December 29, 2024 | 20,000 | 6.75 % | Fixed ⁽²⁾ |
| Pinnacle Financial Subordinated Notes | November 16, 2016 | November 16, 2026 | 120,000 | 5.25 % | Fixed ⁽³⁾ |
| Pinnacle Financial Subordinated Notes | September 11, 2019 | September 15, 2029 | 300,000 | 4.13 % | Fixed ⁽⁴⁾ |
| BNC Subordinated Notes | September 25, 2014 | October 01, 2024 | 60,000 | 5.69 % | 3-month LIBOR + 3.59% ⁽²⁾ |
| Other Borrowings | | | | | |
| Revolving credit facility (5) | April 25, 2019 | April 24, 2020 | _ | 3.19 % | 30-day LIBOR + 1.50% |
| Debt issuance costs and fair value adjustment | ient | | (13,915) | | |
| Total subordinated debt and other borrowi | ngs | | \$ 749,080 | | |

(1) Migrates to three month LIBOR + 3.128% beginning July 30, 2020 through the end of the term.

(2) Effective January 1, 2020, these subordinated notes were redeemed in full by Pinnacle Financial.

(3) Migrates to three month LIBOR + 3.884% beginning November 16, 2021 through the end of the term.

(4) Migrates to three month LIBOR + 2.775% beginning September 15, 2024 through the end of the term.

(5) Borrowing capacity on the revolving credit facility is \$75.0 million. An unused fee of 0.35% is assessed on the average daily unused amount of the loan.

On September 2019, Pinnacle Financial issued \$300.0 million aggregate principal amount of 4.13% Fixed-to-Floating Rate Subordinated Notes due 2029 (the 2029 Notes) in a public offering. From, and including, the date of issuance to, but excluding, September 15, 2024, the 2029 Notes will bear interest at an initial fixed rate of 4.13% per annum, payable semi-annually in arrears on March 15 and September 15, commencing on March 15, 2020. Thereafter, from September 15, 2024 through the maturity date, September 15, 2029, or earlier redemption date, the 2029 Notes will bear interest at a floating rate equal to the then-current three month LIBOR, plus 277.5 basis points for each quarterly interest period (subject to certain provisions regarding use of an alternative base rate upon certain LIBOR transition events), payable quarterly in arrears on March 15, June 15, September 15 and December 15 of each year, commencing on September 15, 2024.

The offering and sale of the 2029 Notes yielded net proceeds of approximately \$296.5 million after deducting the underwriting discount and offering expenses payable by Pinnacle Financial. Pinnacle Financial used approximately \$8.8 million of such proceeds to redeem the previously outstanding Subordinated Note due October 15, 2023, which Pinnacle Financial assumed in the BNC merger and which carried an interest rate of 7.23% at the time of such redemption. Pinnacle Financial also used a portion of the net proceeds of this offering to redeem the outstanding principal and accrued interest of the \$20.0 million aggregate principal amount of Avenue

subordinated notes and \$60.0 million aggregate principal amount of BNC subordinated notes effective January 1, 2020, each of which are listed in the table above as outstanding balances at December 31, 2019.

Note 10. Income Taxes

Income tax expense attributable to continuing operations for each of the years ended December 31 is as follows (in thousands):

| | 2019 | 2018 | 2017 |
|----------------------------------|-----------------|-----------|---------|
| Current tax expense : | | | |
| Federal | \$ 77,422 \$ | 73,921 \$ | 63,496 |
| State | 4,538 | 4,822 | 860 |
| Total current tax expense | 81,960 | 78,743 | 64,356 |
| Deferred tax expense: | | | |
| Federal | 12,446 | 10,162 | 26,339 |
| State | 2,250 | 1,603 | 1,826 |
| Deferred tax revaluation expense | | | 31,486 |
| Total deferred tax expense | 14,696 | 11,765 | 59,651 |
| Total income tax expense | \$ 96,656 \$ | 90,508 \$ | 124,007 |

Pinnacle Financial's income tax expense differs from the amounts computed by applying the Federal income tax statutory rates of 21% to income before income taxes for 2019 and 2018 and 35% for 2017. A reconciliation of the differences for each of the years in the three-year period ended December 31, 2019 is as follows (in thousands):

| | 2019 | 2018 | 2017 |
|---|------------------|-----------|---------|
| Income tax expense at statutory rate | \$ 104,483 \$ | 94,489 \$ | 104,295 |
| State excise tax expense, net of federal tax effect | 5,363 | 5,076 | 1,746 |
| Tax-exempt securities | (11,078) | (7,222) | (5,666) |
| Federal tax credits | (1,704) | (845) | (434) |
| Bank owned life insurance | (3,646) | (2,764) | (2,778) |
| Insurance premiums | (238) | (112) | (283) |
| Revaluation of deferred tax assets and liabilities due to Tax Cuts and Jobs Act | — | | 31,486 |
| Excess tax benefits associated with equity compensation | (1,011) | (2,966) | (5,366) |
| Other items | 4,487 | 4,852 | 1,007 |
| Income tax expense | \$ 96,656 \$ | 90,508 \$ | 124,007 |

Pinnacle Financial's effective tax rate for 2019 and 2018 differs from the Federal income tax rates primarily due to a state excise tax expense, investments in bank qualified municipal securities, tax benefits of Pinnacle Bank's real estate investment trust subsidiary, and tax benefits associated with share-based compensation, bank owned life insurance, and our captive insurance subsidiary, offset in part by the limitation on deductibility of meals and entertainment expense, and for 2019 and 2018, non-deductible executive compensation and FDIC premiums. Pinnacle Financial recognized a charge of \$31.5 million in 2017 resulting from the revaluation of its deferred tax assets in accordance with the Tax Cuts and Jobs Act which reduced the corporate Federal tax rate from 35% to 21% effective January 1, 2018.

The components of deferred income taxes included in other assets in the accompanying consolidated balance sheets at December 31, 2019 and 2018 are as follows (in thousands):

| | 2019 | 2018 |
|--|-----------|-----------|
| Deferred tax assets: | | |
| Loan loss allowance | \$ 23,051 | \$ 20,449 |
| Loans | 20,808 | 29,453 |
| Insurance | 673 | 1,955 |
| Accrued liability for supplemental retirement agreements | 7,308 | 6,231 |
| Restricted stock and stock options | 10,515 | 9,026 |
| Securities | | 15,974 |
| Cash flow hedge | 1,373 | 459 |
| Equity method investment | 425 | 602 |
| Lease liability | 22,782 | 2,099 |
| Other real estate owned | 691 | 1,158 |
| Net federal operating loss carryforward and credits | 5,954 | 13,754 |
| Annual incentive compensation | 12,626 | 9,990 |
| Other deferred tax assets | 1,810 | 3,343 |
| Total deferred tax assets | 108,016 | 114,499 |
| Deferred tax liabilities: | | |
| Depreciation and amortization | 12,455 | 11,769 |
| Core deposit and other intangible assets | 13,253 | 11,475 |
| Securities | 6,978 | - |
| REIT dividends | 1,650 | 1,589 |
| FHLB related liabilities | 925 | 925 |
| Right-of-use assets and other leasing transactions | 21,169 | 639 |
| Subordinated debt | 2,050 | 1,134 |
| Partnership interests | 3,534 | 459 |
| Other deferred tax liabilities | 1,875 | 1,758 |
| Total deferred tax liabilities | 63,889 | 29,748 |
| Net deferred tax assets | \$ 44,127 | \$ 84,75 |

At December 31, 2019, the Company had federal and state loss and tax credit carryforwards resulting from acquisitions of approximately \$14.7 million that expire at various dates from 2028 to 2034.

ASC 740, *Income Taxes*, defines the threshold for recognizing the benefits of tax return positions in the financial statements as "more-likely-than-not" to be sustained by the taxing authority. This section also provides guidance on the derecognition, measurement and classification of income tax uncertainties, along with any related interest and penalties, and includes guidance concerning accounting for income tax uncertainties in interim periods.

A reconciliation of the beginning and ending unrecognized tax benefit related to state uncertain tax positions is as follows (in thousands):

| | 2019 | 2018 | 2017 |
|--|----------------|----------|-------|
| Balance at January 1, | \$ 5,083 \$ | 2,838 \$ | 1,274 |
| Increases due to tax positions taken during the current year | 1,827 | 2,245 | 1,564 |
| Increases due to tax positions taken during a prior year | | — | |
| Decreases due to the lapse of the statute of limitations during the current year | — | — | |
| Decreases due to settlements with the taxing authorities during the current year | | _ | |
| Balance at December 31, | \$ 6,910 \$ | 5,083 \$ | 2,838 |

Pinnacle Financial's policy is to recognize interest and/or penalties related to income tax matters in income tax expense. No interest and penalties were recorded for the year ended December 31, 2019.

Note 11. Commitments and Contingent Liabilities

In the normal course of business, Pinnacle Financial has entered into off-balance sheet financial instruments which include commitments to extend credit (i.e., including unfunded lines of credit) and standby letters of credit. Commitments to extend credit are usually the result of lines of credit granted to existing borrowers under agreements that the total outstanding indebtedness will not exceed a specific amount during the term of the indebtedness. Typical borrowers are commercial concerns that use lines of credit to supplement their treasury management functions, thus their total outstanding indebtedness may fluctuate during any time period based on the seasonality of their business and the resultant timing of their cash flows. Other typical lines of credit are related to home equity loans granted to consumers. Commitments to extend credit generally have fixed expiration dates or other termination clauses and may require payment of a fee. At December 31, 2019, these commitments amounted to \$7.9 billion, of which approximately \$1.0 billion related to home equity lines of credit.

Standby letters of credit are generally issued on behalf of an applicant (customer) to a specifically named beneficiary and are the result of a particular business arrangement that exists between the applicant and the beneficiary. Standby letters of credit have fixed expiration dates and are usually for terms of two years or less unless terminated beforehand due to criteria specified in the standby letter of credit. A typical arrangement involves the applicant routinely being indebted to the beneficiary for such items as inventory purchases, insurance, utilities, lease guarantees or other third party commercial transactions. The standby letter of credit would permit the beneficiary to obtain payment from Pinnacle Financial under certain prescribed circumstances. Subsequently, Pinnacle Financial would then seek reimbursement from the applicant pursuant to the terms of the standby letter of credit. At December 31, 2019, these commitments amounted to \$203.6 million.

Pinnacle Financial follows the same credit policies and underwriting practices when making these commitments as it does for onbalance sheet instruments. Each customer's creditworthiness is evaluated on a case-by-case basis and the amount of collateral obtained, if any, is based on management's credit evaluation of the customer. Collateral held varies but may include cash, real estate and improvements, marketable securities, accounts receivable, inventory, equipment, and personal property.

The contractual amounts of these commitments are not reflected in the consolidated financial statements and would only be reflected if drawn upon. Since many of the commitments are expected to expire without being drawn upon, the contractual amounts do not necessarily represent future cash requirements. However, should the commitments be drawn upon and should our customers default on their resulting obligation to us, Pinnacle Financial's maximum exposure to credit loss, without consideration of collateral, is represented by the contractual amount of those instruments. At December 31, 2019, Pinnacle Financial had accrued \$2.4 million for the inherent risks associated with off balance sheet commitments.

Various legal claims also arise from time to time in the normal course of business. In the opinion of management, the resolution of these routine claims outstanding at December 31, 2019 will not have a material impact on Pinnacle Financial's consolidated financial condition, operating results or cash flows.

Note 12. Salary Deferral Plans

Pinnacle Financial has a 401(k) retirement plan (the 401k Plan) covering all employees who elect to participate, subject to certain eligibility requirements. The 401(k) Plan allows employees to defer up to 50% of their salary subject to regulatory limitations with Pinnacle Financial matching 100% of the first 4% of employee self-directed contributions during 2019, 2018, and 2017. Pinnacle Financial's expense associated with the matching component of the plan for each of the years in the three-year period ended December 31, 2019 was approximately \$8.1 million, \$7.6 million and \$5.9 million, respectively, and is included in the accompanying consolidated statements of operations in salaries and employee benefits expense.

Pinnacle Financial has assumed supplemental retirement plans for certain directors and executive officers of banks which we have acquired. At December 31, 2019 and 2018, respectively, Pinnacle Financial had recorded \$29.2 million and \$28.1 million of liabilities on its balance sheet associated with these supplemental executive retirement plans. A portion of these assumed plans were fully funded with Rabbi Trusts whose balances at December 31, 2019 totaled \$15.6 million. At December 31, 2019, the remaining amounts that are not yet funded are included in other liabilities in the accompanying consolidated balance sheets.

Note 13. Stock Options and Restricted Shares

At Pinnacle Financial's annual shareholders' meeting on April 17, 2018, the shareholders of Pinnacle Financial approved the 2018 Omnibus Incentive Plan (the "2018 Plan"). The 2018 Plan subsumed the then existing Pinnacle Financial Partners, Inc. 2014 Equity Incentive Plan including the approximately 500,000 shares in the aggregate that remained available for issuance thereunder on the date the 2018 Plan was approved by shareholders and increased the maximum number of shares of common stock that may be be issued to associates, directors and contractors of Pinnacle Financial and Pinnacle Bank by an additional 1.2 million shares. The 2018 Plan permits Pinnacle Financial to reissue outstanding awards that are subsequently forfeited, settled in cash, withheld by Pinnacle Financial to cover withholding taxes or expire unexercised and returned to the 2018 Plan. At December 31, 2019, there were approximately 1.2 million shares available for issuance under the 2018 Plan.

The BNC Bancorp 2013 Amended and Restated Omnibus Stock Incentive Plan (the "BNC Plan") was assumed by Pinnacle Financial in connection with the BNC Merger. As of December 31, 2019, the BNC Plan had approximately 8,000 shares remaining available for issuance to existing associates that were previously BNC associates in future periods. No new awards may be granted under plans other than the 2018 Plan except for shares remaining available for issuance to the former BNC associates pursuant to the BNC Plan.

Upon the acquisition of CapitalMark, Pinnacle Financial assumed approximately 858,000 stock options under the CapitalMark Option Plan. No further shares remain available for issuance under the CapitalMark Option Plan. At December 31, 2019, all of the remaining options outstanding were granted under the CapitalMark Option Plan.

Common Stock Options

As of December 31, 2019, of the 119,274 stock options outstanding, approximately 47,560 options were granted with the intention to be incentive stock options qualifying under Section 422 of the Internal Revenue Code for favorable tax treatment to the option holder while approximately 71,714 options would be deemed non-qualified stock options and thus not subject to favorable tax treatment to the option holder. Favorable treatment generally refers to the recipient of the award not having to report ordinary income at the date of exercise assuming certain conditions are met. All stock options granted under the CapitalMark Plan were fully vested at the date of the CapitalMark merger.

A summary of stock option activity within the equity incentive plans during each of the years in the three-year period ended December 31, 2019 and information regarding expected vesting, contractual terms remaining, intrinsic values and other matters was as follows:

| | Number | Weighted- Average Exercise Price | Weighted- Average Contractual Remaining Term (in years) | Aggregate Intrinsic Value ⁽¹⁾ (000's) |
|--|-----------|---|---|---|
| Outstanding at December 31, 2016 | 552,372 | \$ 20.75 | | |
| Granted | _ | _ | | |
| Stock options exercised ⁽²⁾ | (275,904) | 20.09 | | |
| Forfeited | | _ | | |
| Outstanding at December 31, 2017 | 276,468 | \$ 21.40 | | |
| Granted | | _ | | |
| Stock options exercised | (97,877) | 18.91 | | |
| Forfeited | | | | |
| Outstanding at December 31, 2018 | 178,591 | \$ 22.77 | | |
| Granted | | _ | | |
| Stock options exercised | (59,317) | 21.40 | | |
| Forfeited | | | | |
| Outstanding at December 31, 2019 | 119,274 | \$ 23.45 | 2.85 | \$ 4,837 |
| Options exercisable at December 31, 2019 | 119,274 | \$ 23.45 | 2.85 | \$ 4,837 |

(1) The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the quoted price of Pinnacle Financial Common Stock of \$64.00 per common share at December 31, 2019 for the 119,274 options that were in-the-money at December 31, 2019.

(2) Includes 750 stock options which were exercised in a stock swap transaction which settled in 277 shares of Pinnacle Financial common

stock.

During 2019, 2018 and 2017, the aggregate intrinsic value of stock options exercised under Pinnacle Financial's equity incentive plans was \$2.3 million, \$2.7 million and \$12.7 million, respectively, determined as of the date of option exercise.

There have been no options granted by Pinnacle Financial since 2008. All stock option awards granted by Pinnacle Financial were fully vested during 2013. Stock options granted under the CapitalMark Plan were fully vested at the time of acquisition. As such, there was no impact on the results of operations for stock-based compensation related to stock options for any year in the three-year period ended December 31, 2019, except for tax benefits recorded as a component of income tax expense upon exercise.

Restricted Shares

A summary of activity for unvested restricted share awards for the years ended December 31, 2019, 2018, and 2017 follows:

| | Number | Grant Date Weighted- Average Cost | |
|--|-----------|--------------------------------------|-------|
| Unvested at December 31, 2016 | 820,539 | \$ | 36.47 |
| Shares awarded | 261,942 | | 67.14 |
| Conversion of previously awarded restricted share units to restricted share awards | 43,680 | | 69.40 |
| Shares assumed in connection with acquisition of BNC | 136,890 | | 67.25 |
| Restrictions lapsed and shares released to associates/directors | (292,896) | | 37.59 |
| Shares forfeited | (34,020) | | 54.71 |
| Unvested at December 31, 2017 | 936,135 | \$ | 50.08 |
| Shares awarded | 180,450 | | 62.40 |
| Conversion of previously awarded restricted share units to restricted share awards | 6,200 | | 67.85 |
| Restrictions lapsed and shares released to associates/directors | (400,820) | | 46.33 |
| Shares forfeited | (29,159) | | 59.51 |
| Unvested at December 31, 2018 | 692,806 | \$ | 55.19 |
| Shares awarded | 245,845 | | 55.25 |
| Restrictions lapsed and shares released to associates/directors | (348,145) | | 40.47 |
| Shares forfeited | (35,210) | | 58.22 |
| Unvested at December 31, 2019 | 555,296 | \$ | 57.04 |

Pinnacle Financial grants restricted share awards to associates (including members of executive management) and outside directors with a combination of time and, in the case of the annual leadership team award, performance vesting criteria. The following tables outline restricted stock grants that were made by grant year, grouped by similar vesting criteria, during the three-year period ended December 31, 2019. The table below reflects the life-to-date activity for these awards:

| Grant Year | Group ⁽¹⁾ | Vesting Period in years | Shares awarded | Restrictions Lapsed and shares released to participants | Shares Withheld for taxes by participants | Shares Forfeited by participants | Shares Unvested |
|---------------|--------------------------------|-------------------------------|-------------------|--|--|--|--------------------|
| Time Based | d Awards | | | | | | |
| 2017 | Associates (2) | 3 – 5 | 248,265 | 76,923 | 31,355 | 37,904 | 102,083 |
| 2017 | Associates ⁽²⁾⁽³⁾ | 3 - 5 | 136,890 | 128,176 | 3,840 | 1,659 | 3,215 |
| 2018 | Associates (2) | 3 - 5 | 147,601 | 20,527 | 7,460 | 9,375 | 110,239 |
| 2018 | Associates ⁽²⁾⁽³⁾ | 3 - 5 | 16,777 | 3,484 | 1,948 | 942 | 10,403 |
| 2019 | Associates (2) | 3 - 5 | 229,296 | 168 | 106 | 13,787 | 215,235 |
| Performan | ce Based Awards | | | | | | |
| 2017 | Leadership team ⁽⁴⁾ | 3 | 43,680 | 15,054 | 28,626 | — | — |
| 2018 | Leadership team (4) | 3 | 6,200 | 4,340 | 1,860 | — | — |
| Outside Di | rector Awards ⁽⁵⁾ | | | | | | |
| 2017 | Outside directors | 1 | 13,677 | 12,139 | 1,538 | — | _ |
| 2018 | Outside directors | 1 | 16,072 | 12,783 | 3,289 | — | — |
| 2019 | Outside directors | 1 | 16,549 | — | _ | _ | 16,549 |

- (1) Groups include employees (referred to as associates above), the leadership team which includes our named executive officers and other key senior leadership members, and outside directors. When the restricted shares are awarded, a participant receives voting rights and forfeitable dividend rights with respect to the shares, but is not able to transfer the shares until the restrictions have lapsed. Once the restrictions lapse, the participant is taxed on the value of the award and may elect to sell some shares (or have Pinnacle Financial withhold some shares) to pay the applicable income taxes associated with the vested portion of the award. For time-based vesting restricted share awards, dividends paid on shares for which the forfeiture restrictions do not lapse will be recouped by Pinnacle Financial at the time of termination. For performance-based vesting awards and time-based vesting awards to Pinnacle Financial's executive officers, dividends are placed into escrow until the forfeiture restrictions on such shares lapse.
- (2) The forfeiture restrictions on these restricted share awards lapse in equal annual installments on the anniversary date of the grant.
- (3) Restricted share awards issued to associates that were former associates of BNC and to Pinnacle Financial's Chairman of the Carolinas and Virginia pursuant to legacy BNC incentive plans assumed by Pinnacle Financial.
- (4) Reflects conversion of restricted share units issued in prior years to restricted share awards. The forfeiture restrictions on these restricted share awards lapse should Pinnacle Financial achieve certain soundness targets at the end of the fifth year following the grant date. See further details of these awards under the caption "Restricted Share Units" below.
- (5) Restricted share awards are issued to the outside members of the board of directors in accordance with their board compensation plan. Restrictions on those awards granted in 2019 lapse on February 29, 2020 based on each individual board member meeting their attendance goals for the various board and board committee meetings to which each member was scheduled to attend.
- (6) These shares represent forfeitures resulting from recipients whose employment or board membership is terminated during each of the years in the three-year period ended December 31, 2019 or for which the performance criteria applicable to the award are not achieved. Any dividends paid on shares for which the forfeiture restrictions do not lapse will be recouped by Pinnacle Financial at the time of termination or will not be distributed from escrow, as applicable.

Compensation expense associated with the performance-based vesting restricted share awards is recognized over the time period that the restrictions associated with the awards are anticipated to lapse based on a graded vesting schedule such that each tranche is amortized separately. Compensation expense associated with the time-based vesting restricted share awards is recognized over the time period that the restrictions associated with the awards lapse on a straight-line basis based on the total cost of the award.

Restricted Share Units

The following table details the restricted share unit awards (all of which are performance units) outstanding at December 31, 2019:

| | | | ι | J <mark>nits Awa</mark> r | ded | | | | |
|----|------------|-----------------|-----------------------------|---------------------------|------------------------------------|---|---|---|---|
| - | ant ear | Named Exe (N | ecutiv EOs) ⁽ | e Officers | Leadership Team other than NEOs | Applicable Performance Periods associated with each tranche (fiscal year) | Service period per tranche (in years) | Subsequent holding period per tranche (in years) | Period in which units to be settled into shares of common stock ⁽²⁾ |
| 20 |)19 | 166,211 | _ | 249,343 | 52,244 | 2019 | 2 | 3 | 2024 |
| | | | | | | 2020 | 2 | 2 | 2024 |
| | | | | | | 2021 | 2 | 1 | 2024 |
| 20 |)18 | 96,878 | _ | 145,339 | 25,990 | 2018 | 2 | 3 | 2023 |
| | | | | | | 2019 | 2 | 2 | 2023 |
| | | | | | | 2020 | 2 | 1 | 2023 |
| 20 | 017 | 72,537 | _ | 109,339 | 24,916 | 2017 | 2 | 3 | 2022 |
| | | | | | | 2018 | 2 | 2 | 2022 |
| | | | | | | 2019 | 2 | 1 | 2022 |
| 20 | 016 | 73,474 | _ | 110,223 | 26,683 | 2016 | 2 | 3 | 2021 |
| | | | | | | 2017 | 2 | 2 | 2021 |
| | | | | | | 2018 | 2 | 1 | 2021 |
| 20 | 015 | 58,200 | _ | 101,850 | 28,378 | 2015 | 2 | 3 | 2020 |
| | | | | | | 2016 | 2 | 2 | 2020 |
| | | | | | | 2017 | 2 | 1 | 2020 |
| | | | | | | | | | |

(1) The named executive officers are awarded a range of awards that may be earned based on attainment of goals at a target level of performance to the maximum level of performance.

(2) Restricted share unit awards granted in 2019, 2018, 2017, 2016 and 2015, if earned, will be settled in shares of Pinnacle Financial Common Stock in the periods noted in the table, if Pinnacle Bank's ratio of non-performing assets to its loans plus ORE is less than amounts established in the applicable award agreement. A summary of stock compensation expense, net of the impact of income taxes, related to restricted share awards and restricted share units for the three-year period ended December 31, 2019, follows (in thousands):

| | 2019 | 2018 | 2017 | | |
|---|--------------|--------------|------|--------|--|
| | | | | | |
| Restricted stock expense | \$ 21,226 | \$ 17,636 | \$ | 19,538 | |
| Income tax benefit | 5,548 | 4,610 | | 7,665 | |
| Restricted stock expense, net of income tax benefit | \$ 15,678 | \$ 13,026 | \$ | 11,873 | |

As of the December 31, 2019, the total compensation cost related to unvested restricted share awards and restricted share units not yet recognized was \$37.4 million. This expense is expected to be recognized over a weighted-average period of 1.60 years.

Note 14. Derivative Instruments

Financial derivatives are reported at fair value in other assets or other liabilities. The accounting for changes in the fair value of a derivative depends on whether it has been designated and qualifies as part of a hedging relationship. For derivatives not designated as hedges, the gain or loss is recognized in current earnings.

Non-hedge derivatives

Pinnacle Financial enters into interest rate swaps (swaps) to facilitate customer transactions and meet their financing needs. Upon entering into these instruments to meet customer needs, Pinnacle Financial enters into offsetting positions in order to minimize the risk to Pinnacle Financial. These swaps qualify as derivatives, but are not designated as hedging instruments.

Interest rate swap contracts involve the risk of dealing with counterparties and their ability to meet contractual terms. When the fair value of a derivative instrument contract is positive, this generally indicates that the counter party or customer owes Pinnacle Financial, and results in credit risk to Pinnacle Financial. When the fair value of a derivative instrument contract is negative, Pinnacle Financial owes the customer or counterparty and therefore, Pinnacle Financial has no credit risk.

A summary of Pinnacle Financial's interest rate swaps to facilitate customer transactions as of December 31, 2019 and 2018 is included in the following table (in thousands):

| | | Decembe | r 31, | 2019 | Decembe | er 31, 2018 | | |
|--------------------------------|---|-----------|-------|----------|------------------------|-------------|------------------------|--|
| | Notional Estimated Fair Amount Value | | | | Notional Amount | E | stimated Fair Value | |
| Interest rate swap agreements: | | | | | | | | |
| Assets | \$ | 1,296,389 | \$ | 43,507 | \$ 1,059,724 | \$ | 22,273 | |
| Liabilities | | 1,296,389 | | (43,715) | 1,059,724 | | (22,401) | |
| Total | \$ | 2,592,778 | \$ | (208) | \$ 2,119,448 | \$ | (128) | |

| | | Amount of G | Gain (| (Loss) Recogniz | ed in | Income | |
|-------------------------------|--------------------------|-------------|--------|-----------------|-------|--------|----|
| | Location of Gain (Loss) | Ye | ar en | ded December | 31, | | |
| | Recognized in Income | 2019 | | 2018 | | 2017 | |
| Interest rate swap agreements | Other noninterest income | \$ (80) | \$ | (33) | \$ | | 39 |

Derivatives designated as cash flow hedges

For derivative instruments that are designated and qualify as a cash flow hedge, the aggregate fair value of the derivative instrument is recorded in other assets or other liabilities with any gain or loss related to changes in fair value recorded in accumulated other comprehensive income, net of tax. The gain or loss is reclassified into earnings in the same period during which the hedged asset or liability affects earnings and is presented in the same income statement line item as the earnings effect of the hedged asset or liability. Pinnacle Financial uses forward cash flow hedge relationships in an effort to manage future interest rate exposure. The hedging strategy converts the LIBOR-based variable interest rate on forecasted borrowings to a fixed interest rate and is used in an effort to protect Pinnacle Financial from floating interest rate variability. During 2019, Pinnacle Financial paid \$92.9 million to purchase interest rate floors with notional amounts totaling \$2.8 billion to mitigate the impact of declining interest rates on LIBOR-based variable rate loans. A summary of Pinnacle Financial's cash flow hedge relationships as of December 31, 2019 and 2018 are as follows (in thousands):

| | | | | | Decembe | mber 31, 2019 | | | December 31, 201 | | |
|----------------------------------|---------------------------|--|---------------------------------|---------------------------------------|--------------------|---------------|---------|--------------------|------------------|----|---------|
| | Balance Sheet Location | Weighted Average Remaining Maturity (In Years) | Weighted Average Pay Rate | Receive Rate | Notional Amount | | | Notional Amount | | | |
| Asset derivatives | | | | | | | | | | | |
| Interest rate floor - loans | Other assets | 3.50 | N/A | 2.25%-2.75% minus 1 month LIBOR | \$ 2,800,000 | \$ | 87,422 | \$ | _ | \$ | _ |
| Liability derivatives | | | | | | | | | | | |
| Interest rate swaps - borrowings | Other liabilities | 2.34 | 3.09% | 3 month LIBOR | \$ 99,000 | \$ | (3,312) | \$ | 99,000 | \$ | (1,757) |

The effects of Pinnacle Financial's cash flow hedge relationships on the statement of comprehensive income (loss) during the years ended December 31, 2019, 2018 and 2017 were as follows:

| | Amount of Gain (Loss) Recognized in Other Comprehensive Income | | | | | | | | | |
|----------------------------------|--|---------|-------------|--------------|----|-------|--|--|--|--|
| | | | Years ended | December 31, | | | | | | |
| | 2019 | | | 018 | | 2017 | | | | |
| Asset derivatives | | | | | | | | | | |
| Interest rate floor - loans | \$ | (1,432) | \$ | _ | \$ | | | | | |
| Liability derivatives | | | | | | | | | | |
| Interest rate swaps - borrowings | \$ | (1,149) | \$ | 2,660 | \$ | 2,487 | | | | |
| | \$ | (2,581) | \$ | 2,660 | \$ | 2,487 | | | | |

The cash flow hedges were determined to be highly effective during the periods presented and as a result qualify for hedge accounting treatment. If a hedge was deemed to be ineffective, the amount included in accumulated other comprehensive (loss) income would be reclassified into a line item within the statement of income that impacts operating results. The hedge would no longer be considered effective if a portion of the hedge becomes ineffective, the item hedged is no longer in existence or Pinnacle Financial discontinues hedge accounting. Pinnacle Financial expects the hedges to continue to be highly effective and qualify for hedge accounting during the remaining terms of the swaps. Losses on cash flow hedges totaling \$1.6 million, net of tax, were reclassified from other comprehensive income (loss) into net income during the year ended December 31, 2019. Gains on cash flow hedges totaling \$657,000 and \$347,000, net of tax, were reclassified from accumulated other comprehensive income (loss) into net income during the years ended December 31, 2018 and 2017, respectively. Approximately \$826,000 in unrealized gains, net of tax, are expected to be reclassified from accumulated other comprehensive income (loss) into net income (loss) into net income over the next twelve months related to previously terminated cash flow hedges. On October 24, 2018, cash flow swaps with a notional amount of \$101.0 million were terminated resulting in a cash settlement equal to previously unrealized gains of \$1.0 million. These gains are included in accumulated other comprehensive income and are being amortized into net income over the remaining contractual terms of the swaps.

Derivatives designated as fair value hedges

For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative instrument as well as the offsetting loss or gain on the hedged asset or liability attributable to the hedged risk are recognized in current earnings. The gain or loss on the derivative instrument is presented on the same income statement line item as the earnings effect of the hedged item. Pinnacle Financial utilizes interest rate swaps designated as fair value hedges to mitigate the effect of changing interest rates on the fair values of fixed rate callable securities available-for-sale. The hedging strategy on securities converts the fixed interest rates to LIBOR-based variable interest rates. These derivatives are designated as partial term hedges of selected cash flows covering specified periods of time prior to the call dates of the hedged securities.

A summary of Pinnacle Financial's fair value hedge relationships as of December 31, 2019 and 2018 are as follows (in thousands):

| | | | | | | Decembe | r 31, | 2019 | | Decembe | r 31, | 2018 | | | | | |
|---|---------------------------|--|---------------------------------|------------------|----|---------|-------|----------|----|-----------|-------|----------|--|--------------------|--|--|-----------------------|
| | Balance Sheet Location | Weighted Average Remaining Maturity (In Years) | Weighted Average Pay Rate | Receive Rate | | | | | | | | | | Notional Amount | | | stimated air Value |
| Liability derivatives | | | | | | | | | | | | | | | | | |
| Interest rate swap agreements - securities | Other liabilities | 7.04 | 3.08% | 3 month LIBOR | \$ | 477,905 | \$ | (40,778) | \$ | 477,905 | \$ | (14,796) | | | | | |
| Interest rate swap agreements - loans | Other liabilities | _ | % | 3 month LIBOR | | _ | | _ | | 900,000 | | (7,037) | | | | | |
| | | 7.04 | 3.08% | | \$ | 477,905 | \$ | (40,778) | \$ | 1,377,905 | \$ | (21,833) | | | | | |

The effects of Pinnacle Financial's fair value hedge relationships on the income statement during the years end December 31, 2019, 2018 and 2017 were as follows:

| | | | Amou | nt of | f Gain Recognized in I | ncom | ie | | | | |
|--|-------------------------------|-------------------------|----------|-------|------------------------|------|------|---|--|--|--|
| | Location of Gain | Year ended December 31, | | | | | | | | | |
| Liability derivatives | on Derivative | | 2019 | 2018 | | | 2017 | | | | |
| Interest rate swap agreements - securities | Interest income on securities | \$ | (25,982) | \$ | (14,796) | \$ | | — | | | |
| Interest rate swap agreements - loans | Interest income on loans | \$ | (6,915) | \$ | (7,037) | \$ | | _ | | | |

| | | Amou | nt of | Loss Recognized in I | ncom | e | |
|--|-------------------------------|--------------|-------|----------------------|------|------|---|
| | Location of Loss | | Years | ended December 31 | , | | |
| Liability derivatives | on Hedged Item | 2019 | | 2018 | | 2017 | |
| Interest rate swap agreements - securities | Interest income on securities | \$ 25,982 | \$ | 14,796 | \$ | | — |
| Interest rate swap agreements - loans | Interest income on loans | \$ 6,915 | \$ | 7,037 | \$ | | _ |

The following amounts were recorded on the balance sheet related to cumulative basis adjustments for fair value hedges at December 31, 2019 and 2018:

| | Carı | ying Amount o | f the Hedg | ged Assets | | ative Amount of nent Included in of the Hed | the Car | rying Amount |
|--------------------------------|-------|------------------------|------------|------------|-------|---|---------|---------------|
| | Decem | December 31, 2019 Dece | | | Decem | ber 31, 2019 | Decen | ıber 31, 2018 |
| Line item on the balance sheet | | | | | | | | |
| Securities available-for-sale | \$ | 551,789 | \$ | 529,859 | \$ | 40,778 | \$ | 14,796 |
| Loans ⁽¹⁾ | \$ | _ | \$ | 907,037 | \$ | _ | \$ | 7,037 |

(1) The carrying amount as shown represents the designated last-of-layer. At December 31, 2018, the total amortized cost basis of the closed portfolio of loans designated in these hedging relationships was \$2.7 billion.

During the year ended December 31, 2019, a fair value hedging relationship on loans was unwound resulting in a swap termination payment to the counterparty of approximately \$14.0 million. The corresponding loan fair value hedging adjustment as of the date of termination is being amortized over the remaining lives of the designated loans. During the year ended December 31, 2019, amortization expense totaling \$2.7 million was recognized as a reduction to interest income on loans.

Note 15. Employment Contracts

Pinnacle Financial has entered into, and subsequently amended employment agreements with five of its senior executives: the President and Chief Executive Officer, the Chairman of the Board, the Chairman of the Carolinas and Virginia, the Chief Administrative Officer and the Chief Financial Officer. Other than the agreement with the Chairman of the Carolinas and Virginia, these agreements, as amended, automatically renew each year on January 1 for an additional year unless any of the parties to the agreement gives notice of intent not to renew the agreement prior to November 30th of the preceding year, in which case the agreement terminates 30 days later. The agreement with the Chairman of the Carolinas and Virginia has a three-year term that expires on June 16, 2020 and is thereafter renewable in the same manner as the other senior executives' agreements. The agreements specify that in certain defined "Terminating Events," Pinnacle Financial will be obligated to pay each of the five senior executives certain amounts, which vary according to the Terminating Event, which is based on their annual salaries and bonuses. These Terminating Events include termination for disability, cause, without cause and other events. The agreement with the Chairman of the Carolinas and Virginia also provides for the payment of certain defired benefits under his prior employment agreement with BNC upon termination of his employment with Pinnacle Financial.

In connection with the Avenue Merger, Pinnacle Financial entered into an employment agreement with its Vice Chairman. This agreement was on similar terms as the employment agreements with the five senior executives described above, except that it provided for a fixed three-year term and did not automatically renew. This agreement expired on June 30, 2019 at which time the Vice Chairman retired. The Vice Chairman remains on the Board of Directors.

Note 16. Related Party Transactions

Also see Note 5 - "Loans and Allowance for Loan Losses", concerning loans and other extensions of credit to certain directors, officers, and their related entities and individuals and Note 12 – "Salary Deferral Plans" regarding supplemental retirement agreement obligations to certain directors who were formerly directors or employees of acquired banks.

Note 17. Fair Value of Financial Instruments

FASB ASC 820, *Fair Value Measurements and Disclosures*, defines fair value, establishes a framework for measuring fair value in U.S. GAAP and expands disclosures about fair value measurements. The definition of fair value focuses on the exit price, i.e., the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, not the entry price, i.e., the price that would be paid to acquire the asset or received to assume the liability at the measurement date. The statement emphasizes that fair value is a market-based measurement; not an entity-specific measurement. Therefore, the fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability.

Valuation Hierarchy

FASB ASC 820 establishes a three-level valuation hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The following is a description of the valuation methodologies used for assets and liabilities measured at fair value, as well as the general classification of such assets and liabilities pursuant to the valuation hierarchy.

Assets

Securities available-for-sale – Where quoted prices are available for identical securities in an active market, securities are classified within Level 1 of the valuation hierarchy. Level 1 securities include highly liquid government securities and certain other financial products. If quoted market prices are not available, then fair values are estimated by using pricing models that use observable inputs or quoted prices of securities with similar characteristics and are classified within Level 2 of the valuation hierarchy. In certain cases where there is limited activity or less transparency around inputs to the valuation and more complex pricing models or discounted cash flows are used, securities are classified within Level 3 of the valuation hierarchy.

Other investments – Included in other investments are investments recorded at fair value primarily in certain nonpublic investments and funds. The valuation of these nonpublic investments requires management judgment due to the absence of observable quoted market prices, inherent lack of liquidity and the long-term nature of such assets. These investments are valued initially based upon transaction price. The carrying values of other investments are adjusted either upwards or downwards from the transaction price to reflect expected exit values as evidenced by financing and sale transactions with third parties, or when determination of a valuation adjustment is confirmed through ongoing reviews by senior investment managers. A variety of factors are reviewed and monitored to assess positive and negative changes in valuation including, but not limited to, current operating performance and future expectations of the particular investment, industry valuations of comparable public companies and changes in market outlook and the third-party financing environment over time. In determining valuation adjustments resulting from the investment review process, emphasis is placed on current company performance and market conditions. These investments are included in Level 3 of the valuation hierarchy if the entities and funds are not widely traded and the underlying investments are in privately-held and/or start-up companies for which market values are not readily available. Certain investments in funds for which the underlying assets of the fund represent publicly traded in Level 2 of the valuation hierarchy.

Other assets – Included in other assets are certain assets carried at fair value, including interest rate swap agreements to facillitate customer transactions, interest rate floors designated as cash flow hedges and interest rate locks associated with the mortgage loan pipeline. The carrying amount of interest rate swap agreements is based on Pinnacle Financial's pricing models that utilize observable market inputs. The fair value of the cash flow hedge agreements is determined by calculating the difference between the discounted fixed rate cash flows and the discounted variable rate cash flows. The fair value of the mortgage loan pipeline rate locks is based upon the projected sales price of the underlying loans, taking into account market interest rates and other market factors at the measurement date, net of the projected fallout rate. Pinnacle Financial reflects these assets within Level 2 of the valuation hierarchy as these assets are valued using similar transactions that occur in the market.

Impaired loans – A loan is classified as impaired when it is probable Pinnacle Financial will be unable to collect all principal and interest payments due in accordance with the contractual terms of the loan agreement. Impaired loans are measured based on the present value of expected payments using the loan's original effective rate as the discount rate, the loan's observable market price, or the fair value of the collateral less selling costs if the loan is collateral dependent. If the recorded investment in the impaired loan exceeds the measure of fair value, a valuation allowance may be established as a component of the allowance for loan losses or the difference may be recognized as a charge-off. Impaired loans are classified within Level 3 of the hierarchy due to the unobservable inputs used in determining their fair value such as collateral values and the borrower's underlying financial condition.

Other real estate owned – Other real estate owned (OREO) represents real estate foreclosed upon by Pinnacle Bank through loan defaults by customers or acquired by deed in lieu of foreclosure as well as properties acquired in connection with the acquisition of BNC that had previously been held for future expansion and were transferred to OREO in 2019. Substantially all of these amounts relate to lots, homes and development projects that are either completed or are in various stages of construction for which Pinnacle Financial believes it has adequate collateral. Upon foreclosure, the property is recorded at the lower of cost or fair value, based on appraised value, less selling costs estimated as of the date acquired with any loss recognized as a charge-off through the allowance for loan losses. Additional OREO losses for subsequent valuation downward adjustments are determined on a specific property basis and are included as a component of noninterest expense along with holding costs. Any gains or losses realized at the time of disposal are also reflected in noninterest expense, as applicable. OREO is included in Level 3 of the valuation hierarchy due to the lack of observable market inputs into the determination of fair value as appraisal values are property-specific and sensitive to the changes in the overall economic environment.

Liabilities

Other liabilities – Pinnacle Financial has certain liabilities carried at fair value including certain interest rate swap agreements to facilitate customer transactions and the cash flow hedge and interest rate locks associated with the funding for its mortgage loan originations. The fair value of these liabilities is based on Pinnacle Financial's pricing models that utilize observable market inputs and is reflected within Level 2 of the valuation hierarchy.

The following tables present the financial instruments carried at fair value on a recurring basis as of December 31, 2019 and 2018, by caption on the consolidated balance sheets and by FASB ASC 820 valuation hierarchy (as described above) (in thousands):

| | v: co | tal carrying alue in the nsolidated lance sheet | uoted market ces in an active market (Level 1) | Models with significant observable market parameters (Level 2) | | Models with significant unobservable market parameters (Level 3) |
|--|----------|--|---|---|----|---|
| December 31, 2019 | | | | | | |
| Investment securities available-for-sale: | | | | | | |
| U.S. treasury securities | \$ | 72,867 | \$ | \$ 72,867 | \$ | _ |
| U.S. government agency securities | | 79,692 | — | 79,692 | | — |
| Mortgage-backed securities | | 1,463,907 | | 1,463,907 | | _ |
| State and municipal securities | | 1,714,453 | — | 1,698,550 | | 15,903 |
| Asset-backed securities | | 152,972 | | 152,972 | | _ |
| Corporate notes and other | | 56,104 | | 56,104 | | |
| Total investment securities available-for-sale | | 3,539,995 | _ | 3,524,092 | | 15,903 |
| Other investments | | 63,291 | | 25,135 | | 38,156 |
| Other assets | | 134,040 | _ | 134,040 | | |
| Total assets at fair value | \$ | 3,737,326 | \$ | \$ 3,683,267 | \$ | 54,059 |
| Other liabilities | \$ | 87,613 | \$ — | \$ 87,613 | \$ | _ |
| Total liabilities at fair value | \$ | 87,613 | \$ | \$ 87,613 | \$ | |
| December 31, 2018 | | | | | | |
| Investment securities available-for-sale: | | | | | | |
| U.S. treasury securities | \$ | 30,300 | \$ _ | \$ 30,300 | \$ | |
| U.S. government agency securities | | 70,159 | — | 70,159 | | |
| Mortgage-backed securities | | 1,310,945 | _ | 1,310,945 | | |
| State and municipal securities | | 1,229,654 | — | 1,215,059 | | 14,595 |
| Asset-backed securities | | 375,582 | _ | 375,582 | | |
| Corporate notes and other | | 67,046 | | 67,046 | | |
| Total investment securities available-for-sale | | 3,083,686 | — | 3,069,091 | | 14,595 |
| Other investments | | 50,791 | — | 24,369 | | 26,422 |
| Other assets | | 24,524 | | 24,524 | | |
| Total assets at fair value | \$ | 3,159,001 | \$ | \$ 3,117,984 | \$ | 41,017 |
| Other liabilities | \$ | 46,550 | \$ | \$ 46,550 | \$ | |
| Total liabilities at fair value | \$ | 46,550 | \$ | \$ 46,550 | \$ | |

The following table presents assets measured at fair value on a nonrecurring basis as of December 31, 2019 and 2018 (in thousands):

| December 31, 2019 | valı cons | carrying le in the solidated nce sheet | Ì | uoted market prices in an ctive market (Level 1) | ob | Models with significant servable market parameters (Level 2) | Models with significant unobservable market parameters (Level 3) | tal losses for the period ended |
|------------------------------------|--------------|---|----|---|----|--|---|---|
| Other real estate owned | \$ | 29,487 | \$ | — | \$ | _ | \$ 29,487 | \$ (2,927) |
| Impaired loans, net ⁽¹⁾ | | 32,477 | | | | | 32,477 | (656) |
| Total | \$ | 61,964 | \$ | | \$ | | \$ 61,964 | \$ (3,583) |
| December 31, 2018 | | | | | | | | |
| Other real estate owned | \$ | 15,165 | \$ | | \$ | — | \$ 15,165 | \$ (84) |
| Impaired loans, net ⁽¹⁾ | | 40,830 | | _ | | _ | 40,830 | (1,214) |
| Total | \$ | 55,995 | \$ | | \$ | | \$ 55,995 | \$ (1,298) |

(1) Amount is net of a valuation allowance of \$3.3 million and \$4.0 million at December 31, 2019 and 2018, respectively, as required by ASC 310-10, "Receivables."

In the case of the investment securities portfolio, Pinnacle Financial monitors the portfolio to ascertain when transfers between levels have been affected. The nature of the remaining assets and liabilities is such that transfers in and out of any level are expected to be rare. For the year ended December 31, 2019, there were zero transfers between Levels 1, 2 or 3.

The table below includes a rollforward of the balance sheet amounts for the years ended December 31, 2019 and December 31, 2018, (including the change in fair value) for financial instruments classified by Pinnacle Financial within Level 3 of the valuation hierarchy measured at fair value on a recurring basis including changes in fair value due in part to observable factors that are part of the valuation methodology (in thousands):

| | For the year ended December 31, | | | | | | | | | | | |
|---|---------------------------------|--------------------------------------|----|--------------------|----------------------|---|--------------------------------------|---------|----------------------|----------|----------------------|---|
| | | | | 2019 | | | 2018 | | | | | |
| | | Available- for-sale Securities | | Other vestments | Other liabilities | | Available- for-sale Securities | | Other investments | | Other liabilities | |
| Fair value, Jan. 1 | \$ | 14,595 | \$ | 26,422 | \$ | _ | \$ | 17,029 | \$ | 28,874 | \$ | |
| Total net realized gains (losses) included in | | 116 | | 2,785 | | _ | | (34) | | 2,932 | | _ |
| Change in unrealized gains/losses included in other comprehensive income for assets and liabilities still held at Dec. 31 | | 2,710 | | _ | | _ | | (1,232) | | _ | | _ |
| Purchases | | _ | | 11,297 | | _ | | _ | | 9,013 | | _ |
| Issuances | | | | | | | | | | | | |
| Settlements | | (1,518) | | (2,348) | | _ | | (1,168) | | (2,231) | | _ |
| Transfers out of Level 3 | | | | | | | | | | (12,166) | | |
| Fair value, Dec. 31 | \$ | 15,903 | \$ | 38,156 | \$ | _ | \$ | 14,595 | \$ | 26,422 | \$ | |
| Total realized gains (losses) included in income related to financial assets and liabilities still on the consolidated balance sheet at Dec. 31 | \$ | 116 | \$ | 2,785 | \$ | | \$ | (34) | \$ | 2,932 | \$ | |

The following methods and assumptions were used by Pinnacle Financial in estimating its fair value disclosures for financial instruments that are not measured at fair value. In cases where quoted market prices are not available, fair values are based on estimates using discounted cash flow models. Those models are significantly affected by the assumptions used, including the discount rates, estimates of future cash flows and borrower creditworthiness. The fair value estimates presented herein are based on pertinent information available to management as of December 31, 2019 and 2018, respectively. Such amounts have not been revalued for purposes of these consolidated financial statements since those dates and, therefore, current estimates of fair value may differ significantly from the amounts presented herein.

Securities held-to-maturity - Estimated fair values for investment securities are based on quoted market prices where available. If quoted market prices are not available, then fair values are estimated by using pricing models that use observable inputs or quoted prices of securities with similar characteristics.

Loans - The fair value of Pinnacle Financial's loan portfolio includes a credit risk factor in the determination of the fair value of its loans. This credit risk assumption is intended to approximate the fair value that a market participant would realize in a hypothetical orderly transaction. Pinnacle Financial's loan portfolio is initially fair valued using a segmented approach. Pinnacle Financial divides its loan portfolio into the following categories: variable rate loans, impaired loans and all other loans. The results are then adjusted to account for credit risk.

The values derived from the discounted cash flow approach for our performing loan portfolio incorporate credit risk to determine the exit price. Fair values for impaired loans are estimated using discounted cash flow models or are based on the fair value of the underlying collateral.

Purchased loans, including loans acquired through a merger, are initially recorded at fair value on the date of purchase. Purchased loans that contain evidence of post-origination credit deterioration as of the purchase date are carried at the net present value of expected future cash flows. All other purchased loans are recorded at their initial fair value, and adjusted for subsequent advances, pay downs, amortization or accretion of any fair value premium or discount on purchase, charge-offs and any other adjustment to carrying value.

Loans held-for-sale - Loans held-for-sale are carried at the lower of cost or fair value. The estimate of fair value is based on pricing models and other information.

Deposits, securities sold under agreements to repurchase, Federal Home Loan Bank (FHLB) advances, subordinated debt

and other borrowings - The fair value of demand deposits, savings deposits and securities sold under agreements to repurchase are derived from a selection of market transactions reflecting our peer group. Fair values for certificates of deposit, FHLB advances and subordinated debt are estimated using discounted cash flow models, using current market interest rates offered on certificates, advances and other borrowings with similar remaining maturities.

Off-balance sheet instruments - The fair values of Pinnacle Financial's off-balance-sheet financial instruments are based on fees charged to enter into similar agreements. However, commitments to extend credit do not represent a significant value to Pinnacle Financial until such commitments are funded.

The following table presents the carrying amounts, estimated fair value and placement in the fair value hierarchy of Pinnacle Financial's financial instruments at December 31, 2019 and 2018. This table excludes financial instruments for which the carrying amount approximates fair value. For short-term financial assets such as cash and cash equivalents, the carrying amount is a reasonable estimate of fair value due to the relatively short time between the origination of the instrument and its expected realization. For financial liabilities such as non-interest bearing demand, interest-bearing demand, and savings deposits, the carrying amount is a reasonable estimate of fair value due to these products having no stated maturity.

| December 31, 2019 | Carrying/ Notional Amount | Estimated Fair Value ⁽¹⁾ | Quoted market prices in an active market (Level 1) | Models with significant observable market parameters (Level 2) | Models with significant unobservable market parameters (Level 3) | |
|---|---------------------------------|--|---|---|---|--|
| Financial assets: | | | · · · | | | |
| Securities held-to-maturity | \$ 188,996 | \$ 201,217 | \$ — | \$ 201,217 | \$ — | |
| Loans, net | 19,693,099 | 19,717,845 | | _ | 19,717,845 | |
| Consumer loans held-for-sale | 81,820 | 82,986 | _ | 82,986 | _ | |
| Commercial loans held-for-sale | 17,585 | 17,836 | _ | 17,836 | _ | |
| Financial liabilities: | | | | | | |
| Deposits and securities sold under agreements to repurchase | 20,307,382 | 19,647,392 | _ | _ | 19,647,392 | |
| Federal Home Loan Bank advances | 2,062,534 | 2,078,514 | | | 2,078,514 | |
| Subordinated debt and other borrowings | 749,080 | 712,220 | _ | _ | 712,220 | |
| Off-balance sheet instruments: | | | | | | |
| Commitments to extend credit ⁽²⁾ | 7,938,341 | 2,364 | | _ | 2,364 | |
| Standby letters of credit ⁽³⁾ | 203,579 | 1,422 | _ | _ | 1,422 | |
| December 31, 2018 | | | | | | |
| Financial assets: | | | | | | |
| Securities held-to-maturity | \$ 194,282 | \$ 193,131 | \$ | \$ 193,131 | \$ | |
| Loans, net | 17,623,974 | 17,288,795 | — | — | 17,288,795 | |
| Consumer loans held-for-sale | 34,196 | 34,929 | — | 34,929 | — | |
| Commercial loans held-for-sale | 15,954 | 16,296 | _ | 16,296 | | |
| Financial liabilities: | | | | | | |
| Deposits and securities sold under agreements to repurchase | 18,953,848 | 18,337,848 | | _ | 18,337,848 | |
| Federal Home Loan Bank advances | 1,443,589 | 1,432,003 | _ | _ | 1,432,003 | |
| Subordinated debt and other borrowings | 485,130 | 464,616 | _ | _ | 464,616 | |
| Off-balance sheet instruments: | | | | | | |
| Commitments to extend credit ⁽²⁾ | 6,921,689 | 1,733 | | | 1,733 | |
| Standby letters of credit ⁽³⁾ | 177,475 | 1,131 | _ | _ | 1,131 | |
| | | | | | | |

(1) Estimated fair values are consistent with an exit-price concept. The assumptions used to estimate the fair values are intended to approximate those that a market-participant would realize in a hypothetical orderly transaction.

(2) At the end of each period, Pinnacle Financial evaluates the inherent risks of the outstanding off-balance sheet commitments. In making this evaluation, Pinnacle Financial evaluates the credit worthiness of the borrower, the collateral supporting the commitments and any other factors similar to those used to evaluate the inherent risks of our loan portfolio. Additionally, Pinnacle Financial evaluates the probability that the outstanding commitment will eventually become a funded loan. As a result, at December 31, 2019 and 2018, respectively, Pinnacle

Financial included in other liabilities \$2.4 million and \$1.7 million representing the inherent risks associated with these off-balance sheet commitments.

(3) At December 31, 2019 and 2018, the fair value of Pinnacle Financial's standby letters of credit totaled \$1.4 million and \$1.1 million, respectively. This amount represents the unamortized fee associated with these standby letters of credit, which were priced at market when issued, and is included in the consolidated balance sheet of Pinnacle Financial and is believed to approximate fair value. This fair value will decrease over time as the existing standby letters of credit approach their expiration dates.

Note 18. Variable Interest Entities

Under ASC 810, Pinnacle Financial is deemed to be the primary beneficiary and required to consolidate a variable interest entity (VIE) if it has a variable interest in the VIE that provides it with a controlling financial interest. For such purposes, the determination of whether a controlling financial interest exists is based on whether a single party has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. ASC 810 requires continual reconsideration of conclusions reached regarding which interest holder is a VIE's primary beneficiary and disclosures surrounding those VIE's which have not been consolidated. The consolidation methodology provided in this footnote as of December 31, 2019 and 2018 has been prepared in accordance with ASC 810.

Non-consolidated Variable Interest Entities

At December 31, 2019, Pinnacle Financial did not have any consolidated VIEs to disclose but did have the following nonconsolidated VIEs: low income housing partnerships, trust preferred issuances, troubled debt restructuring commercial loans, and managed discretionary trusts.

Since 2003, Pinnacle Financial has made equity investments as a limited partner in various partnerships that sponsor affordable housing projects. The purpose of these investments is to achieve a satisfactory return on capital and to support Pinnacle Financial's community reinvestment initiatives. The activities of the limited partnerships include the identification, development, and operation of multi-family housing that is leased to qualifying residential tenants generally within Pinnacle Financial's primary geographic region.

The Company has invested in various limited partnerships that sponsor affordable housing projects utilizing the Low Income Housing Tax Credit ("LIHTC") pursuant to Section 42 of the Internal Revenue Code. The purpose of these investments is to assist the Bank in achieving its strategic plan associated with the Community Reinvestment Act and to achieve a satisfactory return on capital. The primary activities of the limited partnerships include the identification, development, and operation of multi-family housing that is leased to qualifying residential tenants. Generally, these types of investments are funded through a combination of debt and equity.

The Company is a limited partner in each LIHTC limited partnership. Each limited partnership is managed by an unrelated third party general partner who exercises full control over the affairs of the limited partnership. The general partner has all the rights, powers and authority granted or permitted to be granted to a general partner of a limited partnership. Except for limited rights granted to the limited partner(s), the limited partner(s) may not participate in the operation, management, or control of the limited partnership's business, transact any business in the limited partnership's name or have any power to sign documents for or otherwise bind the limited partnership. In addition, the general partner may only be removed by the limited partner(s) in the event the general partner fails to comply with the terms of the agreement or is negligent in performing its duties.

The partnerships related to affordable housing projects are considered VIEs because Pinnacle Financial, as the holder of the equity investment at risk, does not have the ability to direct the activities that most significantly affect the success of the entity through voting rights or similar rights. While Pinnacle Financial could absorb losses that are significant to these partnerships as it has a risk of loss for its initial capital contributions and funding commitments to each partnership, it is not considered the primary beneficiary of the partnerships as the general partners whose managerial functions give them the power to direct the activities that most significantly impact the partnerships' economic performance and who are exposed to all losses beyond Pinnacle Financial's initial capital contributions and funding commitments are considered the primary beneficiaries.

Pinnacle Financial (or companies it has acquired) has previously issued subordinated debt totaling \$133.0 million to certain statutory trusts which are considered VIEs because Pinnacle Financial's capital contributions to these trusts are not considered "at risk" in evaluating whether the holders of the equity investments at risk in the trusts have the power through voting rights or similar rights to direct the activities that most significantly impact the entities' economic performance. These trusts were not consolidated by Pinnacle Financial because the holders of the securities issued by the trusts absorb a majority of expected losses and residual returns.

For certain troubled commercial loans, Pinnacle Financial restructures the terms of the borrower's debt in an effort to increase the probability of receipt of amounts contractually due. However, Pinnacle Financial does not assume decision-making power or responsibility over the borrower's operations. Following a debt restructuring, the borrowing entity typically meets the definition of a VIE as the initial determination of whether the entity is a VIE must be reconsidered and economic events have proven that the entity's equity is not sufficient to permit it to finance its activities without additional subordinated financial support or a restructuring of the terms of its financing. As Pinnacle Financial does not have the power to direct the activities that most significantly impact such troubled commercial borrowers' operations, it is not considered the primary beneficiary even in situations where, based on the size of the financial provided, Pinnacle Financial is exposed to potentially significant benefits and losses of the borrowing entity. Pinnacle Financial has no contractual requirements to provide financial support to the borrowing entities beyond certain funding commitments established upon restructuring of the terms of the debt to allow for completion of activities which prepare the collateral related to the debt for sale.

Pinnacle Financial serves as manager over certain discretionary trusts, for which it makes investment decisions on behalf of the trusts' beneficiaries in return for a management fee. The trusts meet the definition of a VIE since the holders of the equity investments at risk do not have the power through voting rights or similar rights to direct the activities that most significantly impact the entities' economic performance. However, since the management fees Pinnacle Financial receives are not considered variable interests in the trusts as all of the requirements related to permitted levels of decision maker fees are met, such VIEs are not consolidated by Pinnacle Financial because it cannot be the trusts' primary beneficiary. Pinnacle Financial has no contractual requirements to provide financial support to the trusts.

The following table summarizes VIE's that are not consolidated by Pinnacle Financial as of December 31, 2019 and 2018 (in thousands):

| | December 31, 2019 | | | 2019 | Decembe | r 31 | , 2018 | |
|--|-------------------|--------------------|----|------------------------|-----------------------|------|-------------------------|-------------------|
| _Туре | | aximum Exposure | | Liability ecognized | laximum s Exposure | I | Liability Recognized | Classification |
| Low Income Housing Partnerships | \$ | 100,885 | \$ | | \$ 72,628 | \$ | _ | Other Assets |
| Trust Preferred Issuances | | N/A | | 132,995 | N/A | | 132,995 | Subordinated Debt |
| Commercial Troubled Debt Restructurings | | 828 | | | 1,352 | | _ | Loans |
| Managed Discretionary Trusts | | N/A | | N/A | N/A | | N/A | N/A |

Note 19. Regulatory Matters

Pursuant to Tennessee banking law, Pinnacle Bank may not, without the prior consent of the Commissioner of the TDFI, pay any dividends to Pinnacle Financial in a calendar year in excess of the total of Pinnacle Bank's retained net income for that year plus the retained net income for the preceding two years. Under Tennessee corporate law, Pinnacle Financial is not permitted to pay dividends if, after giving effect to such payment, it would not be able to pay its debts as they become due in the usual course of business or its total assets would be less than the sum of its total liabilities plus any amounts needed to satisfy any preferential rights if it were dissolving. In addition, in deciding whether or not to declare a dividend of any particular size, Pinnacle Financial's board of directors must consider its and Pinnacle Bank's current and prospective capital, liquidity, and other needs. In addition to state law limitations on Pinnacle Financial's ability to pay dividends, the Federal Reserve imposes limitations on Pinnacle Financial's ability to pay dividends. Federal Reserve regulations limit dividends, stock repurchases and discretionary bonuses to executive officers if Pinnacle Financial's regulatory capital is below the level of regulatory minimums plus the applicable capital conservation buffer. During the year ended December 31, 2019, Pinnacle Bank paid \$114.0 million in dividends to Pinnacle Financial. As of December 31, 2019, Pinnacle Bank could pay approximately \$721.2 million of additional dividends to Pinnacle Financial without prior approval of the Commissioner of the TDFI. Pinnacle Financial initiated payment of a quarterly dividend of \$0.08 per share of common stock in the fourth quarter of 2013 and has since increased the dividend to \$0.12 beginning in the first quarter of 2015, to \$0.14 beginning in the first quarter of 2016, and to \$0.16 beginning in the fourth quarter of 2018. During the first quarter of 2020, Pinnacle Financial's board of directors declared a dividend of \$0.16 per share. The amount and timing of all future dividend payments, if any, is subject to the discretion of Pinnacle Financial's board of directors and will depend on Pinnacle Financial's earnings, capital position, financial condition and other factors, including new regulatory capital requirements, as they become known to us.

Pinnacle Financial and Pinnacle Bank are subject to various regulatory capital requirements administered by federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory, and possibly additional discretionary actions, by regulators that, if undertaken, could have a direct material effect on the financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, Pinnacle Financial and Pinnacle Bank must meet specific capital guidelines that involve quantitative measures of the assets, liabilities, and certain off-balance-sheet items as calculated under regulatory accounting practices. Pinnacle Financial's and Pinnacle Bank's capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require Pinnacle Financial and its banking subsidiary to maintain minimum amounts and ratios of common equity Tier 1 capital to risk-weighted assets, Tier 1 capital to risk-weighted assets and of Tier 1 capital to average assets.

Management believes, as of December 31, 2019, that Pinnacle Financial and Pinnacle Bank met all capital adequacy requirements to which they are subject. To be categorized as well-capitalized under applicable banking regulations, Pinnacle Financial and Pinnacle Bank must maintain certain total, Tier 1, common equity Tier 1 and Tier 1 leverage capital ratios as set forth in the following table and not be subject to a written agreement, order or directive to maintain a higher capital level. The capital conservation buffer is not included in the required ratios of the table presented below. Pinnacle Financial's and Pinnacle Bank's actual capital amounts and ratios are presented in the following table (in thousands):

| | | Actual | | | Minimum Require | | Minimum To Be Well-Capitalized | | |
|---|----|-----------|--------|----|--------------------|-------|-----------------------------------|--------|--|
| | _ | Amount | Ratio | | Amount | Ratio | Amount | Ratio | |
| December 31, 2019 | | | | | | | | | |
| Total capital to risk weighted assets: | | | | | | | | | |
| Pinnacle Financial | \$ | 3,159,375 | 13.2 % | \$ | 1,912,885 | 8.0 % | \$ 2,391,106 | 10.0 % | |
| Pinnacle Bank | \$ | 2,906,853 | 12.2 % | \$ | 1,906,839 | 8.0 % | \$ 2,383,549 | 10.0 % | |
| Tier 1 capital to risk weighted assets: | | | | | | | | | |
| Pinnacle Financial | \$ | 2,319,234 | 9.7 % | \$ | 1,434,664 | 6.0 % | \$ 1,912,885 | 8.0 % | |
| Pinnacle Bank | \$ | 2,679,713 | 11.2 % | \$ | 1,430,129 | 6.0 % | \$ 1,906,839 | 8.0 % | |
| Common equity Tier 1 capital: | | | | | | | | | |
| Pinnacle Financial | \$ | 2,319,112 | 9.7 % | \$ | 1,075,998 | 4.5 % | N/A | N/A | |
| Pinnacle Bank | \$ | 2,679,590 | 11.2 % | \$ | 1,072,597 | 4.5 % | \$ 1,549,307 | 6.5 % | |
| Tier 1 capital to average assets (*): | | | | | | | | | |
| Pinnacle Financial | \$ | 2,319,234 | 9.1 % | \$ | 1,021,836 | 4.0 % | N/A | N/A | |
| Pinnacle Bank | \$ | 2,679,713 | 10.5 % | \$ | 1,019,210 | 4.0 % | \$ 1,274,012 | 5.0 % | |
| December 31, 2018 | | | | | | | | | |
| Total capital to risk weighted assets: | | | | | | | | | |
| Pinnacle Financial | \$ | 2,580,143 | 12.2 % | \$ | 1,691,017 | 8.0 % | \$ 2,113,772 | 10.0 % | |
| Pinnacle Bank | \$ | 2,432,419 | 11.5 % | \$ | 1,686,046 | 8.0 % | \$ 2,107,558 | 10.0 % | |
| Tier 1 capital to risk weighted assets: | | | | | | | | | |
| Pinnacle Financial | \$ | 2,024,193 | 9.6 % | \$ | 1,268,263 | 6.0 % | \$ 1,691,017 | 8.0 % | |
| Pinnacle Bank | \$ | 2,218,003 | 10.5 % | \$ | 1,264,535 | 6.0 % | \$ 1,686,046 | 8.0 % | |
| Common equity Tier 1 capital: | | | | | | | | | |
| Pinnacle Financial | \$ | 2,024,070 | 9.6 % | \$ | 951,197 | 4.5 % | N/A | N/A | |
| Pinnacle Bank | \$ | 2,217,880 | 10.5 % | \$ | 948,401 | 4.5 % | \$ 1,369,912 | 6.5 % | |
| Tier 1 capital to average assets (*): | | | | | | | | | |
| Pinnacle Financial | \$ | 2,024,193 | 8.9 % | \$ | 909,102 | 4.0 % | N/A | N/A | |
| Pinnacle Bank | \$ | 2,218,003 | 9.8 % | \$ | 906,185 | 4.0 % | \$ 1,132,731 | 5.0 % | |

(*) Average assets for the above calculations were based on the most recent quarter.

Note 20. Parent Company Only Financial Information

The following information presents the condensed balance sheets, statements of operations, and cash flows of Pinnacle Financial as of December 31, 2019 and 2018 and for each of the years in the three-year period ended December 31, 2019 (in thousands):

CONDENSED BALANCE SHEETS

| | 2019 | 2018 |
|--|--------------|-----------------|
| Assets: | | |
| Cash and cash equivalents | \$ 182,091 | \$ 94,043 |
| Investments in bank subsidiaries | 4,653,310 | 4,096,349 |
| Investments in consolidated subsidiaries | 7,816 | 6,511 |
| Investment in unconsolidated subsidiaries: | | |
| Statutory Trusts | 3,995 | 3,995 |
| Other investments | 97,459 | 79,646 |
| Current income tax receivable | 11,696 | 19,032 |
| Other assets | 29,566 | 26,668 |
| | \$ 4,985,933 | \$ 4,326,244 |
| Liabilities and stockholders' equity: | | |
| Income taxes payable to subsidiaries | 2,467 | _ |
| Subordinated debt and other borrowings | 620,256 | 357,153 |
| Other liabilities | 7,462 | 3,151 |
| Stockholders' equity | 4,355,748 | 3,965,940 |
| | \$ 4,985,933 | \$ 4,326,244 |

CONDENSED STATEMENTS OF OPERATIONS

| | 2019 | 2018 | 2017 |
|---|------------------|---------|------------|
| Revenues: | | | |
| Income from bank subsidiaries | \$ 113,982 \$ | 83,090 | \$ 63,100 |
| Income from nonbank subsidiaries | 178 | 170 | 101 |
| Income from equity method investment | 24,298 | 13,731 | 10,126 |
| Other income | 3,485 | 1,310 | 576 |
| Expenses: | | | |
| Interest expense | 18,425 | 17,703 | 13,583 |
| Personnel expense, including stock compensation | 21,226 | 17,636 | 16,629 |
| Other expense | 1,496 | 1,312 | 4,349 |
| Income before income taxes and equity in undistributed income of subsidiaries | 100,796 | 61,650 | 39,342 |
| Income tax benefit | (4,457) | (8,570) | (12,748) |
| Income before equity in undistributed income of subsidiaries | 105,253 | 70,220 | 52,090 |
| Equity in undistributed income of bank subsidiaries | 294,354 | 288,728 | 121,341 |
| Equity in undistributed income of nonbank subsidiaries | 1,274 | 492 | 548 |
| Net income | \$ 400,881 \$ | 359,440 | \$ 173,979 |

CONDENSED STATEMENTS OF CASH FLOWS

| | 2019 | 2018 | 2017 |
|--|------------|-------------|------------|
| Operating activities: | | | |
| Net income | \$ 400,881 | \$ 359,440 | \$ 173,979 |
| Adjustments to reconcile net income to net cash provided by (used in) operating activities: | | | |
| Amortization and accretion | (3,094) |) 105 | 48 |
| Stock-based compensation expense | 21,226 | 17,636 | 19,538 |
| Increase (decrease) in income tax payable, net | 2,467 | (24) | 24 |
| Deferred tax expense (benefit) | (2,857) |) (549) | 5,919 |
| Income from equity method investments, net | (24,298) |) (13,731) | (10,126) |
| Dividends received from equity method investment | 8,953 | 5,872 | 5,655 |
| Excess tax benefit from stock compensation | (1,011) |) (2,966) | (5,365) |
| Loss (gain) on other investments | (1,057) |) (209) | (350) |
| Decrease (increase) in other assets | 7,295 | 4,390 | (3,990) |
| Increase (decrease) in other liabilities | 5,322 | 2,758 | (9,194) |
| Equity in undistributed income of bank subsidiary | (294,354) |) (288,728) | (121,341) |
| Equity in undistributed income of nonbank subsidiary | (1,274) |) (492) | (548) |
| Net cash provided by operating activities | 118,199 | 83,502 | 54,249 |
| Investing activities: | | | |
| Investment in consolidated banking subsidiaries | (180,000) |) — | (182,288) |
| Increase in other investments | (1,411) |) (2,321) | (815) |
| Net cash used in investing activities | (181,411) |) (2,321) | (183,103) |
| Financing activities: | | | |
| Proceeds from subordinated debt and other borrowings, net of issuance costs | 316,078 | 19,850 | _ |
| Repayment of other borrowings | (49,880) |) (620) | (60) |
| Proceeds from common stock issuance | _ | _ | 192,194 |
| Exercise of common stock options and stock appreciation rights, net of repurchase of restricted shares | (3,694) |) (5,071) | 494 |
| Repurchase of common stock | (61,416) |) (20,694) | |
| Common dividends paid | (49,828) |) (45,454) | (35,907) |
| Net cash provided by (used in) financing activities | 151,260 | (51,989) | 156,721 |
| Net increase in cash | 88,048 | 29,192 | 27,867 |
| Cash and cash equivalents, beginning of year | 94,043 | 64,851 | 36,984 |
| Cash and cash equivalents, end of year | \$ 182,091 | \$ 94,043 | \$ 64,851 |

Pinnacle Bank is subject to restrictions on the payment of dividends to Pinnacle Financial under Tennessee banking laws. Pinnacle Bank paid dividends of \$114.0 million, \$83.1 million and \$63.1 million, respectively to Pinnacle Financial in each of the years ended December 31, 2019, 2018 and 2017.

Note 21. Quarterly Financial Results (unaudited)

A summary of selected consolidated quarterly financial data for each of the years in the three-year period ended December 31, 2019 follows:

| (in thousands, except per share data) | (| First Quarter | Second Quarter | Third Quarter | Fourth Quarter |
|---------------------------------------|----|------------------|-------------------|------------------|-------------------|
| 2019 | | | | | |
| Interest income | \$ | 257,883 | \$ 265,851 | \$ 275,749 | \$ 268,453 |
| Net interest income | | 187,246 | 188,918 | 195,806 | 194,172 |
| Provision for loan losses | | 7,184 | 7,195 | 8,260 | 4,644 |
| Net income before taxes | | 117,074 | 124,719 | 137,224 | 118,520 |
| Net income | | 93,960 | 100,321 | 110,521 | 96,079 |
| Basic net income per share | \$ | 1.22 | \$ 1.31 | \$ 1.45 | \$ 1.26 |
| Diluted net income per share | \$ | 1.22 | \$ 1.31 | \$ 1.44 | \$ 1.26 |
| 2018 | | | | | |
| Interest income | \$ | 211,528 | \$ 230,984 | \$ 248,110 | \$ 256,095 |
| Net interest income | | 174,471 | 182,236 | 189,420 | 190,215 |
| Provision for loan losses | | 6,931 | 9,402 | 8,725 | 9,319 |
| Net income before taxes | | 103,143 | 109,865 | 118,183 | 118,757 |
| Net income | | 83,510 | 86,865 | 93,747 | 95,318 |
| Basic net income per share | \$ | 1.08 | \$ 1.13 | \$ 1.22 | \$ 1.24 |
| Diluted net income per share | \$ | 1.08 | \$ 1.12 | \$ 1.21 | \$ 1.23 |
| 2017 | | | | | |
| Interest income | \$ | 102,143 | \$ 123,743 | \$ 202,167 | \$ 208,085 |
| Net interest income | | 88,767 | 106,627 | 173,182 | 174,731 |
| Provision for loan losses | | 3,651 | 6,812 | 6,920 | 6,281 |
| Net income before taxes | | 53,444 | 63,074 | 99,503 | 81,965 |
| Net income | | 39,653 | 43,086 | 64,442 | 26,798 |
| Basic net income per share | \$ | 0.83 | \$ 0.81 | \$ 0.84 | \$ 0.35 |
| Diluted net income per share | \$ | 0.82 | \$ 0.80 | \$ 0.83 | \$ 0.35 |

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

Pinnacle Financial maintains disclosure controls and procedures, as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934 (the "Exchange Act"), that are designed to ensure that information required to be disclosed by it in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to Pinnacle Financial's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Pinnacle Financial 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 as of the end of the period covered by this report. Based on the evaluation of these disclosure controls and procedures, the Chief Executive Officer and Chief Financial Officer concluded that Pinnacle Financial's disclosure controls and procedures were effective.

Management Report on Internal Control Over Financial Reporting

The report of Pinnacle Financial's management on Pinnacle Financial's internal control over financial reporting begins on page 78 of this Annual Report on Form 10-K. The report of Pinnacle Financial's independent registered public accounting firm on Pinnacle Financial's internal control over financial reporting is set forth on page 80 of this Annual Report on Form 10-K.

Changes in Internal Controls

There were no changes in Pinnacle Financial's internal control over financial reporting during Pinnacle Financial's fiscal quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, Pinnacle Financial's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The responses to this Item will be included in Pinnacle Financial's Proxy Statement for the Annual Meeting of Shareholders to be held April 21, 2020 under the headings "Corporate Governance-Code of Conduct," "Proposal #1 Election of Directors-Audit Committee," "Proposal #1 Election of Directors," "Information About Our Executive Officers," and "Delinquent Section 16(a) Reports" and are incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The responses to this Item will be included in Pinnacle Financial's Proxy Statement for the Annual Meeting of Shareholders to be held April 21, 2020 under the headings "Proposal #1 Election of the Directors-Director Compensation" and "Executive Compensation" and are incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The response to this Item regarding security ownership of certain beneficial owners and management will be included in Pinnacle Financial's Proxy Statement for the Annual Meeting of Shareholders to be held April 21, 2020 under the heading, "Security Ownership of Certain Beneficial Owners and Management" and is incorporated herein by reference.

The following table summarizes information concerning Pinnacle Financial's equity compensation plans at December 31, 2019:

| Plan Category | Number of Securities to be Issued upon Exercise of Outstanding Options, Plan CategoryWeighted Average Exercis Price of Outstanding Option Warrants and Rights (1) | | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in First Column) | | |
|--|--|-----|--|--|--|
| Equity compensation plans approved by shareholders: | | | | | |
| 2014 Equity Incentive Plan | 401,389 | — | | | |
| 2018 Omnibus Equity Incentive Plan | 472,516 | _ | 1,228,939 | | |
| Equity compensation plans not approved by shareholders | N/A | N/A | N/A | | |
| Total | 873,905 | \$ | 1,228,939 | | |

- (1) Includes 472,516 and 401,389 performance-based restricted stock units under the 2018 Plan and the 2014 Plan, respectively. Performance-based restricted stock units do not have an exercise price because their value is dependent upon continued employment over a period of time or the achievement of certain performance goals, and are to be settled for shares of common stock. Accordingly, they have been disregarded for purposes of computing the weighted-average exercise price.
- (2) All of CapitalMark's outstanding stock options vested upon consummation of the CapitalMark merger and were converted into options to purchase shares of Pinnacle Financial's Common Stock. 119,274 shares of Pinnacle Financial's common stock remain subject to outstanding options issued to the CapitalMark option holders and the weighted average exercise price of those options is \$23.45.
- (3) In connection with the BNC Merger, the Company assumed and subsequently amended and restated the BNC Bancorp 2013 Stock Incentive Plan. No options, warrants, rights or restricted stock units are outstanding under this plan, and 8,038 shares remained available for issuance thereunder as of December 31, 2019.

ITEM 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The responses to this Item will be included in Pinnacle Financial's Proxy Statement for the Annual Meeting of Shareholders to be held April 21, 2020 under the headings, "Certain Relationships and Related Transactions," and "Corporate Governance-Director Independence" and are incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The responses to this Item will be included in Pinnacle Financial's Proxy Statement for the Annual Meeting of Shareholders to be held April 21, 2020 under the heading, "Independent Registered Public Accounting Firm" and are incorporated herein by reference.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

| Exhibit No. | Description |
|-------------|--|
| 2.1† | Agreement and Plan of Merger by and among Pinnacle Financial Partners, Inc., BNC Bancorp and Blue Merger Sub, Inc., dated as of January 22, 2017, incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on January 23, 2017. |
| 3.1 | Amended and Restated Charter, as amended (restated for SEC filing purposes only), incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 18, 2018. |
| 3.2 | Second Amended and Restated Bylaws of Pinnacle Financial Partners, Inc., effective as of October 17, 2017, incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on October 20, 2017. |
| 4.1.1 | Specimen Common Stock Certificate, incorporated herein by reference to Exhibit 4.1 to Amendment No. 1 to the Company's Registration Statement on Form SB-2 filed on July 12, 2000. |
| 4.1.2 | See Exhibits 3.1 and 3.2 for provisions of the Charter and Bylaws defining rights of holders of the Common Stock. |
| 4.2 | Description of the Company's Securities.* |
| 4.3 | Form of 4.875% Fixed-to-Floating Rate Subordinated Note due July 30, 2025, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on August 5, 2015. |
| 4.4 | Form of 5.25% Fixed-to-Floating Rate Subordinated Note due November 16, 2026, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 18, 2016. |
| 4.5 | Subordinated Indenture, dated as of September 11, 2019, between Pinnacle Financial Partners, Inc. and U.S. Bank National Association, as trustee, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on September 11, 2019. |
| 4.6 | First Supplemental Indenture, dated as of September 11, 2019 between Pinnacle Financial Partners, Inc. and U.S. Bank National Association, as trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, filed on September 11, 2019. |
| 4.7 | Form of 4.125% Fixed-to-Floating Rate Subordinated Note due 2029 (included as Exhibit A in Exhibit 4.6 hereto). |
| 4.8 | Pinnacle Financial is a party to certain agreements entered into in connection with the offering or assumption of its subordinated debentures and certain of its subordinated indebtedness, in each case as more fully described in this Annual Report on Form 10-K. In accordance with Item 601(b)(4)(iii) of Regulation S-K and because no issuance of any such indebtedness is in excess of 10% of Pinnacle Financial's total assets, Pinnacle Financial has not filed the various documents and agreements associated with such indebtedness herewith. Pinnacle Financial has, however, agreed to furnish copies of the various documents and agreements associated with such indebtedness to the Securities and Exchange Commission upon request. |
| 10.1# | Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and M. Terry Turner, dated as of January 1, 2008, incorporated herein by reference to Exhibit 10.48 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on March 7, 2008. |
| 10.2# | Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Robert A. McCabe, Jr., dated as of January 1, 2008, incorporated herein by reference to Exhibit 10.49 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on March 7, 2008. |
| 10.3# | Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Hugh M. Queener, dated as of January 1, 2008, incorporated herein by reference to Exhibit 10.50 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on March 7, 2008. |
| 10.4# | Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Harold R. Carpenter, dated as of January 1, 2008, incorporated herein by reference to Exhibit 10.51 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on March 7, 2008. |
| 10.5# | Form of 2011TARP CRP Executive Officer Time Vested Restricted Stock Agreement, incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 19, 2011. |
| 10.6# | Pinnacle Financial Partners, Inc. Amended and Restated 2004 Equity Incentive Plan, effective as of April 20, 2004, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 20, 2012. |

| 10.7# | Amendment No. 1 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and M. Terry Turner, dated November 20, 2012, incorporated herein by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed on February 22, 2013. |
|--------|--|
| 10.8# | Amendment No. 1 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Robert A. McCabe, Jr., dated November 20, 2012, incorporated herein by reference to Exhibit 10.39 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed on February 22, 2013. |
| 10.9# | Amendment No. 1 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Hugh M. Queener, dated November 20, 2012, incorporated herein by reference to Exhibit 10.40 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed on February 22, 2013. |
| 10.10# | Amendment No. 1 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Harold R. Carpenter, dated November 20, 2012, incorporated herein by reference to Exhibit 10.41 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed on February 22, 2013. |
| 10.11# | Amendment No. 2 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and M. Terry Turner, incorporated herein by reference to Exhibit 10.40 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on February 25, 2014. |
| 10.12# | Amendment No. 2 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Robert A. McCabe, Jr., incorporated herein by reference to Exhibit 10.41 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on February 25, 2014. |
| 10.13# | Amendment No. 2 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Hugh M. Queener, incorporated herein by reference to Exhibit 10.42 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on February 25, 2014. |
| 10.14# | Amendment No. 2 to Amended Employment Agreement by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Harold R. Carpenter, incorporated herein by reference to Exhibit 10.43 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on February 25, 2014. |
| 10.15# | Amendment No. 1 to Pinnacle Financial Partners, Inc. 2004 Amended and Restated Equity Incentive Plan, incorporated herein by reference to Exhibit 10.45 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on February 25, 2014. |
| 10.16# | Pinnacle Financial Partners, Inc. 2014 Equity Incentive Plan, effective as of April 15, 2014, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 17, 2014. |
| 10.17# | Form of Named Executive Officers 2015 Performance Unit Award Agreement, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 27, 2015. |
| 10.18# | CapitalMark Bank & Trust Amended and Restated Stock Option Plan, effective as of July 31, 2015, incorporated herein by reference to Exhibit 4.4 to Post-Effective Amendment No. 1 to the Company's Registration Statement on Form S-8 filed August 10, 2015. |
| 10.19 | Loan Agreement by and between Pinnacle Financial Partners, Inc., as Borrower, and U.S. Bank National Association, as Lender, dated as of March 29, 2016, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 31, 2016. |
| 10.20# | Form of Pinnacle Financial Partners, Inc. 2016 Restricted Stock Award Agreement, incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 7, 2016. |
| 10.21# | Supplemental Executive Retirement Plan Agreement between Avenue Bank and Ronald Samuels, dated October 26, 2007, incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on July 7, 2016. |
| 10.22 | First Amendment to Loan Agreement by and between Pinnacle Financial Partners, Inc., as Borrower, and U.S. Bank National Association, as Lender, dated as of March 27, 2017, incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 5, 2017. |
| 10.23 | Second Amendment to Loan Agreement by and between Pinnacle Financial Partners, Inc., as Borrower, and U.S. Bank National Association, as lender, dated as of April 26, 2017, incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, filed on May 5, 2017. |
| 10.24# | Employment Agreement, effective as of June 16, 2017, by and among Pinnacle Bank, Pinnacle Financial Partners, Inc. and Richard D. Callicutt II, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 16, 2017. |

10.24# the Company's Current Report on Form 8-K filed June 16, 2017.

| 10.25# | Salary Continuation Agreement dated as of December 12, 2016, between Richard D. Callicutt II and Bank of North Carolina, incorporated herein by reference to Exhibit 10.1 to BNC Bancorp's Current Report on Form 8-K filed on December 16, 2016. |
|----------|---|
| 10.26# | BNC Bancorp 2013 Amended and Restated Omnibus Stock Incentive Plan, incorporated herein by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed June 16, 2017. |
| 10.27# | Form of Pinnacle Financial Partners, Inc. Named Executive Officer Performance Award Agreement, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed February 26, 2018. |
| 10.28# | Pinnacle Financial Partners, Inc. 2018 Omnibus Equity Incentive Plan, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 18, 2018. |
| 10.29 | Third Amendment to Loan Agreement dated as of March 27, 2018 by and between U.S. Bank National Association and Pinnacle Financial Partners, Inc., incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 1, 2018. |
| 10.30 | Fourth Amendment to Loan Agreement dated as of April 26, 2018 by and between U.S. Bank National Association and Pinnacle Financial Partners, Inc., incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on May 1, 2018. |
| 10.31# | Form of Directors Restricted Stock Agreement, incorporated herein by reference to Exhibit 10.40 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 7, 2018. |
| 10.32# | Form of Named Executive Officers Performance Unit Award Agreement, incorporated herein by reference to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 7, 2018. |
| 10.33# | Form of Associate Time-Vested Restricted Stock Agreement, incorporated herein by reference to Exhibit 10.42 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 7, 2018. |
| 10.34# | Form of Named Executive Officers 2019 Performance Unit Award Agreement, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 18, 2019. |
| 10.35# | Pinnacle Financial Partners, Inc. 2019 Annual Cash Incentive Plan, incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on January 18, 2019. |
| 10.36 | Fifth Amendment to Loan Agreement dated as of April 24, 2019 by and between U.S. Bank National Association and Pinnacle Financial Partners, Inc., incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 29, 2019. |
| 10.37 | Sixth Amendment to Loan Agreement dated as of July 1, 2019 by and between U.S. Bank National Association and Pinnacle Financial Partners, Inc., incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019, filed on August 2, 2019. |
| 10.38# | Form of Named Executive Officers 2020 Performance Unit Award Agreement, incorporated herein by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on January 24, 2020. |
| 10.39# | Pinnacle Financial Partners, Inc. 2020 Annual Cash Incentive Plan, incorporated herein by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed on January 24, 2020. |
| 10.40 | Amended and Restated Limited Liability Company Agreement of Bankers Healthcare Group, LLC, dated March 1, 2016, incorporated herein by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K filed on March 4, 2016. |
| 21.1* | Subsidiaries of Pinnacle Financial Partners, Inc. |
| 23.1* | Consent of Crowe LLP |
| 31.1* | Certification pursuant to Rule 13a-14(a)/15d-14(a) |
| 31.2* | Certification pursuant to Rule 13a-14(a)/15d-14(a) |
| 32.1** | Certification pursuant to 18 USC Section 1350 - Sarbanes-Oxley Act of Certification pursuant to 18 USC Section 1350 - Sarbanes-Oxley Act of 2002 |
| 32.2** | Certification pursuant to 18 USC Section 1350 - Sarbanes-Oxley Act of 2002 |
| 101.INS* | Inline XBRL Instance Document |
| 101.SCH* | Inline XBRL Schema Documents |
| 101.CAL* | Inline XBRL Calculation Linkbase Document |
| 101.LAB* | Inline XBRL Label Linkbase Document |
| 101.PRE* | Inline XBRL Presentation Linkbase Document |
| 101.DEF* | Inline XBRL Definition Linkbase Document |
| | |

The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL (included in Exhibit 101)

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- As directed by Item 601(a)(5) of Regulation S-K, certain schedules and exhibits to this exhibit are omitted from this t filing. The Company agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.
- # Management contract or compensatory plan or arrangement.
- Filed herewith. *
- ** Furnished herewith.

(c) Schedules to the consolidated financial statements are omitted, as the required information is not applicable.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of 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.

PINNACLE FINANCIAL PARTNERS, INC

By: /s/ M. Terry Turner

M. Terry Turner President and Chief Executive Officer

Date: February 25, 2020

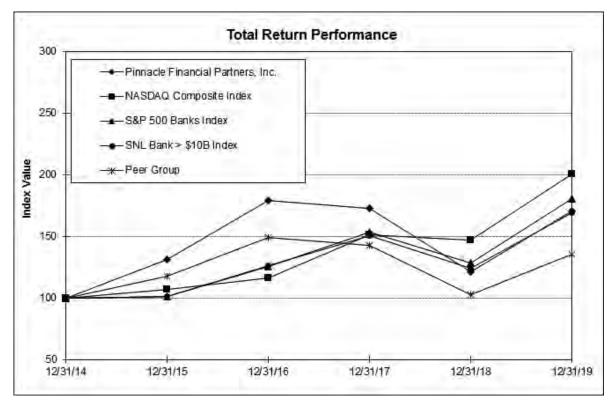
Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated. **SIGNATURES** TITLE DATE /s/ Robert A. McCabe, Jr. Chairman of the Board February 25, 2020 Robert A. McCabe, Jr. February 25, 2020 /s/ M. Terry Turner Director, President and Chief Executive Officer M. Terry Turner (Principal Executive Officer) /s/ Harold R. Carpenter Chief Financial Officer February 25, 2020 Harold R. Carpenter (Principal Financial Officer) /s/ Dana M. Sanders Principal Accounting Officer February 25, 2020 Dana M. Sanders /s/ Richard D. Callicutt Director, Chairman of the Carolinas and Virginia February 25, 2020 Richard D. Callicutt /s/ Abney S. Boxley February 25, 2020 Director Abney S. Boxley /s/ Charles E. Brock Director February 25, 2020 Charles E. Brock /s/ Renda J. Burkhart Director February 25, 2020 Renda J. Burkhart /s/ Gregory L. Burns Director February 25, 2020 Gregory L. Burns /s/ Marty G. Dickens February 25, 2020 Director Marty G. Dickens /s/ Thomas C. Farnsworth, III February 25, 2020 Director Thomas C. Farnsworth, III /s/ Joseph Galante Director February 25, 2020 Joseph Galante /s/ Glenda Baskin Glover Director February 25, 2020 Glenda Baskin Glover /s/ David B. Ingram Director February 25, 2020 David B. Ingram /s/ Ronald L. Samuels February 25, 2020 Director Ronald L. Samuels February 25, 2020 /s/ Gary Scott Director Gary Scott /s/ Thomas R. Sloan Director February 25, 2020 Thomas R. Sloan /s/ Reese L. Smith, III February 25, 2020 Director Reese L. Smith, III /s/ G. Kennedy Thompson February 25, 2020 _____ Director G. Kennedy Thompson

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STOCKHOLDER RETURN PERFORMANCE GROWTH

Set forth below is a line graph comparing the yearly percentage change in the cumulative total shareholder return on the Company's Common Stock against the cumulative total return of the NASDAQ Composite Index, the S&P 500 Banks Index, a peer group consisting of Southeastern banks with an asset size between \$15 billion and \$30 billion as of September 30, 2019, and the SNL Bank greater than \$10 Billion index for the period commencing on December 31, 2014 and ending December 31, 2019 (the "Measuring Period"). The graph assumes that the value of the investment in the Company's Common Stock and each index was \$100 on December 31, 2014. The change in cumulative total return is measured by dividing the sum of the cumulative amount of dividends for the measurement period, assuming dividend reinvestment, and the change in share price between the beginning and end of each Measuring Period by the share price at the beginning of the Measuring Period. Cash dividends may impact the cumulative returns of the indices.

Cumulative Total Returns⁽¹⁾ Comparison of PINNACLE FINANCIAL PARTNERS, INC. NASDAQ COMPOSITE INDEX, PEER GROUP⁽²⁾, S&P 500 BANK INDEX, SNLBank >\$10B Index⁽³⁾



(1) Assumes \$100 invested on December 31, 2014 in Pinnacle Financial Partners, Inc. Common Stock (PNFP) and the five indices noted above.

(2) The peer group consists of Southeast Banks between \$15 billion and \$30 billion as of September 30, 2019. The peer group was developed by S&P Global Market Intelligence and is a composite of 8 banking institutions headquartered in the United States.

(3) SNL > \$10 Billion Index includes all major exchange banks in SNL's coverage universe withassets greater than \$10 billion as of September 30, 2019.

BOARD OF DIRECTORS

ABNEY S. BOXLEY, III President, East Region Summit Materials, Inc.

CHARLES E. BROCK President Brock Partnerships, LLC

RENDA BURKHART Founder and President Burkhart & Company, P.C.

GREGORY L. BURNS President Gregory Burns Consulting Group, LLC

RICHARD D. CALLICUTT, II Chairman, Carolinas and Virginia Pinnacle Financial Partners, Inc. MARTY G. DICKENS Retired Regional Executive BellSouth/AT&T Tennessee

THOMAS C. FARNSWORTH, III President and Owner Farnsworth Investment Company

JOSEPH C. GALANTE Retired Chairman Sony Music. Nashville

GLENDA BASKIN GLOVER, PH.D., JD, CPA President Tennessee State University

DAVID B. INGRAM Chairman Ingram Entertainment, Inc. **ROBERT A. MCCABE, JR.** Chairman Pinnacle Financial Partners, Inc.

RONALD L. SAMUELS Retired Vice Chairman Pinnacle Financial Partners, Inc.

GARY L. SCOTT Retired Chairman and Chief Executive Officer Mid-America Bancshares, Inc. and PrimeTrust Bank

THOMAS R. SLOAN Past Chairman Bank of North Carolina and BNC Bancorp

REESE L. SMITH, III

President Haury & Smith Contractors, Inc.

G. KENNEDY THOMPSON Retired Partner/Co-head, Banking and Credit Aquiline Capital Partners, LLC

M. TERRY TURNER President and Chief Executive Officer Pinnacle Financial Partners, Inc.

SENIOR LEADERSHIP TEAM

RICHARD A. ARTHUR Executive Vice President, Consumer and Small Business

RICHARD D. CALLICUTT, II Chairman, Carolinas and Virginia

HAROLD R. CARPENTER Chief Financial Officer ROBERT GARCIA, JR. Atlanta President D. MICHAEL HAMMONTREE, JR.

Director, Corporate Services **TIMOTHY H. HUESTIS** Chief Credit Officer

D. KIM JENNY Chief Risk Officer SARAE JANES LEWIS Director, Associate and Client Experience

ROBERT A. MCCABE, JR. Chairman

HUGH M. QUEENER Chief Administrative Officer DANA M. SANDERS Chief Audit Executive

M. TERRY TURNER President and Chief Executive Officer

RANDALL L. WITHROW Chief Information Officer

LEADERSHIP TEAM

DAVID ALLEN SUSAN ROGERS APPLE KIRK BAILEY SAMMY BALLESTEROS **GERRY BARBER** DAVE BAUKEMA SAM BELK JOHN CANNON MARK CARLTON **RON CARTER** KENT CLEAVER GARY COLLIER PAIGE COLLIER DOUG DAUGHERTY **KEITH DAVIS** MIKE DISTEFANO KENNY DYER KATIE ELDER ROB FLLENBURG DALE FLOYD

LISA FOLEY MARY GARCIA **BRIAN GILBERT** JIM GOING **ERICH HAMM** JERRY HAMPTON **KAREN HARGIS** PATTI HARRIS CLAY HART MIKE HENDREN CRAIG HOLLEY STEWART HOLMES DAVID HOPPENWORTH DAVID JAMES MAC JOHNSTON **BILL JONES** ROSS KINNEY **GLENN LAYNE** MORGAN LYONS REID MARKS

HEATHER MATKINS PHILLIP MAY **KEVIN MCDERMOTT BLAIR MILLER** ANDY MOATS RYAN MURPHY **RICK NEAL** PAUL NEIL JACK NELSON RANDY NICELY ROGER OSBORNE **DIANNE PORTER** PAT PRITCHARD LISA REID **ROBERT ROGERS** ERIK SANFORD BOB SCARBOROUGH MARY SCHNEIDER LINDA SEIRER GARY SHAFFFR

MELANIE SHAFFER **TED SIMPSON** DAVID SPENCER CATHERINE STALLINGS ED STEIN PHIL STEVENSON HERMAN STRICKLAND DAN STUBBLEFIELD JAMIE SWEENEY MICHELLE SWEENEY SARAH SANDERS TEAGUE MISSY WALLEN **KEVIN WATSON** LARRY WHISENANT ED WHITE HARVEY WHITE DAVID WILLINGHAM GREG WINKLER IFREMY YEAGLE SUMMER YEISER



Pinnacle Financial Partners

150 Third Avenue South, Suite 900 Nashville, TN 37201

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