UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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FORM 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 1		
For the fiscal	year ended Dece	ember 31, 2019
☐ TRANSITION REPORT PURSUANT TO SECTI	ON 13 OR 15(d)	OF THE SECURITIES EXCHANGE ACT OF 1934
For the trans	sition period from	to
Commissi	ion file number:	001-35913
		OLDINGS, INC. ified in its charter)
Pennsylvania		20-4929029
(State or other jurisdiction of incorporation or organiza	tion)	(I.R.S. Employer Identification No.)
	One Oxford Cent	tre
301 G	Frant Street, Sui	te 2700
Pittsbu	rgh, Pennsylvan	ia 15219
(Address o	of principal execu	tive offices)
	(Zip Code)	
	(412) 304-0304	
(Registrant's tele	ephone number, inc	eluding area code)
Securities registered	d pursuant to Sec	tion 12(b) of the Act:
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, no par value	TSC	The Nasdaq Stock Market
Depositary Shares, Each Representing a 1/40th Interest in a Share of 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock	TSCAP	The Nasdaq Stock Market
Depositary Shares, Each Representing a 1/40th Interest in a Share of 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock	TSCBP	The Nasdaq Stock Market
Securities registered p	ursuant to section	12(g) of the Act: None
Indicate by check mark if the registrant is a well-known se	easoned issuer, as	defined in Rule 405 of the Securities Act.
Indicate by check mark if the registrant is not required to t	file reports pursua	ant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1 Act of 1934 during the preceding 12 months (o.			
been subject to such filing requirements for the	past 90 days.		Yes No
Indicate by check mark whether the registrant has to Rule 405 of Regulation S-T (§ 232.405) during submit such files).			
Indicate by check mark whether the registrant is company, or an emerging growth company. See than different growth company in Rule 12b-2	he definitions of "large accelerated f		
Large accelerated filer		Accelerated filer	×
Non-accelerated filer		Smaller reporting company	
		Emerging growth company	
If an emerging growth company, indicate by chewith any new or revised financial accounting st			period for complying
Indicate by check mark whether the registrant i	s a shell company (as defined in Ru	ale 12b-2 of the Exchange Act).	☐ Yes 🗷 No
As of June 30, 2019, the aggregate market valushare of the registrant's common stock as report		•	O 1
As of January 31, 2020, there were 29,683,773	shares of the registrant's common	stock, no par value, outstanding.	

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the proxy statement to be filed with the Securities and Exchange Commission no later than April 29, 2020, for the annual shareholders meeting to be held on or around May 19, 2020, are incorporated by reference into Part III.

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These forward-looking statements reflect our current views with respect to, among other things, future events and our financial performance, as well as our goals and objectives for future operations, financial and business trends, business prospects and management's outlook or expectations for earnings, revenues, expenses, capital levels, liquidity levels, asset quality or other future financial or business performance, strategies or expectations. These statements are often, but not always, made through the use of words or phrases such as "achieve," "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "maintain," "may," "opportunity," "outlook," "plan," "potential," "predict," "projection," "seek," "should," "sustain," "target," "trend," "will, "will likely result," and "would," or the negative version of those words or other comparable of a future or forward-looking nature. These forward-looking statements are not historical facts, and are based on current expectations, estimates and projections about our industry, and beliefs of assumptions made by management, many of which, by their nature, are inherently uncertain. Although we believe that the expectations reflected in these forward-looking statements are reasonable as of the date made, actual results may prove to be materially different from the results expressed or implied by the forward-looking statements. Accordingly, we caution you that any such forward-looking statements are not guarantees of future performance and are subject to risks, assumptions and uncertainties that change over time and are difficult to predict, including, but not limited to, the following:

- deterioration of our asset quality;
- our ability to prudently manage our growth and execute our strategy, including the successful integration of past and future acquisitions and our ability to fully realize the cost savings and other benefits of our acquisitions, manage risks related to business disruption following those acquisitions, and customer disintermediation;
- possible loan losses and changes in the value of collateral securing our loans;
- possible changes in the speed of loan prepayments by customers and loan origination or sales volumes;
- business and economic conditions generally and in the financial services industry, nationally and within our local market area;
- changes in management personnel;
- our ability to maintain important deposit customer relationships, our reputation and otherwise avoid liquidity risks;
- our ability to provide investment management performance competitive with our peers and benchmarks;
- operational risks associated with our business, including cyber-security related risks;
- volatility and direction of market interest rates;
- increased competition in the financial services industry, particularly from regional and national institutions;
- negative perceptions or publicity with respect to any products or services we offer;
- adverse judgments or other resolution of pending and future legal proceedings, and cost incurred in defending such proceedings;
- changes in the laws, rules, regulations, interpretations or policies relating to financial institutions, accounting, tax, trade, monetary and fiscal matters;
- our ability to comply with applicable capital and liquidity requirements, including our ability to generate liquidity internally or raise capital on favorable terms;
- regulatory limits on our ability to receive dividends from our subsidiaries and pay dividends to shareholders;
- changes and direction of government policy towards and intervention in the U.S. financial system;
- natural disasters and adverse weather, acts of terrorism, cyber-attacks, an outbreak of hostilities or other international or domestic calamities, and other matters beyond our control; and
- other factors that are discussed in the section entitled "Risk Factors," in Part I Item 1A.

The foregoing factors should not be construed as exhaustive and should be read together with the other cautionary statements included in this document. If one or more events related to these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may differ materially from what we anticipate. Accordingly, you should not place undue reliance on any such forward-looking statements. Any forward-looking statement speaks only as of the date on which it is made, and we do not undertake any obligation to update or review any forward-looking statement, whether as a result of new information, future developments or otherwise. New factors emerge from time to time, and it is not possible for us to predict which will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

ITEM 1. BUSINESS

Overview

TriState Capital Holdings, Inc. ("we," "us," "our," the "holding company," the "parent company," or the "Company") is a bank holding company headquartered in Pittsburgh, Pennsylvania. The Company has three wholly owned subsidiaries: TriState Capital Bank (the "Bank"), a Pennsylvania chartered bank; Chartwell Investment Partners, LLC ("Chartwell"), a registered investment advisor; and Chartwell TSC Securities Corp. ("CTSC Securities"), a registered broker/dealer. Through our bank subsidiary we serve middle-market businesses in our primary markets throughout the states of Pennsylvania, Ohio, New Jersey and New York and we also serve high-networth individuals on a national basis through our private banking channel. We market and distribute our banking products and services through a scalable branchless banking model, which creates significant operating leverage throughout our business as we continue to grow. Through our investment management subsidiary, we provide investment management services primarily to institutional investors, mutual funds and individual investors on a national basis. Our broker/dealer subsidiary, CTSC Securities, supports the marketing efforts for Chartwell's proprietary investment products.

We operate two reportable segments: Bank and Investment Management.

- The Bank segment provides commercial banking products and services to middle-market businesses and private banking products and services to high-net-worth individuals through the Bank. Total assets of the Bank were \$7.69 billion as of December 31, 2019.
- The Investment Management segment provides investment management services primarily to institutional investors, mutual funds and individual investors through Chartwell and also supports marketing efforts for Chartwell's proprietary investment products through CTSC Securities. Assets under management of Chartwell were \$9.70 billion as of December 31, 2019.

For additional financial information by segment, refer to Note 24, Segments, to our consolidated financial statements.

Our Business Strategy

Our success has been built upon the vision and focus of our executive management team to combine the sophisticated products, services and risk management efforts of a large financial institution with the personalized service of a community bank. We believe that a results-based culture, combined with a well-managed middle-market and private banking business, and our targeted investment management business, will continue to grow and generate attractive returns for shareholders. The following are the key components of our business strategies:

Our Sales and Distribution Culture. We focus on efficient and profitable sales and distribution of investment management services and banking products and services to middle-market businesses and private banking clients. Our relationship managers and distribution professionals have significant experience in the banking and financial services industries and are focused on client service. In our banking business, we monitor net interest income contribution, loan and deposit growth, and asset quality by market and by relationship manager. Our compensation program is designed within our banking business to incentivize our regional presidents and relationship managers to prudently grow their loans, deposits and profitability, while maintaining strong asset quality. In our investment management business, our compensation program is designed to incentivize new assets under management while maximizing the retention of existing clients and exceeding benchmark investment performance.

Disciplined Risk Management. We place a strong emphasis on effective risk management as an integral component of our organizational culture. We use our risk management infrastructure to monitor existing operations, support decision-making and improve the success rate of existing products and services as well as new initiatives. A major part of our risk management effort has been our focus on increasing non-interest income, including the expansion of our investment management business through acquisitions. In our banking business, this has also included our focus on growing loans originated through our private banking channel. We believe these loans have lower credit risk because they are typically secured by readily liquid collateral, such as marketable securities, and/or are personally guaranteed by high-net-worth borrowers. In addition, we mitigate risk associated with these loans through active daily monitoring of the collateral, utilizing our proprietary technology.

Experienced Professionals. Having successful and high quality professionals is critical to continuing to drive prudent growth in our business. In addition to our experienced executive management team and board of directors, we employ highly experienced personnel across our entire organization. Our commercial and private banking presidents as well as our regional banking presidents have an average of more than 30 years of banking experience and our middle-market and private banking relationship managers have an average of over 20 years of banking experience. Chartwell's mission is successfully executed through the dedication of investment professionals who

average over 20 years of industry experience. We believe that our distinct business model, culture, and scalable platform enable us to attract and retain high quality professionals. Additionally, our low overhead costs give us the financial capability to attract and incentivize qualified professionals who desire to work in an entrepreneurial and results-oriented organization.

Efficient and Scalable Operating Model. With respect to our banking business, we believe our branchless banking model gives us a competitive advantage by eliminating the overhead and intense management requirements of a traditional branch network. Moreover, we believe that we have a scalable platform and organizational infrastructure that positions us to grow our revenue more rapidly than our operating expenses. We also believe that our investment management business has an efficient and scalable business model that focuses on institutional direct clients and wholesale distribution channels to reach retail investors.

Lending Strategy. We generate loans through our middle-market banking and private banking channels. These channels provide risk diversification and offer significant growth opportunities.

- *Middle-Market Banking Channel*. Our middle-market banking channel primarily targets businesses with revenues between \$5.0 million and \$300.0 million located within our primary markets. To capitalize on this opportunity, each of our representative offices is led by an experienced regional president so we can understand the unique borrowing needs of the middle-market businesses in their area. They are supported by highly experienced relationship managers with reputations for success in targeting middle-market business customers and maintaining strong credit quality within their loan portfolios.
- Private Banking Channel. We provide loan products and services nationally to executives and high-net-worth individuals most of whom we source through referral relationships with independent broker/dealers, wealth managers, family offices, trust companies and other financial intermediaries. Our private banking products primarily include loans secured by cash and/or marketable securities. The Company also originates loans secured by cash value life insurance and other asset-based loans. Our relationship managers have cultivated referral arrangements with 213 financial intermediaries. Under these arrangements, the financial intermediaries are able to refer their clients to us for responsive and sophisticated banking services. We believe many of our referral relationships with these intermediaries also create cross-selling opportunities with respect to our deposit products and our investment management business. Since inception, we have had no charge-offs related to our loans secured by cash, marketable securities and/or cash value life insurance.

As shown in the following table, we have continued to achieve loan growth through both of our banking channels. As of December 31, 2019, loans and leases sourced through our middle-market banking channel were \$2.88 billion, or 43.8% of our loans held-for-investment.

As of December 31, 2019, loans sourced through our private banking channel were \$3.70 billion, or 56.2% of our loans held-for-investment, of which \$3.60 billion, or 97.4%, were secured by cash, marketable securities and/or cash value life insurance. We expect continued strong loan and deposit growth in this channel, in part, because we added 24 new loan referral relationships during the year ended December 31, 2019, for a total of 213 referral relationships at the end of 2019. We have also experienced continued growth in the number of customers resulting from our existing referral relationships.

	December 31,				2019 Change from 2018		
(Dollars in thousands)		2019	2018		Amount	Percent	
Middle-market banking offices:							
Western Pennsylvania	\$	765,461 \$	617,033	\$	148,428	24.1%	
Eastern Pennsylvania		644,483	423,583		220,900	52.2%	
Ohio		460,701	378,818		81,883	21.6%	
New Jersey		487,496	432,109		55,387	12.8%	
New York		524,016	411,787		112,229	27.3%	
Total middle-market banking loans		2,882,157	2,263,330		618,827	27.3%	
Total private banking loans		3,695,402	2,869,543		825,859	28.8%	
Loans and leases held-for-investment	\$	6,577,559 \$	5,132,873	\$	1,444,686	28.1%	

Deposit Funding Strategy. Since inception, we have focused on creating and growing a branchless, diversified, stable, and low all-in cost deposit channels, both in our primary markets and across the United States. As of December 31, 2019, we consider approximately 88% of our total deposits to be sourced from direct customer relationships. We believe our sources of deposits continue to provide excellent opportunities for growth both within our primary markets and nationally.

We take a multi-faceted approach to our deposit growth strategy. We believe our relationship managers are an integral part of this approach and, accordingly, we measure and incentivize them to increase the deposits associated with their relationships. We have relationship

managers who are specifically dedicated to deposit generation and treasury management, and we plan to continue adding such professionals as appropriate to support our growth. Additionally, we believe that our financial performance and our products and services, which are targeted to our markets, enhance our growth of cost-effective deposits.

Investment Management Strategy. We will continue to execute on our investment management strategy of selectively acquiring other investment management assets that complement Chartwell's business, as evidenced by the Columbia acquisition in 2018. We believe that this segment has and will continue to enhance our recurring fee revenue, provide new product offerings for our national network of financial intermediaries, and leverage our financial services distribution capabilities through the financial intermediaries with which our banking business has worked and developed.

Our Markets

For our middle-market banking business, our primary markets of Pennsylvania, Ohio, New Jersey and New York include the four major metropolitan statistical areas ("MSA") of Pittsburgh and Philadelphia, Pennsylvania; Cleveland, Ohio and New York (which includes northern New Jersey). We believe that our primary markets including these MSAs are long-term, attractive markets for the types of products and services that we offer, and we anticipate that these markets will continue to support our projected growth. With respect to our loans and other financial services and products, we selected the locations for our representative offices partially based upon the number of middle-market businesses located in these MSAs and their respective states. According to SNL Financial, as of December 31, 2019, there were nearly 84,000 middle-market businesses in our primary markets with annual sales between \$5.0 million and \$300.0 million, which represented approximately 18% of the national total as of that date. The 2019 aggregate population of the four MSAs in which our headquarters and four representative offices are located was approximately 30 million, which represented approximately 10% of the national population. We believe that the population and business concentrations within our primary markets provide attractive opportunities to grow our business.

In addition to middle-market businesses in our primary markets, our private banking business also serves high-net-worth individuals on a national basis. We primarily source this business through referral relationships with independent broker/dealers, wealth managers, family offices, trust companies and other financial intermediaries. We view our product offerings as being most appealing to those households with \$500,000 or more in net worth (not including their primary residence).

Through our distribution channels, we pursue and create deposit relationships, including treasury management relationships, with customers in our primary markets and throughout the United States. Because our deposit operations are centralized in our Pittsburgh headquarters all of our deposits are aggregated and accounted for in that MSA. For these distribution and reporting reasons, we do not consider deposit market share in any MSA or any of our primary markets to be relevant data. However, for perspective on the size of the deposit markets in which we have offices, the total aggregate domestic deposits of banks headquartered within the four MSAs were approximately \$1.6 trillion as of December 31, 2019, according to SNL Financial.

Our investment management products are primarily distributed in two markets. These markets and their relative percentage of our assets under management as of December 31, 2019, were as follows: institutional and sub-advisory (74%) and broker/dealers and registered investment advisors (26%).

Institutional and Sub-Advisory. Chartwell maintains a dedicated sales and client service staff to focus on the distribution of its products to a wide variety of institutional and sub-advisory clients, including corporate pension and profit-sharing plans, public pension plans, Taft-Hartley plans, foundations, endowments and registered investment companies. As of December 31, 2019, assets under management in the institutional and sub-advisory market included \$3.19 billion in equity products and \$4.02 billion in fixed-income products.

Broker/Dealer and Independent Registered Investment Advisors. Chartwell maintains sales staff dedicated to calling on national, regional and independent broker/dealers and registered investment advisors. Broker/dealers and registered investment advisors use Chartwell's products to meet the needs of their customers, who are typically retail and/or high-net-worth investors. As of December 31, 2019, assets under management in the broker/dealer and independent registered investment advisor market included \$1.70 billion in equity products and \$792.0 million in fixed-income products.

Our Products and Services

We offer our clients an array of products and services, including loan and deposit products, cash management services, capital market services such as interest rate swaps and investment management products.

Our loan products include, among others, loans secured by cash, marketable securities, cash value life insurance, commercial and industrial loans, commercial real estate loans, personal loans, asset-based loans, acquisition financing, and letters of credit. Our deposit products include, among others, checking accounts, money market deposit accounts, certificates of deposit, and Promontory's Certificate of Deposit

Account Registry Service® ("CDARS®") and Insured Cash Sweep® ("ICS®") services. Our liquidity and treasury management services include online balance reporting, online bill payment, remote deposit, liquidity services, wire and ACH services, foreign exchange and controlled disbursement. Our investment management business provides equity and fixed income advisory and sub-advisory services to third party mutual funds, series trust mutual funds, and to separately managed accounts for a spectrum of clients, but primarily focused on ultra-high-net-worth and institutional clients, including corporations, ERISA plans, Taft-Hartley funds, municipalities, endowments and foundations. We expect to continue to develop and implement additional products for our clients, including additional investment management product offerings to our financial intermediary referral sources.

More information about our key products and services, including a discussion about how we manage our products and services within our overall business and enterprise risk strategy, is set forth below.

Loans and Leases

Our primary source of income in our Bank segment is interest on loans and leases. Our loan and lease portfolio primarily consist of loans to our private banking clients, commercial and industrial loans and leases, and real estate loans secured by commercial real estate properties. Our loan and lease portfolio represents the largest component of our earning assets.

The following table presents the composition of our loan and lease portfolio as of December 31, 2019.

(Dollars in thousands)		December 31, 2019	Percent of Loans	
Private banking loans	\$	3,695,402	56.2%	
Middle-market banking loans:				
Commercial and industrial		1,085,709	16.5%	
Commercial real estate		1,796,448	27.3%	
Total middle-market banking loans		2,882,157	43.8%	
Loans and leases held-for-investment	\$	6,577,559	100.0%	

Private Banking Loans. Our private banking loans include both personal and commercial loans sourced through our private banking channel, which operates on a national basis. These loans primarily consist of loans made to high-net-worth individuals, trusts and businesses that may be secured by cash, marketable securities, cash value life insurance or other financial assets and to a smaller degree, residential property. We also have a small number of unsecured loans and lines of credit in our private banking loan portfolio that have been made to creditworthy borrowers. The primary source of repayment for these loans is the income and assets of the borrowers. Since a majority of our private banking loans are secured by cash, marketable securities and/or cash value life insurance, we believe the credit risk inherent in this portfolio is lower than the risk associated with other types of loans. We mitigate such risks through active daily monitoring of the collateral, utilizing our proprietary technology.

Our private banking lines of credit predominantly are due on demand or have terms of 365 days or less. Our term loans (other than mortgage loans) in this category generally have maturities of three to five years. On an accommodative basis, we have made personal residential real estate loans consisting primarily of first and second mortgage loans for residential properties, including jumbo mortgages. Our residential mortgage loans typically have maturities of seven years or less. On a limited basis we originated mortgage loans with maturities of up to ten years and acquired other residential mortgages that had original maturities of up to 30 years. Our personal lines of credit typically have floating interest rates. We examine the personal cash flow and liquidity of our individual borrowers when underwriting our private banking loans not secured by cash, marketable securities and/or cash value life insurance. In some cases we require our borrowers to agree to maintain a minimum level of liquidity that will be sufficient to repay the loan.

The table below includes all loans made through our private banking channel by collateral type as of the date indicated.

(Dollars in thousands)	December 31, 2019		Percent of Private Banking Loans	Percent of Loans	
Private banking loans:					
Secured by cash, marketable securities and/or cash value life insurance	\$	3,599,198	97.4%	54.7%	
Secured by real estate		62,782	1.7%	1.0%	
Other		33,422	0.9%	0.5%	
Total private banking loans	\$	3,695,402	100.0%	56.2%	

Commercial and Industrial Loans and Leases. Our commercial and industrial loan and lease portfolio primarily includes loans and leases made to financial and other service companies or manufacturers generally for the purposes of financing production, operating capacity,

accounts receivable, inventory, equipment, acquisitions and recapitalizations. Cash flow from the borrower's operations is the primary source of repayment for these loans, except for certain commercial loans that are secured by marketable securities. The primary risks associated with commercial and industrial loans include a deterioration in cash flow, a decline in the value of collateral securing these loans, increased leverage and reduced liquidity. We work throughout the lending process to manage and mitigate such risks within our commercial and industrial loan portfolio.

Our commercial and industrial loans and leases include both working capital lines of credit and term loans. Working capital lines of credit generally have maturities ranging from one to five years. Availability under our commercial lines of credit is typically limited to a percentage of the value of the assets securing the line. Those assets typically include accounts receivable, inventory and equipment. Depending on the risk profile of the borrower, we may require periodic accounts receivable and payable aging, as well as borrowing base certificates representing borrowing availability after applying appropriate advance percentage rates to the collateral. Our commercial and industrial term loans and leases generally have maturities between three to five years, and typically do not extend beyond seven years. Our commercial and industrial lines of credit and term loans typically have floating interest rates.

The table below shows the composition of our commercial and industrial loan and lease portfolio by borrower industry as of December 31, 2019.

	Ι	December 31,	Percent of Commercial and	Percent of	
(Dollars in thousands)		2019	Industrial Loans	Loans	
Industry:					
Service	\$	466,793	43.0%	7.0%	
Real estate, rental and leasing		262,420	24.2%	3.9%	
Manufacturing		103,451	9.5%	1.6%	
Transportation and warehousing		50,056	4.6%	0.8%	
Information		35,125	3.2%	0.5%	
Construction		24,575	2.3%	0.4%	
Wholesale Trade		19,768	1.8%	0.3%	
Mining		16,755	1.5%	0.3%	
Retail Trade		10,494	1.0%	0.2%	
All others		96,272	8.9%	1.5%	
Total commercial and industrial loans and leases	\$	1,085,709	100.0%	16.5%	

Commercial Real Estate Loans. We concentrate on making commercial real estate loans to experienced borrowers that have an established history of successful projects. The cash flow from income-producing properties or the sale of property from for-sale construction and development loans are generally the primary sources of repayment for these loans. The equity sponsors of our borrowers generally provide a secondary source of repayment from their excess global cash flows and liquidity. The primary risks associated with commercial real estate loans include credit risk arising from the dependency of repayment upon income generated from the property securing the loan, the vulnerability of such income to changes in market conditions, and difficulty in liquidating collateral securing the loans. We work throughout the lending process to manage and mitigate such risks within our commercial real estate loan portfolio. The commercial real estate portfolio also includes loans secured by owner-occupied real estate and the primary source of repayment for these loans is cash flow from the borrower's operations.

Our commercial real estate loans are primarily made to borrowers with projects or properties located within our primary markets. Our relationship managers are experienced lenders who are familiar with the trends within their local real estate markets.

The table below shows the composition of our commercial real estate portfolio as of December 31, 2019.

(Dollars in thousands)	December 2019		Percent of Commercial Real Estate Loans	Percent of Loans
Commercial real estate loans:		2019	Estate Loans	Loans
	Ф	000 505	50.10/	12.50/
Income-producing property loans	\$	899,595	50.1%	13.7%
Owner-occupied loans		210,665	11.7%	3.2%
Multifamily/apartment loans		375,257	20.9%	5.7%
Construction loans		285,865	15.9%	4.3%
Land development loans		25,066	1.4%	0.4%
Total commercial real estate loans	\$	1,796,448	100.0%	27.3%

Loan and Lease Underwriting

Our focus on maintaining strong asset quality is pervasive through all aspects of our lending activities, and it is apparent in our loan and lease underwriting function. We are selective in targeting our lending to middle-market businesses, commercial real estate investors and developers, and high-net-worth individuals that we believe will meet our credit standards. Our credit standards are determined by our Credit Risk Policy Committee that is made up of senior bank officers, including our Chief Credit Officer, Chief Risk Officer, Bank President and Chief Executive Officer, President of Commercial Banking and President of Private Banking.

Our underwriting process is multilayered. Prospective loans are first reviewed by our relationship managers and regional presidents. The prospective commercial and certain private banking loans are then discussed in a pre-screen group composed of the Chief Credit Officer, Senior Credit Officer, President of Commercial Banking, President of Private Banking and all of our regional presidents. Applications for prospective loans that are accepted are fully underwritten by our credit administration group in combination with the relationship manager. Finally, the prospective loans are submitted to our Senior Loan Committee for approval, with the exception of certain loans that are fully secured by cash, marketable securities and/or cash value life insurance. Members of the Senior Loan Committee include our Chairman and Chief Executive Officer, Chief Financial Officer, Vice Chairman, Chief Credit Officer, Senior Credit Officer, Bank President and Chief Executive Officer, President of Commercial Banking, President of Private Banking and our regional presidents. All of our lending personnel, from our relationship managers to the members of our Senior Loan Committee, have significant experience that benefits our underwriting process.

We maintain high credit quality standards. Each credit approval, renewal, extension, modification or waiver is documented in written form to reflect all pertinent aspects of the transaction. Our underwriting analysis generally includes an evaluation of the borrower's business, industry, operating performance, financial condition and typically includes a sensitivity analysis of the borrower's ability to repay the loan. Our underwriting is conducted by our team of highly experienced portfolio managers.

Our lending activities are subject to internal exposure limits that restrict concentrations of loans within our portfolio to certain targets and maximums based on a percentage of total loan commitments and as a multiple of total risk-based capital. These exposure limits are approved by our Senior Loan Committee and our board of directors. Our internal exposure limits are established to avoid unacceptable concentrations in a number of areas, including in our different loan categories and in specific industries. In addition, we have established a preferred lending limit that is significantly lower than our legal lending limit.

Our loan portfolio includes Shared National Credits ("SNC"). Effective January 1, 2018, the bank regulatory agencies revised the SNC definition to increase the loan size from \$20 million or more to \$100 million or more and that are still shared by three or more financial institutions. We are typically part of the originating bank group in connection with these loan participations. We utilize the same underwriting criteria for these loans that we use for loans that we originate directly. These loans are to borrowers typically located within our primary markets and are generally made to companies that are known to us and with whom we have direct contact. We participate in the SNC loans of the financial intermediaries that refer private banking loans to us. These intermediaries are also a source of significant deposit balances. These loans have helped us to diversify the risk inherent in our loan portfolio by allowing us to access a broader array of corporations with different credit profiles, repayment sources, geographic footprints and with larger revenue bases than those businesses associated with our direct loans. Still, we are focused more on growing our direct loans than SNC loans. As of December 31, 2019, we had \$281.2 million of SNC loans compared to \$236.1 million as of December 31, 2018.

Loan and Lease Portfolio Concentrations

Geographic criteria. We focus on developing client relationships with companies that have headquarters and/or significant operations within our primary markets.

The table below shows the composition of our commercial loan and lease portfolios based upon the states where our borrowers are located. Loans and leases to borrowers located in our four primary market states made up 87.0% of our total commercial loans outstanding as of December 31, 2019. When those loans are aggregated with our loans to borrowers located in states that are contiguous to our primary market states, the percentage increases to approximately 92.4% of our commercial loan and lease portfolio. Loans in contiguous and other states include loans to the financial intermediaries that have substantial deposits with us, and are a referral source for private banking loans.

(Dollars in thousands)	December 31, 2019	Percent of Total Commercial Loans	
Geographic region of borrower:			
Pennsylvania	\$ 1,036,884	36.0%	
Ohio	473,427	16.4%	
New Jersey	482,653	16.7%	
New York	514,822	17.9%	
Contiguous states	156,124	5.4%	
Other states	218,247	7.6%	
Total commercial loans and leases	\$ 2,882,157	100.0%	

Diversified lending approach. We are committed to maintaining a diversified loan and lease portfolio. We also concentrate on making loans and leases to businesses where we have or can obtain the necessary expertise to understand the credit risks commonly associated with the borrower's industry. We generally avoid lending to businesses that would require a high level of specialized industry knowledge that we do not have.

Deposits

An important aspect of our business franchise is the ability to gather deposits and establish and grow meaningful relationships related to liquidity and treasury management customers. Deposits provide the primary source of funding for our lending activities. We offer traditional depository products including checking accounts, money market deposit accounts and certificates of deposit in addition to CDARS® and ICS® reciprocal products. We also offer cash management and treasury management services, including online balance reporting, online bill payment, remote deposit, liquidity services, wire and ACH services and collateral disbursement. Our deposits are insured by the Federal Deposit Insurance Corporation ("FDIC") up to statutory limits.

As of December 31, 2019, non-brokered deposits represented approximately 88.4% of our total deposits. Our non-brokered deposit sources primarily include deposits from financial institutions, high-net-worth individuals, family offices, trust companies, wealth management firms, corporations and their executives. We compete for deposits by offering a range of deposit products at competitive rates. We also attract deposits by offering customers a variety of cash management services. We maintain direct customer relationships with nearly all of our depositors that participate in CDARS® and ICS® reciprocal deposits.

The table below shows the balances of our deposit portfolio by type as of the dates indicated.

	December 31,				2019 Change from 2018		
(Dollars in thousands)	 2019		2018	Amount		Percent	
Non-brokered deposits:							
Noninterest-bearing checking accounts	\$ 356,102	\$	258,268	\$	97,834	37.9 %	
Interest-bearing checking accounts	1,274,859		740,733		534,126	72.1 %	
Money market deposit accounts	3,104,565		2,434,535		670,030	27.5 %	
Certificates of deposit	1,132,477		975,492		156,985	16.1 %	
Total non-brokered deposits	5,868,003		4,409,028		1,458,975	33.1 %	
Brokered deposits:							
Interest-bearing checking accounts	123,405		37,398		86,007	230.0 %	
Money market deposit accounts	322,180		347,335		(25,155)	(7.2)%	
Certificates of deposit	321,025		256,700		64,325	25.1 %	
Total brokered deposits	766,610		641,433		125,177	19.5 %	
Total deposits	\$ 6,634,613	\$	5,050,461	\$	1,584,152	31.4 %	
Non-brokered deposits to total deposits	88.49	6	87.3%	ó			

Investment Management Products

Chartwell Investment Partners manages \$9.70 billion in a variety of equity and fixed income investment styles, for over 250 institutional investors, mutual funds and individual investors as of December 31, 2019. A description of each investment style is provided below.

Equity Investment Strategies:

- Small Cap Value: Chartwell's Small Cap Value portfolio employs a traditional value style supplemented with both deep and relative value stocks. Our opportunity set is selected using multiple valuation yardsticks and focuses heavily on company valuation relative to history. Portfolio decisions result from business reviews assessing the prospects of erasing these valuation discounts with a focus on fundamental and event-driven catalysts which we believe the market should recognize. The portfolio aims to be well diversified across all economic sectors and exhibit better growth, profitability and financial strength characteristics than the small cap value benchmark. Our objective is to outperform small cap value benchmarks over the long term while producing lower risk scores versus peers.
- *Mid Cap Value*: Chartwell's Mid Cap Value portfolio employs a traditional value style supplemented with both deep and relative value stocks, similar to Chartwell's Small Cap Value strategy. Our objective is to outperform mid cap value benchmarks over the long term while producing lower risk scores versus peers.
- Small Cap Growth: Our Small Cap Growth portfolio invests in a select set of small growth oriented companies that have demonstrated strong increases in earnings per share. More significantly, we look to invest in companies that have historically continued to broaden, deepen and enhance their fundamental capabilities, competitive positions, product and service offerings and customer bases. Our plan is to invest in these companies for an intermediate time horizon. Our portfolios focus on a narrow set of such investments.
- *Mid Cap Growth:* Our Mid Cap Growth portfolio invests in a select set of mid-cap growth oriented companies, similar to Chartwell's Small Cap Growth strategy.
- *SMID Cap Growth:* For clients in our SMID Cap Growth portfolio we invest in a select set of growth oriented companies with small to mid-market caps focused on securities held in Chartwell's Small Cap Growth and Mid Cap Growth portfolios.
- U.S. Small Cap: The U.S. Small Cap portfolio integrates the efforts of our Small Cap Value and Small Cap Growth investment teams. The final portfolio is constructed as a bottom up residual of stock selection from the "best ideas" of both value and growth.
- Dividend Value: Our objective in managing the Dividend Value portfolio is to deliver investment returns that exceed that of the Russell 1000 Value by focusing on what we believe are undervalued stocks with above-average dividend yields. We seek long-term inflation protection by investing in stocks in the top 40% of the market ranked by dividend yield; companies that we believe are capable of consistent dividend growth; and stocks that we believe are undervalued with significant potential for capital appreciation during a full market cycle.
- Covered Call: Our objective in managing Chartwell's Covered Call strategy is to provide market-like returns in rising equity
 markets while earning superior returns in flat or down equity markets. We seek to attain this objective by combining a portfolio
 of higher dividend paying stocks which have valuations that do not properly reflect our view of their fundamentals and a
 disciplined call overwriting strategy. We join these two investment disciplines in an effort to create a lower volatility total return
 solution for clients.
- *Micro Cap Value*: Chartwell's Micro Cap Value strategy offers investors a diversified portfolio of small-cap stocks selected in accordance with the Chartwell's value style.

Fixed Income Investment Strategies:

• Intermediate/Core/Short Duration Fixed Income: Chartwell's philosophy of investment grade fixed income management stresses security selection, preservation of principal, and compounding of the income stream as keys to consistently add value in the bond market. We focus our research efforts in the corporate sector of the market. Because the return potential of any bond tends to be asymmetric - with limited capital appreciation potential, but considerably greater capital loss potential - Chartwell targets high quality credits with stable-to improving profiles.

Chartwell utilizes a disciplined value, bottom-up approach to the fixed income market, with emphasis on building the portfolio through individual security selection. Our goal is to reduce risk and volatility exposures through credit research; therefore,

duration shifts, sector swapping, interest rate bets and macroeconomic forecasting are not a central focus in our bottom-up process. Futures, options and other leveraged derivatives are not utilized in our credit central process.

- Core Plus Fixed Income: With flexibility to adjust to each client's specific guidelines, Chartwell's Core Plus product invests across both the U.S. Investment Grade and High Yield markets. By strategically expanding our credit-driven, valued-based opportunity set, the portfolio is able to take advantage of Chartwell's broad ranging corporate bond expertise and to benefit from the potential for increased income, total return and diversification.
- High Yield Fixed Income: Chartwell's philosophy of high yield bond management stresses preservation of principal and compounding of the income stream as keys to adding value in the high yield bond market. In evaluating investment candidates our perspective is that of a lender. We focus on the higher quality tiers of the market, which offer an attractive yield premium but a lower incidence of credit erosion relative to the market as a whole. Chartwell believes that the consistent application of high credit standards and strict trading disciplines is the most predictable route to outperformance in the high yield bond market.
- Short Duration BB-Rated High Yield Fixed Income: Chartwell's philosophy of high yield bond management stresses preservation of principal and compounding of the income stream as keys to adding value in the high yield bond market. Again, our focus is on the higher quality tiers of the market, which offer an attractive yield premium but a lower incidence of credit erosion relative to the market as a whole. We focus on duration of less than three years with maximum maturities of five years.

Balanced Investment Strategies:

• Conservative Allocation: The Conservative Allocation strategy is managed utilizing Chartwell's value-oriented security selection process and includes the Berwyn Income Fund as one of its main products. While the majority of funds managed under this strategy are invested in bonds, it may invest up to 30% of its assets in dividend-paying common stocks. We believe the fund's balanced, income-oriented approach may afford a greater level of price stability than an all equity portfolio.

Our total assets under management of \$9.70 billion increased \$512.0 million, or 5.6%, as of December 31, 2019, from \$9.19 billion as of December 31, 2018. We reported new business and new flows from existing accounts and acquired assets of \$1.11 billion and market appreciation of \$1.28 billion, partially offset by outflows of \$1.88 billion during the year ended December 31, 2019.

The following table shows the changes of our assets under management by investment style for the year ended December 31, 2019.

	Year Ended December 31, 2019								
(Dollars in thousands)		Beginning Balance	Inflows (1)		Market Appreciation Depreciation)	Ending Balance			
Equity investment styles	\$	3,419,000 \$	424,000	\$ (733,000) \$	822,000 \$	3,932,000			
Fixed income investment styles		4,263,000	550,000	(341,000)	344,000	4,816,000			
Balanced investment styles		1,507,000	139,000	(809,000)	116,000	953,000			
Total assets under management	\$	9,189,000 \$	1,113,000	\$ (1,883,000) \$	1,282,000 \$	9,701,000			

⁽¹⁾ Inflows consist of new business and contributions to existing accounts.

Competition

We operate in a very competitive industry and face significant competition for customers from bank and non-bank competitors, particularly regional and national institutions, in originating loans, attracting deposits and providing other financial services. We compete for loans and deposits based upon the personal and responsive service offered by our highly experienced relationship managers, access to management and interest rates. As a result of our low operating costs, we believe we are able to compete for customers with the competitive interest rates that we pay on deposits and that we charge on our loans.

Our management believes that our most direct competition for deposits comes from commercial banks, savings and loan associations, credit unions, money market funds and brokerage firms, particularly national and large regional banks, which target the same customers as we do. Competition for deposit products is generally based on pricing because of the ease with which customers can transfer deposits from one institution to another. Our cost of funds fluctuates with market interest rates and our ability to further reduce our cost of funds may be affected by higher rates being offered by other financial institutions. During certain interest rate environments, additional significant competition for deposits may be expected to arise from corporate and government debt securities and money market mutual funds.

⁽²⁾ Outflows consist of business lost as well as distributions from existing accounts.

Our competition in making commercial loans comes principally from national, regional and large community banks and insurance companies. Many large national and regional commercial banks have a significant number of branch offices in the areas in which we operate. Competition for our private banking loans is more limited than for commercial loans due largely to our niche offering of loans backed by cash, marketable securities and/or or cash value life insurance, which represent 55% of our entire loan portfolio. Aggressive pricing policies and terms of our competitors on middle-market and private banking loans may result in a decrease in our loan origination volume and a decrease in our yield on loans. We compete for loans principally through the quality of products and service we provide to middle-market customers and private banking referral relationships, while maintaining competitive interest rates, loan fees and other loan terms.

Our relationship-based approach to business also enables us to compete with other financial institutions in attracting loans and deposits. Our relationship managers and regional presidents have significant experience in the banking industry in the markets they serve and are focused on customer service. By capitalizing on this experience and by tailoring our products and services to the specific needs of our clients, we have been successful in cultivating stable relationships with our customers and also with financial intermediaries who refer their clients to us for banking services. We believe our approach to customer relationships will assist us in continuing to compete effectively for loans and deposits in our primary markets and nationally through our private banking channel.

The investment management business is intensely competitive. In the markets where we compete, there are over 1,000 firms which we consider to be primary competitors. In addition to competition from other institutional investment management firms, Chartwell, along with the active-management industry, competes with passive index funds, exchange traded funds ("ETFs") and investment alternatives such as hedge funds. We compete for investment management business by delivering excellent investment performance with a committed customer service model.

Employees

As of December 31, 2019, we had approximately 276 full-time equivalent employees (219 in our banking business and 57 in our investment management business).

Supervision and Regulation

The following is a summary of material laws, rules and regulations governing banks, investment management businesses and bank holding companies, but does not purport to be a complete summary of all applicable laws, rules and regulations. These laws and regulations may change from time to time and the regulatory agencies often have broad discretion in interpreting them. We cannot predict the outcome of any future changes to these laws, regulations, regulatory interpretations, guidance and policies, which may have a material and adverse impact on the financial markets in general, and our operations and activities, financial condition, results of operations, growth plans and future prospects.

General

The common stock and preferred stock of TriState Capital Holdings, Inc. is publicly traded and listed and, as a result, we are subject to securities laws and stock market rules, including oversight from the Securities and Exchange Commission ("SEC") and the Nasdaq Stock Market Rules. Banking is highly regulated under federal and state law. Regulation and supervision by the federal and state banking agencies are intended primarily for the protection of depositors, the Deposit Insurance Fund ("DIF") administered by the FDIC, consumers and the banking system as a whole, and not for the protection of our investors. We are a bank holding company registered under the Bank Holding Company Act of 1956, as amended, and are subject to supervision, regulation and examination by the Federal Reserve. TriState Capital Bank is a commercial bank chartered under the laws of the Commonwealth of Pennsylvania. It is not a member of the Federal Reserve System and is subject to supervision, regulation and examination by the Pennsylvania Department of Banking and Securities and the FDIC.

Our investment management business is subject to extensive regulation in the United States. Chartwell and CTSC Securities are subject to Federal securities laws, principally the Securities Act of 1933, the Investment Company Act, the Advisers Act, state laws regarding securities fraud and regulations promulgated by various regulatory authorities, including the SEC, Financial Industry Regulatory Authority ("FINRA"), applicable state laws and stock exchanges. Our investment management business also may be subject to regulation by the U.S. Commodity Futures Trading Commission ("CFTC") and the National Futures Association ("NFA"). Changes in laws, regulations or governmental policies, both domestically and abroad, and the costs associated with compliance, could materially and adversely affect our business, results of operations, financial condition and/or cash flows.

This system of supervision and regulation establishes a comprehensive framework for our operations. Failure to meet regulatory standards could have a material and adverse impact on our operations and activities, financial condition, results of operations, growth plans and future prospects.

Regulatory Developments

The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank"), enacted in 2010, has resulted in broad changes to the U.S. financial system where its provisions have resulted in enhanced regulation and supervision of the financial services industry. In May 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act ("EGRRCPA") was signed into law. While the EGRRCPA preserves the fundamental elements of the post Dodd-Frank regulatory framework, it includes modifications that are intended to result in meaningful regulatory relief for smaller and certain regional banking organizations.

Over several years the Department of Labor ("DOL") developed a rule governing the circumstances in which a person rendering investment advice with respect to an employee benefit plan under the Employee Retirement Income Security Act of 1974 would be treated as a fiduciary for the recipient of the advice. DOL finalized a regulation in 2016, which might have affected our investment advisory business, but DOL extended the effective date, and the U.S. Court of Appeals for the Tenth Circuit effectively vacated the rule in 2018. While this matter now appears to be in abeyance, the SEC is considering a comparable rule, popularly known as Regulation BI, for best interest. The SEC has not issued a proposal, however, and we cannot predict what effect, if any, such a regulation might have on our investment advisory business.

Regulatory Capital Requirements

Capital adequacy. The Federal Reserve monitors the capital adequacy of our holding company, on a consolidated basis, and the FDIC and the Pennsylvania Department of Banking and Securities monitor the capital adequacy of TriState Capital Bank. The regulatory agencies use a combination of risk-based ratios and a leverage ratio to evaluate capital adequacy and consider these capital levels when taking action on various types of applications and when conducting supervisory activities related to safety and soundness. The current capital rules, which began to take effect in 2015, are popularly known as the Basel III Capital Rules because they are based on international standards known as Basel III. The risk-based capital standards are designed to make regulatory capital requirements more sensitive to differences in risk profiles among financial institutions and their 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. Regulatory capital, in turn, is classified into three "tiers" of capital. Common Equity Tier 1 capital ("CET 1") includes common equity, retained earnings, and minority interests in equity accounts of consolidated subsidiaries, less goodwill, most intangible assets and certain other assets. "Tier 1" capital includes, among other things, qualifying non-cumulative perpetual preferred stock. "Tier 2" capital includes, among other things, qualifying subordinated debt and allowances for loan and lease losses, subject to limitations. Total capital is the total of all three tiers. The resulting capital ratios represent capital as a percentage of average assets or total risk-weighted assets, including off-balance sheet items.

As discussed above in connection with EGRRCPA, the Company and the Bank may be able to satisfy all the capital requirements, including those under both the Basel III Capital Rules, and prompt corrective action if both entities maintain the necessary Community Bank Leverage Ratio ("CBLR"). The federal banking agencies have finalized the CBLR rule at 9% and we exceed this standard.

In the meantime, the Basel III Capital Rules apply to us and require banks and bank holding companies generally to maintain four minimum capital standards to be "adequately capitalized": (1) a tier 1 capital to total average assets ratio ("tier 1 leverage capital ratio") of at least 4%; (2) a common equity tier 1 capital to risk-weighted assets ratio ("CET 1 risk-based capital ratio") of at least 4.5%; (3) a tier 1 capital to risk-weighted assets ratio ("tier 1 risk-based capital ratio") of at least 6%; and (4) a total risk-based capital to risk-weighted assets ratio ("total risk-based capital ratio") of at least 8%. These capital requirements are minimum requirements. Higher capital levels may be required if warranted by the particular circumstances or risk profiles of individual institutions, or if required by the banking regulators due to the economic conditions impacting our primary markets. For example, FDIC regulations provide that higher capital may be required to take adequate account of, among other things, interest rate risk and the risks posed by concentrations of credit, nontraditional activities or securities trading activities.

In addition, the Basel III Capital Rules subject a banking organization to certain limitations on capital distributions and discretionary bonus payments to executive officers if the organization does not maintain a capital conservation buffer (a ratio of CET1 to total risk-based assets of at least 2.5% on top of the minimum risk-based capital requirements). The implementation of the capital conservation buffer began on January 1, 2016, at 0.625%; in 2018 the buffer was 1.875%; and the full 2.5% requirement took effect on January 1, 2019. As a result, the Company and the Bank must adhere to the following minimum capital ratios to satisfy the Basel III Capital Rule requirements and to avoid the limitations on capital distributions and discretionary bonus payments to executive officers:

- 4.0% tier 1 leverage ratio;
- minimum CET1 risk-based capital ratio of 7.0%;
- minimum tier 1 risk-based capital ratio of 8.5%; and

• minimum total risk-based capital ratio to 10.5%.

When assets are risk weighted for the purpose of the risk-based capital ratios, the Basel III Capital Rules present a large number of risk weight 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. These categories may result in higher risk weights than under the earlier rules for a variety of asset classes, including certain commercial real estate mortgages. Additional aspects of the new capital rules that are most relevant to us include:

- a formula-based approach, referred to as the collateral haircut approach, to determine the risk weight of eligible margin loans
 collateralized by liquid and readily marketable debt or equity securities, where the collateral is marked to fair value daily, and
 the transaction is subject to daily margin maintenance requirements;
- consistent with the prior risk-based capital rules, assigning exposures secured by single family residential properties to either a 50% risk weight for first-lien mortgages that meet prudential underwriting standards or a 100% risk weight category for all other mortgages;
- 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%);
- assigning a 150% risk weight to all exposures that are non-accrual or 90 days or more past due (previously set at 100%), except for those secured by single family residential properties, which will be assigned a 100% risk weight, consistent with the prior risk-based capital rules;
- applying a 150% risk weight instead of a 100% risk weight for certain high volatility commercial real estate loans for acquisition, development and construction; and
- the option to use a formula-based approach referred to as the simplified supervisory formula approach to determine the risk weight of various securitization tranches in addition to the previous "gross-up" method (replacing the credit ratings approach for certain securitization).

Further, under the Dodd-Frank Act, the federal banking agencies adopted new capital requirements to address the risks that the activities of an institution poses to the institution and the public and private stakeholders, including risks arising from certain enumerated activities. Capital guidelines may continue to evolve and may have material impacts on us or our banking subsidiary.

Based on our calculations, we expect that TriState Capital Holdings, Inc. and TriState Capital Bank will meet all minimum capital requirements when effective and that we and the Bank would continue to meet all capital requirements as fully phased in without material adverse effects on our business. However, the capital rules may continue to evolve over time and future changes may have a material adverse effect on our business. Failure to meet capital guidelines could subject us to a variety of enforcement remedies, including issuance of a capital directive, a prohibition on accepting brokered deposits, other restrictions on our business and the termination of deposit insurance by the FDIC.

Prompt corrective action regulations. Under the prompt corrective action regulations, the FDIC is required and authorized to take supervisory actions against undercapitalized insured depository institutions. For this purpose, a bank is placed in one of the following five categories based on its capital: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," and "critically undercapitalized."

Under the current prompt corrective action provisions of the FDIC, after adopting the Basel III Capital rules, an insured depository institution generally will be classified in the following categories based on the capital measures indicated:

"Well capitalized"

Tier 1 leverage ratio of 5%, CET 1 risk-based ratio of 6.5%, Tier 1 risk-based ratio of 8%, Total risk-based ratio of 10%, and

Not subject to written agreement, order, capital directive or prompt corrective action directive that requires a specific capital level

"Undercapitalized"

Tier 1 leverage ratio less than 4%, CET 1 risk-based ratio less than 4.5%, Tier 1 risk-based ratio less than 6%, or Total risk-based ratio less than 8%

"Critically undercapitalized"

Tangible equity to total assets less than 2%

"Adequately capitalized"

Tier 1 leverage ratio of 4%, CET 1 risk-based ratio of 4.5%, Tier 1 risk-based ratio of 6%, and Total risk-based ratio of 8%

"Significantly undercapitalized"

Tier 1 leverage ratio less than 3%, CET 1 risk-based ratio less than 3%, Tier 1 risk-based ratio less than 4%, or Total risk-based ratio less than 6%

Various consequences flow from a bank's prompt corrective action category. A bank that is adequately capitalized but not well capitalized must obtain a waiver from the FDIC in order to continue to accept, renew or roll over brokered deposits. Federal banking regulators are required to take various mandatory supervisory actions and are authorized to take other discretionary actions with respect to institutions in the three undercapitalized categories. The severity of the action depends upon the capital category in which the institution is placed. Subject to a narrow exception, banking regulators must appoint a receiver or conservator for an institution that is critically undercapitalized. 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. An undercapitalized institution also is 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 regulations also establish procedures for downgrading an institution to a lower capital category based on supervisory factors other than capital.

A bank holding company must guarantee that a subsidiary bank performs under a capital restoration plan, including an obligation to contribute capital to the bank up to the lesser of 5% of an "undercapitalized" subsidiary's assets at the time it became "undercapitalized" or the amount required to meet regulatory capital requirements.

The prompt corrective action classification of a bank affects the frequency of regulatory examinations, the bank's ability to engage in certain activities and the deposit insurance premiums paid by the bank. As of December 31, 2019, TriState Capital Bank met the requirements to be categorized as "well capitalized" based on the aforementioned ratios for purposes of the prompt corrective action regulations, as currently in effect.

Source of Strength Doctrine for Bank Holding Companies

Under longstanding Federal Reserve policy which has been codified by the Dodd-Frank Act, we are expected to act as a source of financial strength to, and to commit resources to support, TriState Capital Bank. This support may be required at times when we may not be inclined to provide it. In addition, any capital loans that we make to TriState Capital Bank are subordinate in right of payment to deposits and to certain other indebtedness of TriState Capital Bank. In the event of our bankruptcy, any commitment by us to a federal bank regulatory agency to maintain the capital of TriState Capital Bank will be assumed by the bankruptcy trustee and entitled to a priority of payment. These obligations are in addition to the performance guaranty we must provide in the event that TriState Capital Bank is required to develop a capital restoration plan under prompt corrective action.

Acquisitions by Bank Holding Companies

We must obtain the prior approval of the Federal Reserve before: (1) acquiring more than five percent of the voting stock of any bank or other bank holding company; (2) acquiring all or substantially all of the assets of any bank or bank holding company; or (3) merging or consolidating with any other bank holding company. The Federal Reserve may determine not to approve any of these transactions if it would result in or tend to create a monopoly or substantially lessen competition or otherwise function as a restraint of trade, unless the anticompetitive effects of the proposed transaction are clearly outweighed by the public interest in meeting the convenience and needs

of the community to be served. The Federal Reserve also may not approve a transaction in which the resulting institution would hold a share of state or nationwide deposits in excess of certain caps. The Federal Reserve is also required to consider the financial condition and managerial resources and future prospects of the bank holding companies and banks concerned, the convenience and needs of the community to be served, whether the transaction would result in greater or more concentrated risks to the stability of the United States banking or financial system, the records of a bank holding company and its subsidiary bank(s) in compliance with applicable banking, consumer protection, and anti-money laundering laws.

Scope of Permissible Bank Holding Company Activities

In general, the Bank Holding Company Act limits the activities permissible for bank holding companies to the business of banking, managing or controlling banks and such other activities as the Federal Reserve has determined to be so closely related to banking as to be properly incident thereto.

A bank holding company may elect to be treated as a financial holding company if it and its depository institution subsidiaries are categorized as "well capitalized" and "well managed." A financial holding company may engage in a range of activities that are (1) financial in nature or incidental to such financial activity or (2) complementary to a financial activity and which do not pose a substantial risk to the safety and soundness of a depository institution or to the financial system generally. These activities include securities dealing, underwriting and market making, insurance underwriting and agency activities, merchant banking and insurance company portfolio investments. Expanded financial activities of financial holding companies generally will be regulated according to the type of such financial activity: banking activities by banking regulators, securities activities by securities regulators and insurance activities by insurance regulators. While we may determine in the future to become a financial holding company, we do not have an intention to make that election at this time.

The Bank Holding Company Act does not place territorial limitations on permissible non-banking activities of bank holding companies. The Federal Reserve has the power to order any bank holding company or its subsidiaries to terminate any activity or to terminate its ownership or control of any subsidiary when the Federal Reserve has reasonable grounds to believe that continuation of such activity or such ownership or control constitutes a serious risk to the financial soundness, safety or stability of any bank subsidiary of the bank holding company.

Dividends

As a bank holding company, we are subject to certain restrictions on dividends under applicable banking laws and regulations. The Federal Reserve has issued a policy statement that provides that a bank holding company should not pay dividends unless: (1) its net income over the last four quarters (net of dividends paid) has been sufficient to fully fund the dividends; (2) the prospective rate of earnings retention appears to be consistent with the capital needs, asset quality and overall financial condition of the bank holding company and its subsidiaries; and (3) the bank holding company will continue to meet minimum required capital adequacy ratios. Accordingly, a bank holding company should not pay cash dividends that exceed its net income or that can only be funded in ways that weaken the bank holding company's financial health, such as by borrowing. The Dodd-Frank Act and the Basel III Capital Rules impose additional restrictions on the ability of banking institutions to pay dividends, such as limits that come into play when the capital conservation buffer falls below the required ratio. In addition, in the current financial and economic environment, the Federal Reserve has indicated that bank holding companies should carefully review their dividend policy and has discouraged payment ratios that are at maximum allowable levels unless both asset quality and capital are very strong.

A part of our income could be derived from, and a potential material source of our liquidity could be, dividends from TriState Capital Bank. The ability of TriState Capital Bank to pay dividends to us is also restricted by federal and state laws, regulations and policies. Under applicable Pennsylvania law, TriState Capital Bank may only pay cash dividends out of its accumulated net earnings, subject to certain requirements regarding the level of surplus relative to capital.

Under federal law, TriState Capital Bank may not pay any dividend to us if the Bank is undercapitalized or the payment of the dividend would cause it to become undercapitalized. The FDIC may further restrict the payment of dividends by requiring TriState Capital Bank to maintain a higher level of capital than would otherwise be required for it to be adequately capitalized for regulatory purposes. Moreover, if, in the opinion of the FDIC, TriState Capital Bank is engaged in an unsafe or unsound practice (which could include the payment of dividends), the FDIC may require, generally after notice and hearing, the Bank to cease such practice. The FDIC has indicated that paying dividends that deplete a depository institution's capital base to an inadequate level would be an unsafe banking practice. The FDIC has also issued guidance to the effect that insured depository institutions generally should pay dividends out of current operating earnings.

Incentive Compensation Guidance

The federal banking agencies have issued comprehensive guidance intended to ensure that the incentive compensation policies of banking organizations do not undermine the safety and soundness of those organizations by encouraging excessive risk-taking. The incentive

compensation guidance sets expectations for banking organizations concerning their incentive compensation arrangements and related risk-management, control and governance processes. In addition, under the incentive compensation guidance, a banking organization's federal supervisor may initiate enforcement action if the organization's incentive compensation arrangements pose a risk to the safety and soundness of the organization. Further, provisions of the Basel III regime described above limit discretionary bonus payments to bank and bank holding company executives if the institution's regulatory capital ratios fail to exceed certain thresholds. The scope and content of the U.S. banking regulators' policies on incentive compensation are likely to continue evolving. In 2016, the federal banking agencies, together with certain other federal agencies, proposed a regulation to limit certain incentive-based compensation arrangements that encourage inappropriate risks by banks, bank holding companies, and certain other financial institutions. We do not know when the agencies will finalize this regulation and what the final requirements will be.

Restrictions on Transactions with Affiliates and Loans to Insiders

Federal law strictly limits the ability of banks to engage in transactions with their affiliates, including their bank holding companies. Section 23A and 23B of the Federal Reserve Act, and the Federal Reserve's Regulation W, impose quantitative limits, qualitative standards, and collateral requirements on certain transactions by a bank with, or for the benefit of, its affiliates, and generally require those transactions to be on terms at least as favorable to the bank as transactions with non-affiliates. The Dodd-Frank Act significantly expands the coverage and scope of the limitations on affiliate transactions within a banking organization, including an expansion of the covered transactions to include credit exposures related to derivatives, repurchase agreements and securities lending arrangements and an increase in the amount of time for which collateral requirements regarding covered transactions must be satisfied.

Federal law also limits a bank's authority to extend credit to its directors, executive officers and 10% shareholders, as well as to entities controlled by such persons. Among other things, extensions of credit to insiders are required to be made on terms that are substantially the same as, and follow credit underwriting procedures that are not less stringent than, those prevailing for comparable transactions with unaffiliated persons. In addition, the terms of such extensions of credit may not involve more than the normal risk of repayment or present other unfavorable features and may not exceed certain limitations on the amount of credit extended to such persons, individually and in the aggregate, which limits are based, in part, on the amount of the bank's capital. TriState Capital Bank maintains a policy that does not permit loans to employees, including executive officers.

FDIC Deposit Insurance Assessments

FDIC-insured banks are required to pay deposit insurance assessments to the FDIC, which fund the Deposit Insurance Fund ("DIF"). The assessment rate for institutions with less than \$10 billion in assets is now determined by the FDIC's financial ratios method, which takes into account seven financial ratios for each institution and the weighted average of the institution's CAMELS composite ratings. The rate may be adjusted by the institution's long-term unsecured debt and its brokered deposits. In addition, the FDIC can impose special assessments in certain instances. The FDIC has in past years raised assessment rates to increase funding for the Deposit Insurance Fund.

All assessment rates may change based on the reserve ratio of the DIF. The Dodd-Frank Act changed the way that deposit insurance premiums are calculated, increased the minimum designated reserve ratio of the Deposit Insurance Fund from 1.15% to 1.35% of the estimated amount of total insured deposits, and eliminated the upper limit for the reserve ratio designated by the FDIC each year, and eliminates the requirement that the FDIC pay dividends to depository institutions when the reserve ratio exceeds certain thresholds. As of September 30, 2019, the DIF's reserve ratio was 1.41%. Rates may be reduced if this ratio rises above 2.0% or 2.5%. We cannot predict how the reserve ratio may change in the future.

Further increases in assessment rates or special assessments may occur in the future, especially if there are significant additional financial institution failures. Continued action by the FDIC to replenish and increase the Deposit Insurance Fund, as well as the changes contained in the Dodd-Frank Act, may result in higher assessment rates, which could reduce our profitability or otherwise negatively impact our operations, financial condition or future prospects.

Branching and Interstate Banking

Under Pennsylvania law, TriState Capital Bank is permitted to establish additional branch offices within Pennsylvania, subject to the approval of the Pennsylvania Department of Banking and Securities. The Bank is also permitted to establish additional offices outside of Pennsylvania, subject to prior regulatory approval.

TriState Capital Bank operates four representative offices, with one each located in the states of Pennsylvania, Ohio, New Jersey and New York. Because our representative offices are not branches for purposes of applicable state law and FDIC regulations, there are restrictions on the types of activities we may conduct through our representative offices. Relationship managers in our representative offices may solicit loan and deposit products and services in their markets and act as liaisons to our headquarters in Pittsburgh, Pennsylvania.

However, consistent with our centralized operations and regulatory requirements, we do not disburse or transmit funds, accept loan repayments or accept or contract for deposits or deposit-type liabilities through our representative offices.

Community Reinvestment Act

TriState Capital Bank has a responsibility under the Community Reinvestment Act ("CRA"), and related FDIC regulations to help meet the credit needs of its communities, including low-income and moderate-income borrowers. In connection with its examination of TriState Capital Bank, the FDIC is required to assess the Bank's record of compliance with the CRA. The Bank's failure to comply with the provisions of the CRA could result in denial of certain corporate applications, such as for branches or mergers, or in restrictions on its or our activities, including additional financial activities if we elect to be treated as a financial holding company.

CRA regulations provide that a financial institution may elect to have its CRA performance evaluated under the strategic plan option. The strategic plan enables the institution to structure its CRA goals and objectives to address the needs of its community consistent with its business strategy, operational focus, capacity and constraints. In January 2018, the FDIC approved our updated strategic plan to cover the years 2018 through 2020. TriState Capital Bank received an "outstanding" CRA rating in its most recent CRA examination, which covered an approximately three-year period ending on September 10, 2018.

Financial Privacy

The federal banking and securities regulators have adopted rules that limit the ability of banks and other financial institutions to disclose non-public information about consumers to non-affiliated third parties. These limitations require disclosure of privacy policies to consumers and, in some circumstances, allow consumers to prevent disclosure of certain personal information to a non-affiliated third party. These regulations affect how consumer information is transmitted through financial services companies and conveyed to outside vendors. In addition, consumers may also prevent disclosure of certain information among affiliated companies that is assembled or used to determine eligibility for a product or service, such as that shown on consumer credit reports and asset and income information from applications. Consumers also have the option to direct banks and other financial institutions not to share information about transactions and experiences with affiliated companies for the purpose of marketing products or services. In addition to applicable federal privacy regulations, TriState Capital Bank is subject to certain state privacy laws.

Anti-Money Laundering and OFAC

Under federal law, including the Bank Secrecy Act and the USA PATRIOT Act of 2001, certain financial institutions must maintain antimoney laundering programs that are reasonably designed to prevent and detect money laundering and terrorist financing, including enhanced scrutiny of account relationships, and to comply with the recordkeeping and reporting requirements of the Bank Secrecy Act (the "BSA") including the requirement to report suspicious activities. The programs are to include established internal policies, procedures and controls; a designated compliance officer; an ongoing employee training program; and testing of the program by an independent audit function. Financial institutions are also prohibited from entering into specified financial transactions and account relationships and must meet enhanced standards for due diligence and customer identification in their dealings with foreign financial institutions and foreign customers. Law enforcement authorities also have been granted increased access to financial information maintained by financial institutions to investigate suspected money laundering or terrorist financing. The United States Department of Treasury's Financial Crimes Enforcement Network ("FinCEN") and the federal banking agencies continue to issue regulations and guidance with respect to the application and requirements of the BSA and their expectations for effective anti-money laundering programs.

The Office of Foreign Assets Control ("OFAC") administers laws and Executive Orders that prohibit U.S. entities from engaging in transactions with certain prohibited parties. OFAC publishes lists of persons and organizations suspected of aiding, harboring or engaging in terrorist acts, known as Specially Designated Nationals and Blocked Persons. Generally, if a bank identifies a transaction, account or wire transfer relating to a person or entity on an OFAC list, it must freeze the account or block the transaction, file a suspicious activity report and notify the appropriate authorities.

Bank regulators routinely examine institutions for compliance with these obligations and they must consider an institution's compliance in connection with the regulatory review of applications, including applications for bank mergers and acquisitions. Failure of a financial institution to maintain and implement adequate programs to combat money laundering and terrorist financing and comply with OFAC sanctions, or to comply with relevant laws and regulations, could have serious legal, reputational and financial consequences for the institution.

Safety and Soundness Standards

Federal bank regulatory agencies have adopted guidelines that establish general standards relating to internal controls and information systems, internal audit systems, loan documentation, credit underwriting, interest rate exposure, asset growth and compensation, fees and benefits. Additionally, the agencies have adopted regulations that provide the authority to order an institution that has been given

notice by an agency that it is not satisfying any of these safety and soundness standards to submit a compliance plan. If, after being so notified, an institution fails to submit an acceptable compliance plan or fails in any material respect to implement an acceptable compliance plan, the agency must issue an order directing action to correct the deficiency and may issue an order directing other actions of the types to which an undercapitalized institution is subject under the "prompt corrective action" provisions of the Federal Deposit Insurance Act. If an institution fails to comply with such an order, the agency may seek to enforce such order in judicial proceedings and to impose civil money penalties.

In addition to federal consequences for failure to satisfy applicable safety and soundness standards, the Pennsylvania Department of Banking and Securities Code grants the Pennsylvania Department of Banking and Securities the authority to impose a civil money penalty of up to \$25,000 per violation against a Pennsylvania financial institution, or any of its officers, employees, directors, or trustees for: (1) violations of any law or department order; (2) engaging in any unsafe or unsound practice; or (3) breaches of a fiduciary duty in conducting the institution's business.

Bank holding companies are also prohibited from engaging in unsound banking practices. For example, the Federal Reserve's Regulation Y requires a holding company to give the Federal Reserve prior notice of any redemption or repurchase of its own equity securities, if the consideration to be paid, together with the consideration paid for any repurchases in the preceding year, is equal to 10% or more of the company's consolidated net worth. The Federal Reserve may oppose the transaction if it believes that the transaction would constitute an unsafe or unsound practice or would violate any law or regulation. As another example, a holding company is forbidden from impairing its subsidiary bank's soundness by causing it to make funds available to non-banking subsidiaries or their customers if the Federal Reserve believed it not prudent to do so. The Federal Reserve has broad authority to prohibit activities of bank holding companies and their nonbanking subsidiaries that present unsafe and unsound banking practices or that constitute violations of laws or regulations.

In addition to the agencies' written regulations, standards and guidelines, banks and bank holding companies are regularly examined for safety and soundness by their appropriate federal and state regulators. These examinations are extensive and cover many items, including loan concentrations. At the end of an examination, a bank is assigned ratings for capital, assets, management, earnings, liquidity, and sensitivity to market risk as well as on overall composite rating for these elements, commonly referred to as the CAMELS rating. The Federal Reserve makes comparable findings for bank holding companies. These ratings and the reports on which they are based are highly confidential and not available to the public.

Consumer Laws and Regulations

TriState Capital Bank is subject to numerous laws and regulations intended to protect consumers in transactions with the Bank. These laws include, among others, laws regarding unfair, deceptive and abusive acts and practices, usury laws, and other federal consumer protection statutes. These federal laws include the Electronic Fund Transfer Act, the Equal Credit Opportunity Act, the Fair Credit Reporting Act, the Fair Debt Collection Practices Act, the Real Estate Procedures Act of 1974, the S.A.F.E. Mortgage Licensing Act of 2008, the Truth in Lending Act and the Truth in Savings Act, among others. Many states and local jurisdictions have consumer protection laws analogous, and in addition, to those enacted under federal law. These laws and regulations mandate certain disclosure requirements and regulate the manner in which financial institutions deal with customers when taking deposits, making loans and conducting other types of transactions. Failure to comply with these laws and regulations could give rise to regulatory sanctions, customer rescission rights, action by state and local attorneys general and civil or criminal liability.

In addition, the Dodd-Frank Act created a new independent Consumer Finance Protection Bureau that has broad authority to regulate and supervise retail financial services activities of banks and various non-bank providers. The Consumer Financial Protection Bureau has authority to promulgate regulations, issue orders, guidance and policy statements, conduct examinations and bring enforcement actions with regard to consumer financial products and services. In general, banks with assets of \$10 billion or less, such as TriState Capital Bank, will continue to be examined for consumer compliance by their primary federal bank regulator. Nevertheless, positions established by the Consumer Financial Protection Bureau may become applicable to us, and the bureau has back-up enforcement authority.

Effect of Governmental Monetary Policies

Our commercial banking business and investment management business are affected not only by general economic conditions but also by U.S. fiscal policy and the monetary policies of the Federal Reserve. Some of the instruments of monetary policy available to the Federal Reserve include changes in the discount rate on member bank borrowings, the fluctuating availability of borrowings at the "discount window," open market operations, the imposition of and changes in reserve requirements against member banks' deposits and assets of foreign branches, the imposition of and changes in reserve requirements against certain borrowings by banks and their affiliates, and asset purchase programs. These policies influence to a significant extent the overall growth of bank loans, investments, and deposits, as well as the performance of our investment management products and services and the interest rates charged on loans or paid on deposits. We cannot predict the nature of future fiscal and monetary policies or the effect of these policies on our operations and activities, financial condition, results of operations, growth plans or future prospects.

Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act") implemented a broad range of corporate governance, accounting and reporting measures for companies that have securities registered under the Exchange Act, including publicly-held bank holding companies. Specifically, the Sarbanes-Oxley Act and the various regulations promulgated thereunder, established, among other things: (i) requirements for audit committees, including independence, expertise, and responsibilities; (ii) responsibilities regarding financial statements for the Chief Executive Officer and Chief Financial Officer of the reporting company; (iii) the forfeiture of bonuses or other incentive-based compensation and profits from the sale of the reporting company's securities by the Chief Executive Officer and Chief Financial Officer in the twelve-month period following the initial publication of any financial statements that later require restatement; (iv) the creation of an independent accounting oversight board; (v) standards for auditors and regulation of audits, including independence provisions that restrict non-audit services that accountants may provide to their audit clients; (vi) disclosure and reporting obligations for the reporting company and their directors and executive officers, including accelerated reporting of stock transactions and a prohibition on trading during pension blackout periods; (vii) a prohibition on personal loans to directors and officers, except certain loans made by insured financial institutions on non-preferential terms and in compliance with other bank regulatory requirements; and (viii) a range of civil and criminal penalties for fraud and other violations of the securities laws.

Asset Management

The asset management industry is subject to extensive federal, state and international laws and regulations promulgated by various governments, securities exchanges, central banks and regulatory bodies that are intended to benefit and protect investors in products. In addition, our distribution activities also may be subject to regulation by U.S. federal agencies, self-regulatory organizations and securities commissions in those jurisdictions in which we conduct business. Due to the extensive laws and regulations to which we are subject, we must devote substantial time, expense and effort to remaining vigilant about, and addressing, legal and regulatory compliance matters.

Existing U.S. Regulation

Chartwell is a registered investment adviser regulated by the SEC. Chartwell is also currently subject to regulation by the Department of Labor (the "DOL") and other government agencies and regulatory bodies. The Investment Advisers Act of 1940 imposes numerous obligations on registered investment advisers such as Chartwell, including recordkeeping, operational and marketing requirements, disclosure obligations and prohibitions on fraudulent activities. The Investment Company Act of 1940 imposes stringent governance, compliance, operational, disclosure and related obligations on registered investment companies and their investment advisers and distributors. The SEC is authorized to institute proceedings and impose sanctions for violations of the Investment Advisers Act of 1940 and the Investment Company Act of 1940, ranging from fines and censure to termination of an investment adviser's registration. Investment advisers also are subject to certain state securities laws and regulations. Non-compliance with the Investment Advisers Act of 1940, the Investment Company Act of 1940 or other federal and state securities laws and regulations could result in investigations, sanctions, disgorgement, fines and reputational damage.

Chartwell's trading and investment activities for client accounts are also regulated under the Exchange Act, as well as the rules of various U.S. exchanges and self-regulatory organizations, including laws governing trading on inside information, market manipulation and a broad number of technical requirements and market regulation policies in the United States.

CTSC, our broker/dealer subsidiary, is subject to regulations that cover all aspects of the securities business. Much of the regulation of broker/dealers has been delegated to self-regulatory organizations, principally FINRA. These self-regulatory organizations have adopted extensive regulatory requirements relating to matters such as sales practices, compensation and disclosure, and conduct periodic examinations of member broker/dealers in accordance with rules they have adopted and amended from time to time, subject to approval by the SEC. The SEC, self-regulatory organizations and state securities commissions may conduct administrative proceedings that can result in censure, fine, suspension or expulsion of a broker/dealer, its officers or registered employees. These administrative proceedings, whether or not resulting in adverse findings, can require substantial expenditures and can have an adverse impact on the reputation or business of a broker/dealer. The principal purpose of regulation and discipline of broker/dealers is the protection of clients and the securities markets, rather than protection of creditors and stockholders of the regulated entity.

There has been substantial regulatory and legislative activity at federal and state levels regarding standards of care for financial services firms, related to both retirement and taxable accounts. This includes the DOL adoption of a fiduciary rule that was ultimately struck down by the Fifth Circuit Court of Appeals and the SEC's proposal of a package of related rules and interpretations in April 2018. The ultimate action taken by the DOL, SEC or other applicable regulatory or legislative body may impact our business activities and increase our costs.

In addition, Chartwell also may be subject to the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and related regulations, particularly insofar as they act as a "fiduciary" or "investment manager" under ERISA with respect to benefit plan clients.

ERISA imposes duties on persons who are fiduciaries of ERISA plan clients, and ERISA and related provisions of the Internal Revenue Code prohibit certain transactions involving the assets of ERISA plan and Individual Retirement Account ("IRA") clients and certain transactions by the fiduciaries (and several other related parties) to such clients. In April 2016, the Department of Labor, which administers ERISA, issued a final fiduciary rule expanding the circumstances in which advice furnished to retirement investors will be treated as fiduciary in nature as well as related prohibited transaction class exemptions.

Net Capital Requirements

CTSC is a non-clearing broker/dealer subsidiary with a primary business of wholesaling and marketing the proprietary investment products and services provided by Chartwell. CTSC is subject to net capital rules imposed by various federal, state, and foreign authorities that mandate that it maintain certain levels of capital.

Impact of Current Laws and Regulations

The cumulative effect of these laws and regulations, while providing certain benefits, add significantly to the cost of our operations and thus have a negative impact on our profitability. There has also been a notable expansion in recent years of financial service providers that are not subject to the examination, oversight, and other rules and regulations to which we are subject. Those providers, because they are not so highly regulated, may have a competitive advantage over us and may continue to draw large amounts of funds away from traditional banking institutions, with a continuing adverse effect on the banking industry in general.

Future Legislation and Regulatory Reform

New regulations and statutes are regularly proposed that contain wide-ranging proposals for altering the structures, regulations and competitive relationships of financial institutions operating in the United States. 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. Future legislation and policies, and the effects of that legislation and those policies, may have a significant influence on our operations and activities, financial condition, results of operations, growth plans or future prospects and the overall growth and distribution of loans, investments and deposits. Such legislation and policies have had a significant effect on the operations and activities, financial condition, results of operations, growth plans and future prospects of commercial banks and investment management businesses in the past and are expected to continue.

Available Information

All of our reports filed electronically with the United States Securities and Exchange Commission ("SEC"), including this Annual Report on Form 10-K for the fiscal year ended December 31, 2019, our Registration Statements on Forms S-1 and S-3, quarterly reports on Form 10-Q, current reports on Form 8-K and proxy statements, as well as any amendments to those reports are accessible at no cost on our website at www.tristatecapitalbank.com under "Who We Are," "Investor Relations," "SEC Documents". These filings are also accessible on the SEC's website at www.sec.gov. You may read and copy any material we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

ITEM 1A. RISK FACTORS

An investment in our common stock involves a high degree of risk. There are risks, many beyond our control, that could cause our financial condition or results of operations to differ materially from management's expectations. Some of the risks that may affect us are described below. If any of the following risks, singly or together with one or more other factors, actually occur, our business, financial condition, results of operations and future prospects could be materially and adversely affected. These risks are not the only risks that we may face. Our business, financial condition, results of operations and future prospects could also be affected by additional risks that apply to all companies operating in the United States, as well as other risks that are not currently known to us or that we currently consider to be immaterial to our business, financial condition, results of operations and growth prospects. Further, some statements contained herein constitute forward-looking statements. See "Cautionary Note Regarding Forward-Looking Statements" on page 4. The risks described below should also be considered together with the other information included in this Annual Report on Form 10-K, including the disclosures in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included in "Item 8. Financial Statements and Supplementary Data".

Risks Relating to our Business

We may not be able to adequately measure and limit our credit risk, which could lead to unexpected losses.

Our business depends on our ability to successfully measure and manage credit risk and maintaining disciplined and prudent underwriting standards. The business of lending is inherently risky, and includes the risk that the principal or interest on any loan will not be repaid timely or at all or that the value of any collateral supporting the loan will be insufficient to cover our outstanding exposure. In addition, we are exposed to risks with respect to the period of time over which loans may be repaid, risks relating to proper loan underwriting, risks resulting from changes in economic and industry conditions, and risks inherent in dealing with individual loans and borrowers. The creditworthiness of a borrower is affected by many factors, including local market conditions and general economic conditions, and many of our loans are made to middle-market businesses that may be less able to withstand competitive, economic and financial pressures than larger borrowers.

Our risk management practices, such as monitoring the concentration of our loans within specific industries and our credit approval, review and administrative practices, may not adequately reduce credit risk, and our credit administration personnel, policies and procedures may not adequately adapt to changes in economic or any other conditions affecting customers and the quality of our loan portfolio, which may result in loan defaults, foreclosures and additional charge-offs, and may require us to significantly increase our allowance for loan and lease losses (ALL), each of which could adversely affect our net income. In addition, the weakening of our underwriting standards for any reason, such as to seek higher yielding loans, or a lack of discipline or diligence by our employees, may result in loan defaults, foreclosures and additional charge-offs or an increase in ALL, any of which could adversely affect our net income. As a result, our inability to successfully manage credit risk and our underwriting standards could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Our allowance for loan and lease losses may prove to be insufficient to absorb our loan losses, which could have a material adverse effect on our financial condition and results of operations.

Our experience in the banking industry indicates that some portion of our loans will not be fully repaid in a timely manner or at all. Accordingly, we maintain an ALL that represents management's judgment of probable losses in our loan portfolio. The level of the allowance reflects management's continuing evaluation of historical losses in our portfolio and general economic conditions, among other factors. The determination of the ALL is inherently subjective and requires us to make significant assumptions which may change or be incorrect. Inaccurate assumptions, deterioration of economic conditions, new information, the identification of additional problem loans and other factors, both within and outside of our control, may require us to increase our ALL. In addition, our regulators, as an integral part of their periodic examination, review the adequacy of our ALL and may direct us to make additions to it. Further, if actual charge-offs in future periods exceed the amounts allocated to the ALL, we may need additional provision for loan losses to restore the adequacy of our ALL. While we believe that our ALL was adequate at December 31, 2019, there is no assurance that it will be sufficient to cover future loan losses, especially if there is a significant deterioration in economic conditions. If we are required to materially increase our level of ALL for any reason, such increase could materially decrease our net income and could have a material adverse effect on our business, financial condition, results of operations and future prospects.

A material portion of our loan portfolio is comprised of commercial loans secured by general business assets, the deterioration in value of which could expose us to credit losses.

Historically, a material portion of our loans held-for-investment have been comprised of commercial loans to businesses collateralized by business assets including, among other things, accounts receivable, inventory, equipment, cash value life insurance and owner-occupied real estate. These commercial loans are typically larger in amount than loans to individuals and, therefore, have the potential for larger losses on a single loan basis. Additionally, the repayment of commercial loans is subject to the ongoing business operations of the

borrower. The collateral securing such loans generally includes movable property, such as equipment and inventory, which may decline in value more rapidly than we anticipate, exposing us to increased credit risk. In addition, a portion of our customer base, may be exposed to volatile businesses or industries which are sensitive to commodity prices or market fluctuations, such as energy prices. Accordingly, negative changes in commodity prices, real estate values and liquidity could impair the value of the collateral securing these loans.

Historically, losses in our commercial credits have been higher than losses in other segments of our loan portfolio. Significant adverse changes in various industries could cause rapid declines in values and collectability resulting in inadequate collateral coverage that may expose us to credit losses. An increase in specific reserves and charge-offs related to our commercial and industrial loan portfolio could have a material adverse effect on our business, financial condition, results of operations and future prospects. As of December 31, 2019, we had commercial and industrial loans outstanding of \$1.09 billion, or 16.5% of our loans held-for-investment, and owner-occupied commercial real estate loans outstanding of \$210.7 million, or 3.2% of our loans held-for-investment.

Our business may be adversely affected by conditions in the financial markets and economic conditions generally, and in the states in which we operate in particular.

If the overall economic climate in the U.S., generally, and our market areas, specifically, experiences material disruption, our borrowers may experience difficulties in repaying their loans, the collateral we hold may decrease in value or become illiquid, and the level of non-performing loans, charge-offs and delinquencies could rise and require significant additional provisions for loan losses.

Many of our customers are commercial enterprises whose business and financial condition are sensitive to changes in the general economy of the United States. Our businesses and operations are, in turn, sensitive to these same general economic conditions. If the United States experiences a deterioration or other significant volatility in economic conditions our growth and profitability could be constrained. In addition, any future downgrade of the credit rating of the United States, failures to raise the U.S. statutory debt limit, or deterioration in the fiscal outlook of the United States federal government, could, among other things, materially adversely affect the market value of the U.S. and other government and governmental agency securities that we may hold, the availability of those securities as collateral for borrowing, and our ability to access capital markets on favorable terms. In addition, any resulting decline in the financial markets could affect the value of marketable securities that serve as collateral for our loans and the ability of our customers to repay loans. In addition, economic conditions in foreign countries, including uncertainty over the stability of the euro currency and the withdrawal of the United Kingdom from the European Union, as well as concerns regarding terrorism and potential hostilities with various countries, could affect the stability of global financial markets, which could negatively affect U.S. economic conditions. Any of these developments could have a material adverse effect on our business, financial condition and future prospects.

Our commercial banking operations are concentrated in Pennsylvania, New Jersey, New York, and Ohio. As a result, our business is affected by changes in the economic conditions of those states and the regions of which they are a part. Our success depends to a significant extent upon the business activity, population, income levels, deposits and real estate activity in these markets, and we are vulnerable to a downturn in the local economies in these areas. For example, low energy prices have adversely impacted and may continue to adversely impact the economies of Western Pennsylvania and Northeastern Ohio, two of our significant commercial banking markets, which have industries focused on shale gas exploration and shale gas production. Although we do not make loans to companies directly engaged in oil and gas production, adverse conditions that affect these market areas could reduce our growth rate, affect the ability of our customers to repay their loans, affect the value of collateral underlying loans, impact our ability to attract deposits and generally affect our business and financial condition. Because of our geographic concentration, we may be less able than other financial institutions to diversify our credit risks across multiple markets.

Weak economic conditions can be characterized by deflation, fluctuations in debt and equity capital markets, lack of liquidity and depressed prices in the secondary market for loans, increased delinquencies on loans, real estate price declines, and lower commercial activity. All of these factors can be detrimental to the business and/or financial position of our customers and their ability to repay loans as well as the value of the collateral supporting our loans which could adversely impact demand for our credit products as well as our credit quality. Adverse economic conditions and government policy responses to such conditions could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Our non-owner-occupied commercial real estate loan portfolio exposes us to credit risks that may be greater than the risks related to other types of loans.

Our loan portfolio includes non-owner-occupied commercial real estate loans for individuals and businesses for various purposes, which are secured by commercial properties, as well as real estate construction and development loans. As of December 31, 2019, we had outstanding loans secured by non-owner-occupied commercial properties of \$1.59 billion, or 24.1%, of our loans held-for-investment. These loans typically involve repayment dependent upon income generated, or expected to be generated, by the secured property. These loans typically expose a lender to greater credit risk than loans secured by other types of collateral due to a number of factors, including the concentration of principal in a limited number of loans and borrowers, the difficulty of liquidating the collateral securing these loans and the relatively larger loan balances compared to single borrowers. In addition, the amount we may realize after a default is dependent

upon factors outside of our control, including, but not limited to, economic conditions, environmental cleanup liabilities, assessments, interest rates, real estate tax rates, operating expenses of the mortgaged property, occupancy rates, zoning laws, regulatory rules, and natural disasters. Accordingly, charge-offs on non-owner-occupied commercial real estate loans may be larger on a per loan basis than those incurred with residential or consumer loan portfolios.

An unexpected deterioration in the credit quality of our non-owner-occupied commercial real estate loan portfolio or if only a few of our largest borrowers become unable to repay their loan obligations, could result in us increasing our ALL, which would reduce our profitability and have a material adverse effect on our business, financial condition and future prospects.

Our private banking business could be negatively impacted by a prolonged downturn in the securities markets.

Marketable-securities-backed private banking loans represent a material portion of our business and are the fastest growing portion of our loan portfolio. As of December 31, 2019, we had outstanding marketable-securities-backed private banking loans of \$3.60 billion, or 54.7% of our loans held-for-investment. We expect to continue to increase the percentage of our loan portfolio represented by marketable-securities-backed private banking loans in the future. A sharp or prolonged decline in the value of the collateral that secures these loans could materially adversely affect the growth prospects and loan performance in this segment of our loan portfolio and, as a result, could materially adversely affect our business, financial condition, results of operations and future prospects.

A downturn in the real estate market, especially in our primary markets, could result in losses and adversely affect our profitability.

A material portion of our loans are secured by real estate as a primary component of collateral. The real estate collateral provides an alternate source of repayment in the event of default by the borrower and may deteriorate in value. A general decline in real estate values, particularly in our primary markets, could impair the value of our collateral and our ability to sell the collateral upon any foreclosure, which would likely require us to increase our ALL. In addition, we could be subject to costly environmental liabilities with respect to foreclosed properties. In the event of a default with respect to any of these loans, the amount we receive upon sale of the collateral may be insufficient to recover the outstanding principal and interest on the loan. If we are required to re-value the collateral securing a loan to satisfy the debt during a period of reduced real estate values or to increase our ALL, our profitability could be adversely affected, which could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Our lending limit may restrict our growth and prevent us from effectively implementing our business strategy.

We are limited in the amount we can loan to a single borrower by the amount of our capital. Generally, under current law, we may lend up to 15.0% of our unimpaired capital and surplus to any one borrower. We have established an internal lending limit that is significantly lower than our legal lending limit and, based upon our current capital levels, the amount we may lend is significantly less than that of many of our competitors and may discourage potential borrowers who have credit needs in excess of our lending limit from doing business with us. We accommodate larger loans by selling participations in those loans to other financial institutions, but this strategy may not always be available. If we are unable to compete effectively for loans, we may not be able to effectively implement our business strategy, which could have a material adverse effect on our business, financial condition, results of operations and future prospects.

We rely heavily on our executive management team and other key employees, and the loss of the services of any of these individuals could adversely impact our business and reputation.

Our success depends in large part on the performance of our key personnel, as well as on our ability to attract, motivate and retain highly qualified senior and middle management and other skilled employees. Competition for employees is intense, and the process of locating key personnel with the combination of skills and attributes required to execute our business plan may be lengthy. We currently do not have any employment or non-compete agreements with any of our executive officers or key employees other than certain non-solicitation and restrictive agreements from certain key employees in connection with our investment management business. We may not be successful in retaining our key employees, and the loss of one or more of our key personnel could have a material adverse effect on our business because of their skills, knowledge of our markets, relationships, industry experience and the difficulty of finding qualified replacement personnel. If the services of any of our key personnel become unavailable for any reason, we may not be able to hire qualified persons on terms acceptable to us, or at all, which could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Our business has grown rapidly, and we may not be able to maintain our historical rate of growth.

Our business has grown rapidly. Although rapid business growth can be a favorable business condition, financial institutions that grow rapidly can experience significant difficulties as a result of rapid growth. Successful growth in our banking business requires that we follow adequate loan underwriting standards, balance loan and deposit growth while managing interest rate risk and our net interest margin, maintain adequate capital at all times, produce investment performance results competitive with our peers and benchmarks, further diversify our revenue sources, meet the expectations of our clients, and hire and retain qualified employees.

We may not be able to sustain our historical rate of growth or continue to grow our business at all. Because of factors such as the uncertainty in the general economy and the recent government intervention in the credit markets, it may be difficult for us to repeat our historic earnings growth as we continue to expand. Failure to grow or failure to manage our growth effectively could have a material adverse effect on our business and future prospects, and could adversely affect the implementation our business strategy.

Our utilization of brokered deposits could adversely affect our liquidity and results of operations.

Since our inception, we have utilized both brokered and non-brokered deposits as a source of funds to support our growing loan demand and other liquidity needs. As a bank regulatory supervisory matter, reliance upon brokered deposits as a significant source of funding is discouraged. Brokered deposits may not be as stable as other types of deposits and, in the future, those depositors may not renew their deposits, or we may have to pay a higher interest rate to keep those deposits or replace them with other deposits or with funds from other sources. Additionally, if TriState Capital Bank ceases to be categorized as "well capitalized" for bank regulatory purposes, it will not be able to accept, renew or roll over brokered deposits without a waiver from the Federal Deposit Insurance Corporation, or FDIC. Our inability to maintain or replace these brokered deposits as they mature could adversely affect our liquidity and results of operations. Further, paying higher interest rates to maintain or replace these deposits could adversely affect our net interest margin, our net income, and financial condition.

Liquidity risk could impair our ability to fund operations and meet our obligations as they become due.

Our ability to implement our business strategy will depend on our liquidity and ability to obtain funding for loan originations, working capital and other general purposes. Our preferred source of funds for our banking business consists of customer deposits; however, we rely on other sources such as brokered deposits and Federal Home Loan Bank or "FHLB" advances. In addition to our competition with other banks for deposits, such account and deposit balances can decrease when customers perceive alternative investments as providing a better risk/return trade off. If customers move money out of bank deposits and into other investments, we may increase our utilization of brokered deposits, FHLB advances and other wholesale funding sources necessary to fund desired growth levels.

We rely on our ability to generate deposits and effectively manage the repayment and maturity schedules of our loans and investment securities and other sources of liquidity, respectively, to ensure that we have adequate liquidity to fund our banking operations. Any decline in available funding could adversely impact our ability to fund new loan balances, invest in securities, meet our expenses or fulfill obligations such as repaying our borrowings or meeting deposit withdrawal demands, any of which could have a material adverse effect on our liquidity, financial condition, results of operations and future prospects.

We may need to raise additional capital in the future, and if we fail to maintain sufficient capital, we may not be able to maintain regulatory compliance.

We face significant capital and other regulatory requirements as a financial institution. We may need to raise additional capital in the future to provide us with sufficient capital resources and liquidity to meet our commitments and business needs, which could include the financing of acquisitions. In addition, we, on a consolidated basis, and Tristate Capital Bank, on a stand-alone basis, must meet certain regulatory capital requirements and maintain sufficient liquidity required by regulators. Regulatory capital requirements could increase from current levels or our regulators could ask us to maintain capital levels that are in excess of such requirements, which could require us to raise additional capital or reduce our operations. Our ability to raise additional capital depends on conditions in the capital markets, economic conditions and a number of other factors, including investor perceptions regarding the banking industry, market conditions and governmental activities, as well as on our financial condition and performance. Accordingly, we may not be able to raise additional capital if needed or on terms acceptable to us. If we fail to maintain capital to meet regulatory requirements, we could be subject to enforcement actions or other regulatory consequences, which could have an adverse effect on our business, financial condition, results of operations and future prospects.

Any future reductions in our credit ratings may increase our funding costs or impair our ability to effectively compete for business.

Credit ratings or changes in ratings policies and practices are subject to change at any time, and it is possible that any rating agency will take action to downgrade us in the future. We have used and may in the future use debt as a funding source. One or more rating agencies regularly evaluate us and their ratings of our long-term debt are based on many quantitative and qualitative factors, including capital adequacy, liquidity, asset quality, business mix and level and quality of earnings, and we may not be able to maintain our current credit ratings.

Any future decrease in our credit ratings by one or more rating agencies could impact our access to the capital markets or short-term funding or increase our financing costs, and thereby adversely affect our financial condition and liquidity. In the event of a ratings downgrade, our clients and counterparties may terminate their relationships with us, be less likely to engage in transactions with us, or only engage in transactions with us on terms that are less favorable. We cannot predict whether client relationships or opportunities for

future relationships could be adversely affected by clients who choose to do business with a higher-rated institution. The inability to maintain our credit ratings have a material adverse effect on our business, financial condition, results of operations or future prospects.

Changes in interest rates could negatively impact the profitability of our banking business.

Our profitability depends to a significant extent on our net interest income, which is the difference between our interest income on interest-earning assets, such as loans and investment securities, and our interest expense on interest-bearing liabilities, such as deposits and borrowings. Net interest income is affected by changes in market interest rates because different types of assets and liabilities may react differently, and at different times, to market interest rate changes. When interest-bearing liabilities mature or reprice more quickly than interest-earning assets in a period, an increase in market rates of interest could reduce net interest income. Similarly, when interest-earning assets mature or reprice more quickly than interest-bearing liabilities, falling interest rates could reduce net interest income. These rates are highly sensitive to many factors beyond our control, including general economic conditions and policies of various governmental and regulatory agencies, in particular the Federal Reserve. Changes in monetary policy, including changes in interest rates, could influence not only the interest we receive on loans and securities and the interest we pay on deposits and borrowings, but such changes could also affect our ability to originate loans and obtain deposits, the fair value of our financial assets and liabilities, and the average duration of our assets. If the interest rates paid on deposits and other borrowings increase at a faster rate than the interest rates received on loans and other investments, our net interest income, and therefore net income, could be adversely affected.

Our loans are predominantly variable rate loans, with the majority being based on the London Interbank Offered Rate, or LIBOR. A decline in interest rates could cause the spread between our loan yields and our deposit rates paid to compress our net interest margin and our net income could be adversely affected. Further, any substantial, unexpected, prolonged change in market interest rates could have a material adverse effect on our business, financial condition, results of operations and future prospects.

In addition, an increase in interest rates could also have a negative impact on our results of operations by reducing the market value of our investment securities and the ability of borrowers to repay their current loan obligations. These circumstances could not only result in increased loan defaults, foreclosures and charge-offs, but also necessitate increases to our ALL. Each of these factors could have a material adverse effect on our business, results of operations, financial condition and future prospects.

The phasing out and ultimate replacement of LIBOR with an alternative reference rate and changes in the manner of calculating other reference rates may adversely impact the value of loans and other financial instruments we hold that are linked to LIBOR or other reference rates in ways that are difficult to predict and could adversely impact our financial condition.

In July 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021, and for LIBOR to be replaced with an alternative reference rate that will be calculated in a different manner. The Company's commercial and consumer businesses issue, trade and hold various products that are currently indexed to LIBOR. As of December 31, 2019, the Company had a material amount of loans, investment securities, FHLB advances and notional value of derivatives indexed to LIBOR that will mature after 2021. At this time, no consensus exists as to what rate or rates may become acceptable alternatives to LIBOR and it is impossible to predict the effect of any such alternatives on the value of LIBOR-based instruments or arrangements. One of the major identified risks is inadequate fallback language in the various instruments' contracts that may result in issues establishing the alternative index and adjusting the margin as applicable. The Company has (1) established a cross-functional team to identify, assess and monitor risks associated with the transition of LIBOR and other benchmark rates; (2) developed an inventory of affected products; and (3) implemented fallback contractual language where no fallback language previously existed and developed a plan to assess the appropriateness of existing fallback contractual language in legacy loans.

Uncertainty as to the nature of alternative reference rates and as to potential changes or other reforms to LIBOR may adversely affect LIBOR rates and the value of LIBOR-based loans and securities. If not sufficiently planned for, the discontinuation of LIBOR could result in financial, operational, legal, reputational or compliance risks to financial markets and institutions, including to the Company. In addition, we may incur significant expenses in effecting the transition, and may be subject to disputes or litigation with customers over the appropriateness or comparability to LIBOR of the substitute indices, which could have a material adverse effect on our financial condition or results of operations.

Our investment management business may be negatively impacted by competition, changes in economic and market conditions, changes in interest rates and investment performance.

A material portion of our earnings is derived from Chartwell, our investment management business. Chartwell may be negatively impacted by competition, changes in economic and market conditions, changes in interest rates and investment performance. The investment management business is intensely competitive. There are over 1,000 firms which we consider to be primary competitors. In addition to competition from other institutional investment management firms, Chartwell competes with passive index funds, ETFs and investment alternatives such as hedge funds. Many competitors offer similar products to those offered by Chartwell and its performance of competitors' products could lead to a loss of investment in similar Chartwell products, regardless of the performance of such products.

Our investment management contracts are typically terminable in nature and our ability to successfully attract and retain investment management clients will depend on, among other things, our ability to compete with our competitors' investment products, our investment performance, fees, client services, marketing and distribution capabilities. Most of our clients may withdraw funds from under our management at their discretion at any time for any reason, including as a result of competition or poor performance of our products. If we cannot effectively attract and retain customers, our business, financial condition, results of operations and future prospects may be adversely affected.

Additionally, it is possible our management fees could be reduced for a variety of reasons, including, among other things, pressure resulting from competition or regulatory changes, and we may from time to time reduce or waive investment management fees, or limit total expenses, on certain products or services offered for particular time periods to manage fund expenses, to help retain or increase managed assets or for other reasons. If our revenues decline without a commensurate reduction in our expenses, our net income from our investment management business would be reduced, which could have a material adverse effect on our business, financial condition, results of operations and future prospects.

We cannot guaranty that our investment performance will be favorable in the future. The financial markets and businesses operating in the securities industry are highly volatile and affected by, among other factors, economic conditions and trends in business, all of which are beyond our control. Declines in the financial markets, changes in interest rates or a lack of sustained growth may result in declines in the performance of our investment management business and the assets under management. Because the revenues of our investment management business are, to a large extent, fees based on assets under management, such declines could adversely affect our business.

We face significant competitive pressures that could impair our growth, decrease our profitability or reduce our market share.

We operate in the highly competitive financial services industry and face significant competition for customers from bank and non-bank competitors, particularly regional and nationwide institutions, in originating loans, attracting deposits, providing financial management products and services, and providing other financial services. Our competitors are generally larger and may have significantly more resources, greater name recognition, and more extensive and established branch networks or geographic footprints. Because of their scale, many of these competitors can be more aggressive than we can on loan, deposit and financial services pricing. In addition, many of our non-bank and non-institutional financial management competitors have fewer regulatory constraints and may have lower cost structures. We expect competition to continue to intensify due to financial institution consolidation; legislative, regulatory and technological changes; and the emergence of alternative banking sources and investment management products and services. Additionally, technology has lowered barriers to entry.

Our ability to compete successfully will depend on a number of factors, including, our ability to build and maintain long-term customer relationships while ensuring high ethical standards and safe and sound business practices; the scope, relevance, performance and pricing of products and services that we offer; customer satisfaction with our products and services; industry and general economic trends; and our ability to keep pace with technological advances and to invest in new technology. Increased competition could require us to increase the rates we pay on deposits or lower the rates we offer on loans or the fees we charge on banking or investment management products and services, all of which could reduce our profitability. Our failure to compete effectively in our primary markets could cause us to lose market share and could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Our ability to maintain our reputation is critical to the success of our business.

Our business plan emphasizes building and maintaining strong relationships with our clients. We have benefited from strong relationships with and among our customers, and also from our relationships with financial intermediaries. As a result, our reputation is one of the most valuable components of our business. If our reputation is negatively affected by the actions of our employees or otherwise, our existing relationships may be damaged. We could lose some of our existing customers, including groups of large customers who have relationships with each other, and we may not be successful in attracting new customers from competing financial institutions. Any of these developments could have a material adverse effect on our business, financial condition, results of operations and future prospects.

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

Factors beyond our control can significantly influence the fair value of securities in our portfolio and can cause potential adverse changes to the fair value of these securities. These factors include, but are not limited to, rating agency actions in respect to the securities, defaults by the issuer or with respect to the underlying securities, changes in market interest rates and continued instability in the capital markets. Any of these factors, among others, could cause other-than-temporary impairments and realized or unrealized losses in future periods, which could have a material adverse effect on our business, financial condition, results of operations and future prospects. The process for determining whether impairment of a security is other-than-temporary often requires complex, subjective judgments about whether there has been a significant deterioration in the financial condition of the issuer, whether management has the intent or ability to hold a

security for a period of time sufficient to allow for any anticipated recovery in fair value, the future financial performance and liquidity of the issuer and any collateral underlying the security, and other relevant factors which may be inaccurate.

Our financial results depend on management's selection of accounting methods and certain assumptions and estimates.

Our financial condition and results of operations are based on our consolidated financial statements, which are prepared in accordance with generally accepted accounting principles in the United States, or GAAP and with general practices within the financial services industry. The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that have a possibility of producing results that could be materially different than originally reported.

For example, the Bank adopted new guidance for estimating credit losses on loans receivable, held-to-maturity debt securities, and unfunded loan commitments effective January 1, 2020. The current expected credit losses, or CECL, model significantly changed how entities recognize impairment of many financial assets by requiring immediate recognition of estimated credit losses that occur over the life of the financial asset. This requires reserves over the life of the loan rather than the loss emergence period used in the prior model. The CECL guidance requires the implementation of new modeling to quantify this estimate by using principles of not only relevant historical experience and current conditions, but also reasonable and supportable forecasts of future events and circumstances, thus incorporating a broad range of estimates and assumptions in developing credit loss estimates, which could result in significant changes to both the timing and amount of credit loss expense and allowance. Adoption of, and efforts to implement this guidance has caused and may cause our ALL to change materially in the future, which could have a material adverse effect on our business, financial condition, results of operations and future prospects. Our company has very limited loss experience over its life. As a result, our implementation of CECL involved using general industry loss data to estimate historic loss experience. The availability and quality of relevant historical information under this estimation process, the accuracy of forecasts that are required under the CECL methodology, and the development of effective modeling to implement the CECL methodology can have material impacts on current and future provision reserve requirements.

By engaging in derivative transactions, we are exposed to additional credit and market risk in our banking business.

We use interest rate swaps to help manage our interest rate risk in our banking business from recorded financial assets and liabilities when they can be demonstrated to effectively hedge a designated asset or liability and the asset or liability exposes us to interest rate risk or risks inherent in customer related derivatives. We use other derivative financial instruments to help manage other economic risks, such as liquidity and credit risk and differences in the amount, timing, and duration of our known or expected cash receipts principally related to certain of our fixed-rate loan assets or certain of our variable-rate borrowings. We also have derivatives that result from a service we provide to certain qualifying customers approved through our credit process.

By engaging in derivative transactions, we are exposed to credit and market risk. Hedging interest rate risk is a complex process, requiring sophisticated models and routine monitoring, and is not a perfect science. As a result of interest rate fluctuations, hedged assets and liabilities will appreciate or depreciate in value. The effect of this unrealized appreciation or depreciation will generally be offset by income or loss on the derivative instruments. If the counterparty fails to perform, credit risk exists to the extent of the fair value gain in the derivative. Market risk exists to the extent that interest rates change in ways that are significantly different from what we expected when we entered into the derivative transaction. The existence of credit and market risk associated with our derivative instruments could adversely affect our net interest income and, therefore, could have an adverse effect on our business, financial condition, results of operations and future prospects.

We may be adversely affected by a decrease in the soundness of other financial services companies.

Our ability to engage in routine funding and other transactions could be adversely affected by the actions and commercial soundness of other financial services companies. The financial services industry is highly interrelated as a result of trading, clearing, servicing, custody arrangements, counterparty and other relationships. We have exposure to different industries and counterparties, including through transactions with counterparties and intermediaries in the financial services industry such as brokers and dealers, commercial banks, insurance companies, investment banks, mutual and hedge funds and other institutional clients. In addition, we participate in loans originated by other financial institutions (including shared national credits) and our private banking channel relies on relationships with other financial services companies for referrals. As a result, declines in the financial condition, defaults, or even rumors or questions about, one or more financial service companies or the financial services industry generally, may lead to market-wide liquidity, asset quality or other problems and could lead to losses or defaults by us or by other institutions. In addition, problems that arise in our relationships with financial services companies may result in a slow down or cessation in referrals that we receive from these financial services companies. These problems, losses or defaults could have a material adverse effect on our business, financial condition, results of operations and future prospects.

We rely on third parties to provide key components of our business infrastructure, including to monitor the value of and control marketable securities that collateralize our loans, and a failure of these parties to perform for any reason could disrupt our operations.

Third parties provide key components of our business infrastructure such as loan and account servicing, data processing, internet connections, network access, core application processing, statement production and account analysis. Our business depends on the successful and uninterrupted functioning of our information technology and telecommunications systems and third-party servicers. In addition, we utilize the systems of these third parties to provide information to us so that we can quickly and accurately monitor changes in the value of marketable securities that serve as collateral. We also rely on these parties to provide control over marketable securities for purposes of perfecting our security interests and retaining the collateral in the applicable accounts.

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 or impaired performance of our systems and technology due to malfunctions, programming inaccuracies or other circumstances or events. Replacing vendors or addressing other issues with our third-party service providers could entail significant delay and expense. If we are unable to efficiently replace ineffective service providers, or if we experience a significant, sustained or repeated, system failure or service denial, it could compromise our ability to effectively operate and assess and react to a risk in our loan portfolio, damage our reputation, result in a loss of customer business or financial damages from customer businesses, and subject us to additional regulatory scrutiny and possible financial liability, any of which could have a material adverse effect on our business, financial condition, results of operations and future prospects.

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

In deciding whether to extend credit or enter into other transactions with clients and counterparties, we may rely on information furnished by or on behalf of clients and counterparties, including financial statements, property appraisals, title information, income documentation, account information and other financial information. We may also rely on representations of counterparties as to the accuracy and completeness of such information and, with respect to financial statements, on reports of independent auditors. Any such misrepresentation or incorrect or incomplete information may not be detected prior to funding a loan or during our ongoing monitoring of outstanding loans. In addition, one or more of our employees or vendors could cause a significant operational breakdown or failure, either as a result of human error or fraud. Any of these developments could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Our growth and expansion strategy may involve strategic investments or acquisitions, and we may not be able to overcome risks associated with such transactions.

Although we plan to continue to grow our business organically, we may seek opportunities to invest in or acquire investment management businesses or other businesses that we believe would complement our existing business model. Any potential future investment or acquisition activities could be material to our business and involve a number of risks, including significant time and expense required to identify, evaluate and negotiate potential transactions; an inability to attract acceptable funding; the limited experience of our management team in working together on acquisitions and integration activities; the time, expense and difficulty of integrating the combined businesses; an inability to realize expected synergies or returns on investment; potential disruption of our ongoing business; an inability to maintain adequate regulatory capital; and a loss of key employees or key customers. We may not be successful in overcoming these risks or any other problems. Our inability to overcome these risks could have an adverse effect on our ability to implement our business strategy and enhance shareholder value, which, in turn, could have a material adverse effect on our business, financial condition, results of operations and future prospects.

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

From time to time, we may develop, grow or acquire new lines of business or offer new products and services. There are substantial risks and uncertainties associated with these efforts, particularly in instances where the markets are not fully developed. In developing, implementing and marketing new lines of business or new or enhanced products and services, we may invest significant time and resources. Initial timetables for the introduction and development of new lines of business or new products or services may not be achieved and price and profitability targets may not prove feasible. External factors, such as compliance with regulations, competitive alternatives and shifting market preferences, may also impact the successful implementation of a new line of business or a new product or service. Furthermore, any new line of business or new or enhanced product or service could have a significant impact on the effectiveness of our system of internal controls. Failure to successfully manage these risks could have a material adverse effect on our business, financial condition, results of operations and future prospects.

The value of our goodwill and other intangible assets may decline in the future.

In our prior acquisitions, we have generally recognized intangible assets, including customer relationship intangible assets and goodwill, in our consolidated statements of financial condition, but we may not realize the value of these assets. Management performs an annual review of the carrying values of goodwill and indefinite-lived intangible assets and periodically reviews the carrying values of all other intangible assets to determine whether events and circumstances indicate that an impairment in value may have occurred. Although we have determined that goodwill and other intangible assets were not impaired during 2019, a significant and sustained decline in our stock price and market capitalization, 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 goodwill or other intangible assets. Should a review indicate impairment, a write-down of the carrying value of the asset would occur, resulting in a non-cash charge which could result in a material charge to earnings and would adversely affect our results of operations.

Unauthorized access, cyber-crime and other threats to data security may require significant resources, harm our reputation, and adversely affect our business.

We necessarily collect, use and hold personal and financial information concerning individuals and businesses with which we have a relationship. In addition, we provide our clients with the ability to bank and make investment decisions remotely, including over the internet. Threats to data security, including unauthorized access and cyber-attacks, rapidly emerge and change, exposing us to additional costs related to protection or remediation and competing time constraints to secure our data in accordance with customer expectations, statutory and regulatory privacy regulations, and other requirements. It is difficult or impossible to defend against every risk being posed by changing technologies, as well as the intent of criminals, terrorists or foreign governments or their agents with respect to committing cyber-crime. Because of the increasing sophistication of cyber-criminals and terrorists, data breaches could result despite our best efforts. These risks may increase in the future as we continue to increase our internet-based product offerings and expand our internal use of web-based products and applications, and controls employed by our information technology department and our other employees and vendors could prove inadequate to resolve or mitigate these risks.

We could also experience a breach due to intentional or negligent conduct on the part of employees, vendors or other internal sources, software bugs or other technical malfunctions, or other causes. As a result of any of these threats, our customer accounts and the personal and financial information of our customers and employees may become vulnerable to account takeover schemes, identity theft or cyber-fraud. In addition, our customers use their own electronic devices to do business with us and may provide their information to a third party in connection with obtaining services from such third party. Our ability to assure security is limited in these instances. Our systems and those of our third-party vendors may also become vulnerable to damage or disruption due to circumstances beyond our or their control, such as catastrophic events, power anomalies or outages, natural disasters, network failures, viruses and malware.

A breach of our security or the security of any of our third-party vendors that results in unauthorized access to our data, including personal and financial information of our customers, could expose us to a disruption or challenges relating to our daily operations as well as to data loss, litigation, damages, fines and penalties, significant increases in compliance costs, regulatory scrutiny and reputational damage. Maintaining our security measures may also create risks associated with implementing and integrating new systems. In addition, our investment management business could be harmed by cyber incidents affecting issuers in which its customers' assets are invested, and our private banking business could be harmed by such incidents. Any such breaches of security or cyber incidents could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Beyond breaches of our security or the security of our third party vendors or their affiliates, as a result of financial entities and technology systems becoming more interdependent and complex, a cyber-incident, information breach or loss, or technology failure that compromises the systems or data of one or more financial entities could have a material impact on counterparties or other market participants, including us. We have taken measures to implement backup systems and other safeguards to support our operations, but our ability to conduct business may be adversely affected by any significant disruptions to us or to third parties with whom we interact.

We are subject to laws regarding the privacy, information security and protection of personal information and any violation of these laws or another incident involving personal, confidential or proprietary information of individuals could damage our reputation and otherwise adversely affect our operations and financial condition.

Our business requires the collection and retention of large volumes of customer data, including personally identifiable information in various information systems that we maintain and in those maintained by third party service providers. We also maintain important internal company data such as personally identifiable information about our employees and information relating to our operations. We are subject to complex and evolving laws and regulations governing the privacy and protection of personal information of individuals (including customers, employees, suppliers and other third parties). Various state and federal banking regulators and states have also enacted data security breach notification requirements with varying levels of individual, consumer, regulatory or law enforcement notification in the event of a security breach. Ensuring that our collection, use, transfer and storage of personal information comply with all applicable laws and regulations may increase our costs. Furthermore, we may not be able to ensure that all of our clients, suppliers,

counterparties and other third parties have appropriate controls in place to protect the confidentiality of the information that they exchange with us. If personal, confidential or proprietary information of our customers or others were to be mishandled or misused, we could be exposed to litigation or regulatory sanctions under personal information laws and regulations. Concerns regarding the effectiveness of our measures to safeguard personal information, or even the perception that such measures are inadequate, could cause us to lose customers or potential customers and thereby reduce our revenues. Accordingly, any failure or perceived failure to comply with applicable privacy or data protection laws and regulations may subject us to inquiries, examinations and investigations that could result in requirements to modify or cease certain operations or practices or in significant liabilities, fines or penalties, and could damage our reputation and otherwise adversely affect our business, financial condition, results of operations and future prospects.

We have a continuing need for technological change, and we may not have the resources to effectively implement new technology, or we may experience operational challenges when implementing new technology.

The financial services industry is continually undergoing rapid technological change with frequent introductions of new technology-driven products and services. The effective use of technology increases efficiency and enables financial institutions to better serve customers and to reduce costs. Our future success depends, in part, upon our ability to address the needs of our customers by using technology to provide products and services that will satisfy customer demands, as well as to create additional efficiencies in our operations. Although we are committed to keeping pace with technological advances and to investing in new technology, our competitors may, through the use of new technologies that we have not implemented, whether due to cost or otherwise, be able to offer additional or superior products, which would put us at a competitive disadvantage. We also may not be able to effectively implement new technology-driven products and services, be successful in marketing such products and services or replace technologies that are out of date with new technologies, which could result in a loss of customers seeking new technology-driven products and services. In addition, the implementation of technological changes and upgrades to maintain current systems and integrate new ones may cause service interruptions, transaction processing errors and system conversion delays, may cause us to fail to comply with applicable laws, and may cause us to incur additional expenses, which may be substantial. Failure to successfully keep pace with technological change affecting the financial services industry and avoid interruptions, errors and delays could have a material adverse effect on our business, financial condition, results of operations and future prospects.

We may take tax filing positions or follow tax strategies that may be subject to challenge.

The amount of income taxes that we are required to pay on our earnings is based on federal and state legislation and regulations. We provide for current and deferred taxes in our financial statements based on our results of operations, business activity, legal structure and interpretation of tax statutes. We may take filing positions or follow tax strategies that are subject to audit and may be subject to challenge. Our net income may be reduced if a federal, state or local authority assesses charges for taxes that have not been provided for in our consolidated financial statements. Taxing authorities could change applicable tax laws, challenge filing positions or assess taxes and interest charges. If taxing authorities take any of these actions, our business, financial condition, results of operations and future prospects could be adversely affected, perhaps materially.

Risks Relating to Regulations

We operate in a highly regulated environment and the laws and regulations that govern our operations, corporate governance, executive compensation and accounting principles, or changes in them, or our failure to comply with them, could subject us to regulatory action or penalties.

Banking is highly regulated under federal and state law. We are subject to extensive regulation and supervision that governs almost all aspects of our operations. As a registered bank holding company, we are subject to supervision, regulation and examination by the Federal Reserve. As a commercial bank chartered under the laws of Pennsylvania, TriState Capital Bank is subject to supervision, regulation and examination by the Pennsylvania Department of Banking and Securities and the FDIC. Our investment management business is subject to extensive regulation in the United States. Chartwell and Chartwell TSC are subject to federal securities laws, principally the Securities Act of 1933, as amended, the Investment Company Act of 1940, as amended, the Investment Advisers Act of 1940, as amended, and other regulations promulgated by various regulatory authorities, including the SEC, the Financial Industry Regulatory Authority, Inc., or FINRA, stock exchanges, and applicable state laws. Our investment management business also may be subject to regulation by the Commodity Futures Trading Commission and the National Futures Association. Our investment management business also is affected by various regulations governing banks and other financial institutions. Failure to appropriately comply with any such laws, regulations or regulatory policies could result in sanctions by regulatory agencies, civil monetary penalties or damage to our reputation, all of which could adversely affect our business, financial condition, results of operations and future prospects.

The banking agencies have broad enforcement power over bank holding companies and banks, including the authority, among other things, to enjoin "unsafe or unsound" practices, require affirmative action to correct any violation or practice, issue administrative orders that can be judicially enforced, direct increases in capital, direct the sale of subsidiaries or other assets, limit dividends and distributions,

restrict growth, assess civil monetary penalties, remove officers and directors and, with respect to banks, terminate a bank's charter, terminate its deposit insurance or place a bank into conservatorship or receivership.

In addition to the safety and soundness focus, there are significant banking regulations relating to other aspects of our business, including borrower protection and community development. With respect to our community development obligations under the Community Reinvestment Act, or CRA, we have an approved CRA strategic plan for the years 2018 through 2020. While we currently believe we will succeed in obtaining approval for our CRA strategic plan commencing in 2021, we cannot guaranty that we will obtain such an approval, in which case we would be subject to the CRA for traditional large banks, which could have material adverse effects on our business, financial of operation, financial condition and future prospects. For additional information, see "Supervision and Regulation-Community Reinvestment Act."

Compliance with the myriad laws and regulations applicable to our organization can be difficult and costly. In addition, these laws, regulations and policies are subject to continual review by governmental authorities, and changes to these laws, regulations and policies, including changes in interpretation or implementation of these laws, regulations and policies, could affect us in substantial and unpredictable ways and often impose additional compliance costs. Further, any new laws, rules and regulations, could make compliance more difficult or expensive. Failure to comply with these laws and regulations, even if the failure follows good faith effort or reflects a difference in interpretation, could subject us to restrictions on our business activities, fines and other penalties, which could have an adverse impact on our business, financial condition, results of operations and future prospects.

The ongoing implementation of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, could require significant management attention and resources and subject us to more stringent regulatory requirements.

The Dodd-Frank Act comprehensively reformed the regulation of financial institutions, products and services. The Dodd-Frank Act requires various federal agencies to adopt a broad range of new implementing rules and regulations, and to prepare numerous studies and reports for Congress. While a significant number of regulations have already been promulgated to implement the Dodd-Frank Act, many of the details and much of the impact of the Dodd-Frank Act may not be known for lengthy periods. We may be forced to invest significant management attention and resources to make any necessary changes related to the Dodd-Frank Act and regulations promulgated thereunder, which may adversely affect our business, financial condition, results of operations and future prospects.

Federal and state bank regulators periodically conduct examinations of our business and we may be required to remediate adverse examination findings.

The Federal Reserve, the FDIC and the Pennsylvania Department of Banking and Securities periodically conduct examinations of our business, including our compliance with laws and regulations. If, as a result of an examination, a bank regulatory agency were to determine that our financial condition, capital resources, asset quality, earnings prospects, management, liquidity or other aspects of any of our operations had become unsatisfactory, or that we or TriState Capital Bank were in violation of any law or regulation, it may take a number of different remedial actions. These actions include the power to enjoin "unsafe or unsound" practices, to require affirmative action to correct any conditions resulting from any violation or practice, to issue an administrative order that can be judicially enforced, to direct an increase in our capital, to restrict our growth, to assess civil monetary penalties against us, TriState Capital Bank or our respective officers or directors, to remove officers and directors and, if it is concluded that such conditions cannot be corrected or there is an imminent risk of loss to depositors, to terminate TriState Capital Bank's charter or deposit insurance and place the Bank into receivership or conservatorship. Any regulatory action against us could have a material adverse effect on our business.

The Bank's FDIC deposit insurance premiums and assessments may increase.

The deposits of TriState Capital Bank are insured by the FDIC up to legal limits and, accordingly, subject the Bank to the payment of FDIC deposit insurance assessments. The Bank's regular assessments are determined by its risk category, which is based on a combination of its financial ratios and supervisory ratings, and which, among other things, generally demonstrates its regulatory capital levels and level of supervisory concern. Moreover, the FDIC has the unilateral authority to change deposit insurance assessment rates and the manner in which deposit insurance is calculated, and also to charge special assessments to FDIC-insured institutions. High levels of bank failures since 2007 and increases in the statutory deposit insurance limits have increased costs to the FDIC to resolve bank failures and have put significant pressure on the Deposit Insurance Fund. In order to maintain a strong funding position and restore the reserve ratios of the Deposit Insurance Fund, the FDIC increased deposit insurance assessment rates and charged a special assessment to all FDIC-insured financial institutions. Further increases in assessment rates or special assessments may occur in the future, especially if there are significant additional financial institution failures.

We are subject to numerous laws designed to protect consumers, including the Community Reinvestment Act, or the CRA, and fair lending laws, and failure to comply with these laws could lead to a wide variety of sanctions.

The CRA, the Equal Credit Opportunity Act, the Fair Housing Act and other fair lending laws and regulations impose nondiscriminatory lending requirements on financial institutions. The Consumer Financial Protection Bureau, or CFPB, the Department of Justice and other federal agencies are responsible for enforcing these laws and regulations. A successful regulatory challenge to an institution's performance under the CRA or fair lending laws and regulations could result in a wide variety of sanctions, including damages and civil money penalties, injunctive relief, restrictions on mergers and acquisitions activity, restrictions on expansion, and restrictions on entering new business lines. Private parties may also have the ability to challenge an institution's performance under fair lending laws in private class action litigation. Such actions could have a material adverse effect on our business, financial condition, results of operations and future prospects.

We face a risk of noncompliance with and enforcement action under the Bank Secrecy Act and other anti-money laundering statutes and regulations.

The Bank Secrecy Act, the USA PATRIOT Act of 2001, and other laws and regulations require financial institutions, among other duties, to institute and maintain an effective anti-money laundering program and file suspicious activity and currency transaction reports when appropriate. In addition to other bank regulatory agencies, the federal Financial Crimes Enforcement Network of the Department of the Treasury is authorized to impose significant civil money penalties for violations of those requirements and has recently engaged in coordinated enforcement efforts with state and federal banking regulators, as well as the Department of Justice, the CFPB, the Drug Enforcement Administration, the Office of Foreign Assets Control, or OFAC, and the Internal Revenue Service. We are also subject to increased scrutiny of compliance with the rules enforced by OFAC regarding, among other things, the prohibition of transacting business with, and the need to freeze assets of, certain persons and organizations identified as a threat to the national security, foreign policy or economy of the United States. To comply with regulations, guidelines and examination procedures in these areas, we have dedicated significant resources to our anti-money laundering program and OFAC compliance. If our policies, procedures and systems are deemed deficient, we would be subject to liability, including fines and regulatory actions, which may include restrictions on our ability to pay dividends and the necessity to obtain regulatory approvals to proceed with certain aspects of our business plan, including any acquisitions we desire to make. We could also incur increased costs and expenses to improve our anti-money laundering procedures and systems to comply with any regulatory requirements or actions. Failure to maintain and implement adequate programs to combat money laundering and terrorist financing could also have serious reputational consequences for us. Any of these results could have a material adverse effect on our business, financial condition, results of operations and future prospects.

We are a holding company and we depend upon our subsidiaries for liquidity. Applicable laws and regulations, including capital and liquidity requirements, may restrict our ability to transfer funds from our subsidiaries to us or other subsidiaries.

TriState Capital Holdings, Inc., as the parent company, is a separate and distinct legal entity from our banking and nonbank subsidiaries. We evaluate and manage liquidity on a legal entity basis. Legal entity liquidity is an important consideration as there are legal and other limitations on our ability to utilize liquidity from one legal entity to satisfy the liquidity requirements of another, including the parent company. For instance, the parent company depends on distributions and other payments from our banking and nonbank subsidiaries to fund all payments on our other obligations, including debt obligations. Our bank and investment management subsidiaries are subject to laws that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to the parent company or other subsidiaries. In addition, our bank and investment management subsidiaries are subject to restrictions on their ability to lend to or transact with affiliates and to minimum regulatory capital and liquidity requirements, as well as restrictions on their ability to use funds deposited with them in bank or brokerage accounts to fund their businesses. These limitations may hinder our ability to implement our business strategy which, in turn, could have a material adverse effect on our business, financial condition, results of operations and future prospects.

Risks Relating to an Investment in our Common Stock and Preferred Stock

Shares of our common stock, preferred stock and underlying depositary shares are not an insured deposit.

Shares of our common stock, preferred stock and underlying depositary shares are not bank deposits and are not insured or guaranteed by the FDIC or any other government agency. An investment in our common stock, preferred stock or underlying depositary shares has risks, and you may lose your entire investment.

An active, liquid market for our securities may not be sustained.

Our common stock and depositary shares underlying our Series A Preferred Stock and Series B Preferred Stock are listed on Nasdaq, but we may be unable to meet continued listing standards. In addition, an active, liquid trading market for such securities may not be sustained. A public trading market having depth, liquidity and orderliness depends upon the presence in the marketplace and independent decisions

of willing buyers and sellers of our common stock, over which we have no control. Without an active, liquid trading market for our common stock, shareholders may not be able to sell their shares at the volume, prices and times desired. The lack of an established market could adversely affect the value of our common stock.

Our preferred stock is thinly traded.

There is only a limited trading volume in our preferred stock due to the small size of the issue and its largely institutional holder base. Significant sales of our preferred stock, or the expectation of these sales, could cause the price of our preferred stock to fall substantially.

The market price of our securities may be subject to substantial fluctuations, which may make it difficult for you to sell your shares at the volume, prices and times desired.

The market price of our common stock and depositary shares underlying our Series A Preferred Stock and Series B Preferred Stock may be highly volatile, which may make it difficult to resell shares of our securities at the volume, prices and times desired. There are many factors that may impact the market price and trading volume of our securities, including, without limitation:

- actual or anticipated fluctuations in our operating results or financial condition or general changes in economic conditions;
- the effects of, and changes in, trade, monetary and fiscal policies, accounting standards, policies, interpretations or principles or in laws or regulations affecting us;
- public reaction to our press releases, our other public announcements or our filings with the SEC;
- publication of research reports about us, our competitors, or the financial services industry or changes in, or failure to meet, securities analysts' estimates of our performance, or lack of research reports by industry analysts or ceasing of coverage;
- operating and stock price performance of companies that investors deemed comparable to us;
- additional or anticipated sales of our common stock or other securities by us or our existing shareholders;
- additions or departures of key personnel;
- perceptions in the marketplace regarding our competitors and/or us;
- significant acquisitions or business combinations, partnerships, joint ventures or capital commitments by us or our competitors;
- other economic, competitive, governmental, regulatory and technological factors affecting our business; and
- other news, announcements or disclosures (whether by us or others) related to us, our competitors, our core market or the financial services industry.

The stock market has experienced substantial fluctuations in recent years, which in many cases have been unrelated to the operating performance and prospects of particular companies. In addition, significant fluctuations in the trading volume in our common stock may cause significant price variations. Increased market volatility may adversely affect the market price of our common stock, which could make it difficult to sell your shares at the volume, prices and times desired.

Actual or anticipated issuances or sales of our securities in the future could adversely affect the prevailing market price of our common stock, preferred stock and underlying depositary shares and could impair our ability to raise capital through future sales of equity securities.

Actual or anticipated issuances or sales of substantial amounts of our common stock, preferred stock or depositary shares could cause the market price of any of our securities to decline significantly and make it more difficult for us to sell equity or equity-related securities in the future at a time and on terms that we deem appropriate. The issuance of any shares of our securities also would, and the issuance of equity-related securities could, dilute the percentage ownership interest held by shareholders with respect to such security. We may issue additional equity securities, or debt securities convertible into or exercisable or exchangeable for equity securities, from time to time to raise additional capital, support growth or to make acquisitions. Further, we expect to issue stock options or other stock awards to retain and motivate our employees and directors. These issuances of securities could dilute the voting and economic interests of our existing shareholders, result in a significant decline in the market price of our common stock or other securities and make it more difficult for us to raise capital through future sales of equity securities.

Our current management and board of directors have significant control over our business.

Our directors, as well as their related parties, and executive officers beneficially own a material portion of our outstanding common stock. Consequently, our directors and executive officers, acting together, may be able to significantly affect the outcome of the election of directors and the potential outcome of other matters submitted to a vote of our shareholders, such as mergers, the sale of substantially all of our assets and other corporate matters. The interests of these insiders could conflict with the interest of our shareholders.

The rights of holders of our common stock are generally subordinate to the rights of holders of our debt securities and preferred stock and may be subordinate to the rights of holders of any class of preferred stock or any debt securities that we may issue in the future.

Our board of directors has the authority to issue debt securities as well as an aggregate of up to 150,000 shares of preferred stock on the terms it determines without shareholder approval. In 2018, we issued 40,250 shares of our 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock in the form of \$1.6 million depositary shares, each representing a 1/40th interest in a share of Series A Preferred Stock. In 2019, we issued 80,500 shares of our 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock in the form of \$3.2 million depositary shares, each representing ownership of a 1/40th interest in a share of Series B Preferred Stock. Any debt or shares of preferred stock that we may issue in the future will be senior to our common stock. Because our decision to issue debt or equity securities or incur other borrowings in the future will depend on market conditions and other factors beyond our control, the amount, timing, nature or success of our future capital raising efforts is uncertain. Thus, holders of our common stock bear the risk that our future issuances of debt or equity securities or our incurrence of other borrowings may negatively affect the market price of our common stock.

Holders of our preferred stock and the depositary shares will have limited voting rights.

Holders of the Series A Preferred Stock and Series B Preferred Stock and, accordingly, holders of the depositary shares, will have no voting rights with respect to matters that generally require the approval of our voting common shareholders. Holders of preferred stock have voting rights that are generally limited to, with respect to the series of preferred stock held, (i) authorizing, creating or issuing any capital stock ranking senior to the such preferred stock as to dividends or the distribution of assets upon liquidation, and (ii) amending, altering or repealing any provision of our Articles of Incorporation, so as to adversely affect the powers, preferences or special rights of such series of preferred stock.

We have not paid dividends on our common stock and are subject to regulatory restrictions on our ability to pay dividends.

We have not paid any dividends on our common stock since inception and have instead utilized our earnings to finance the growth and development of our business. In addition, if we decide to pay dividends on our common stock in the future (and we have not made such a decision), we are subject to certain restrictions as a result of banking laws, regulations and policies. Moreover, because TriState Capital Bank is our most significant asset, our ability to pay dividends to our shareholders depends in large part on our receipt of dividends from the Bank, which is also subject to restrictions on dividends as a result of banking laws, regulations and policies. Finally, so long as any shares of our Series A Preferred Stock or Series B Preferred Stock remain outstanding, unless we have paid in full (or declared and set aside funds sufficient for) applicable dividends on the Preferred Stock, we may not declare or pay any dividend on our common stock, other than a dividend payable solely in shares of common stock or in connection with a shareholder rights plan.

Our corporate governance documents, and certain applicable corporate and banking laws, could make a takeover more difficult.

Certain provisions of our amended and restated articles of incorporation, our bylaws, as amended, and corporate and federal banking laws, could make it more difficult for a third party to acquire control of our organization or conduct a proxy contest, even if those events were perceived by many of our shareholders as beneficial to their interests. These provisions, and the corporate and banking laws and regulations applicable to us:

- empower our board of directors, without shareholder approval, to issue preferred stock, the terms of which, including voting power, are set by our board of directors;
- divide our board of directors into four classes serving staggered four-year terms;
- eliminate cumulative voting in elections of directors;
- require the request of holders of at least 10% of the outstanding shares of our capital stock entitled to vote at a meeting to call a special shareholders' meeting;

- require at least 60 days' advance notice of nominations by shareholders for the election of directors and the presentation of shareholder proposals at meetings of shareholders; and
- require prior regulatory application and approval of any transaction involving control of our organization.

These provisions may discourage potential acquisition proposals and could delay or prevent a change in control, including circumstances in which our shareholders might otherwise receive a premium over the market price of our shares.

There are substantial regulatory limitations on changes of control of bank holding companies.

With certain limited exceptions, federal regulations prohibit a person or company or a group of persons deemed to be "acting in concert" from, directly or indirectly, acquiring more than 10% (5% if the acquirer is a bank holding company) of any class of our voting stock or obtaining the ability to control in any manner the election of a majority of our directors or otherwise direct the management or policies of our company without prior notice or application to and the approval of the Federal Reserve. Accordingly, prospective investors need to be aware of and comply with these requirements, if applicable, in connection with any purchase of shares of our common stock. These provisions effectively inhibit certain mergers or other business combinations, which, in turn, could adversely affect the market price of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our main office consists of leased office space located at One Oxford Centre, Suite 2700, 301 Grant Street, Pittsburgh, Pennsylvania. We also lease office space for each of our four representative bank offices in the metropolitan areas of Philadelphia, Pennsylvania; Cleveland, Ohio; Edison, New Jersey; and New York, New York; and we lease office space for Chartwell Investment Partners, LLC in Berwyn, Pennsylvania. The leases for our facilities have terms expiring at dates ranging from 2020 and 2036, although certain of the leases contain options to extend beyond these dates. We believe that our current facilities are adequate for our current level of operations.

ITEM 3. LEGAL PROCEEDINGS

From time to time the Company is a party to various litigation matters incidental to the conduct of its business. During the year ended December 31, 2019, the Company was not a party to any legal proceedings the resolution of which management believes will be material to the Company's business, future prospects, financial condition, liquidity, results of operation, cash flows or capital levels.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

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

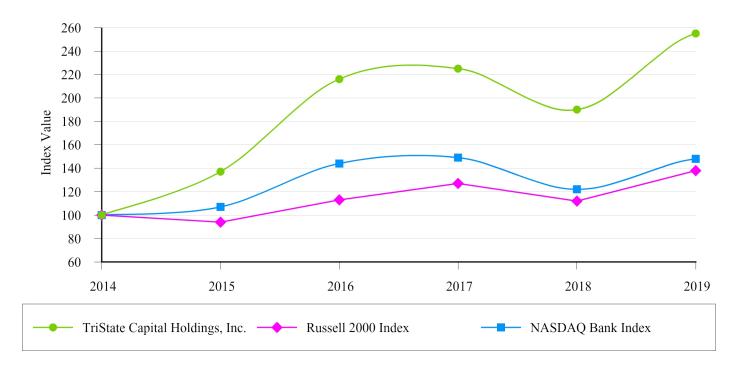
Our common stock is traded on The Nasdaq Global Select Market under the symbol "TSC." On December 31, 2019, there were approximately 158 holders of record of our common stock, listed with our registered agent.

No cash dividends have ever been paid by us on our common stock. Our principal source of funds to pay cash dividends on our common stock would be cash dividends from our Bank and Chartwell subsidiaries. The payment of dividends by our bank is subject to certain restrictions imposed by federal and state banking laws, regulations and authorities.

Stock Performance Graph

The following graph sets forth the cumulative total stockholder return for the Company's common stock for the five-year period ending December 31, 2019, compared to an overall stock market index (Russell 2000 Index) and the Company's peer group index (Nasdaq Bank Index). The Russell 2000 Index and Nasdaq Bank Index are based on total returns assuming reinvestment of dividends. The graph assumes an investment of \$100 on December 31, 2014. The performance graph represents past performance and should not be considered to be an indication of future performance.

Total Return Performance



Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The table below sets forth information regarding the Company's purchases of its common stock during its fiscal quarter ended December 31, 2019:

	Total Number of Shares Purchased ⁽¹⁾	Weighted Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	of S Ye	Approximate Dollar Value Shares that May It Be Purchased der the Plans or Programs
October 1, 2019 - October 31, 2019	_	\$	_	\$	10,428,804
November 1, 2019 - November 30, 2019	4,483	23.4	4 —		10,428,804
December 1, 2019 - December 31, 2019	8,647	24.8	-		10,428,804
Total	13,130	\$ 24.3) —	\$	10,428,804

The 13,130 shares of treasury stock in the table above were acquired in connection with the exercise, net settlement, cancellation, or vesting of equity awards. These shares were not part of a publicly announced plan or program.

Recent Sales of Unregistered Securities

None.

On October 16, 2018, the Board approved a share repurchase program of up to \$5 million. On July 15, 2019, the Board approved an additional share repurchase program of up to \$10 million. Under this authorization, purchases of shares may be made at the discretion of management from time to time in the open market or through negotiated transactions, as well as purchases of shares or the options to acquire shares subject to common stock incentive compensation award agreements from officers, directors or employees of the Company.

ITEM 6. SELECTED FINANCIAL DATA

You should read the selected financial data set forth below in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and the related notes included elsewhere in this Form 10-K. We have derived the selected statements of income data for the years ended December 31, 2019, 2018 and 2017, and the selected balance sheet data as of December 31, 2019 and 2018, from our audited consolidated financial statements included elsewhere in this Form 10-K. We have derived the selected statements of income data for the years ended December 31, 2016 and 2015, and the selected balance sheet data as of December 31, 2017, 2016 and 2015, from our audited consolidated financial statements not included in this Form 10-K. The performance, asset quality and capital ratios are unaudited and derived from the audited financial statements as of and for the years presented. Average balances have been computed using daily averages. Our historical results may not be indicative of our results for any future period.

	As of and for the Years Ended December 31,											
(Dollars in thousands)		2019	2018	2017	2016	2015						
Period-end balance sheet data:												
Cash and cash equivalents	\$	403,855 \$	189,985 \$	156,153 \$	103,994 \$	96,676						
Total investment securities		469,150	466,759	220,552	238,473	225,411						
Loans and leases held-for-investment		6,577,559	5,132,873	4,184,244	3,401,054	2,841,284						
Allowance for loan and lease losses		(14,108)	(13,208)	(14,417)	(18,762)	(17,974)						
Loans and leases held-for-investment, net		6,563,451	5,119,665	4,169,827	3,382,292	2,823,310						
Goodwill and other intangibles, net		65,854	67,863	65,358	67,209	50,816						
Other assets		263,500	191,383	166,007	138,489	105,958						
Total assets	\$	7,765,810 \$	6,035,655 \$	4,777,897 \$	3,930,457 \$	3,302,171						
Deposits	\$	6,634,613 \$	5,050,461 \$	3,987,611 \$	3,286,779 \$	2,689,844						
Borrowings, net		355,000	404,166	335,913	239,510	254,308						
Other liabilities		154,916	101,674	65,302	52,361	32,042						
Total liabilities		7,144,529	5,556,301	4,388,826	3,578,650	2,976,194						
Preferred stock		116,079	38,468	_	_	_						
Common shareholders' equity		505,202	440,886	389,071	351,807	325,977						
Total shareholders' equity		621,281	479,354	389,071	351,807	325,977						
Total liabilities and shareholders' equity	\$	7,765,810 \$	6,035,655 \$	4,777,897 \$	3,930,457 \$	3,302,171						
Income statement data:												
Interest income	\$	262,447 \$	199,786 \$	134,295 \$	98,312 \$	83,596						
Interest expense		135,390	86,382	42,942	23,499	15,643						
Net interest income		127,057	113,404	91,353	74,813	67,953						
Provision (credit) for loan and lease losses		(968)	(205)	(623)	838	13						
Net interest income after provision for loan and lease losses		128,025	113,609	91,976	73,975	67,940						
Non-interest income:												
Investment management fees		36,442	37,647	37,100	37,035	29,618						
Net gain (loss) on the sale and call of debt securities		416	(70)	310	77	33						
Other non-interest income		15,924	10,340	9,556	9,396	5,832						
Total non-interest income		52,782	47,917	46,966	46,508	35,483						
Non-interest expense:												
Intangible amortization expense		2,009	1,968	1,851	1,753	1,558						
Change in fair value of acquisition earn out		_	(218)	_	(3,687)	_						
Other non-interest expense		110,140	99,407	89,621	80,728	68,485						
Non-interest expense		112,149	101,157	91,472	78,794	70,043						
Income before tax		68,658	60,369	47,470	41,689	33,380						
Income tax expense		8,465	5,945	9,482	13,048	10,892						
Net income	\$	60,193 \$	54,424 \$	37,988 \$	28,641 \$	22,488						
Preferred stock dividends		5,753	2,120	_								
Net income available to common shareholders	\$	54,440 \$	52,304 \$	37,988 \$	28,641 \$	22,488						

			1 to or and for	unc	Tears Ended	יט	cccinoci 51,			
(Dollars in thousands, except per share data)		2019		2018		2017		2016		2015
Per share and share data:										
Earnings per common share:										
Basic	\$	1.95	\$	1.90	\$	1.38	\$	1.04	\$	0.81
Diluted	\$	1.89	\$	1.81	\$	1.32	\$	1.01	\$	0.80
Book value per common share	\$	17.21	\$	15.27	\$	13.61	\$	12.38	\$	11.62
Tangible book value per common share (1)	\$	14.97	\$	12.92	\$	11.32	\$	10.02	\$	9.81
Common shares outstanding, at end of period	2	29,355,986		28,878,674		28,591,101		28,415,654		28,056,195
Weighted average common shares outstanding:										
Basic	2	27,864,933		27,583,519		27,550,833		27,593,725		27,771,345
Diluted	2	28,833,335		28,833,396		28,711,322		28,359,152		28,237,453
Performance ratios:										
Return on average assets		0.89	%	1.04%	6	0.89%	6	0.81%	ó	0.74%
Return on average common equity		11.47	%	12.57%	6	10.30%	6	8.48%	ó	7.13%
Net interest margin (2)		1.97	%	2.26%	6	2.25%	6	2.23%	ó	2.36%
Total revenue (1)	\$	179,423	\$	161,391	\$	138,009	\$	121,244	\$	103,403
Pre-tax, pre-provision net revenue (1)	\$	67,274	\$	60,234	\$	46,537	\$	42,450	\$	33,360
Bank efficiency ratio (1)		54.49	%	53.09%	6	57.39%	6	61.17%	ó	62.30%
Non-interest expense to average assets		1.66	%	1.93%	6	2.15%	6	2.23%	ó	2.32%
Asset quality:										
Non-performing loans	\$	184	\$	2,237	\$	3,183	\$	17,790	\$	16,660
Non-performing assets	\$	4,434	\$	5,661	\$	6,759	\$	21,968	\$	18,390
Other real estate owned	\$	4,250	\$	3,424	\$	3,576	\$	4,178	\$	1,730
Non-performing assets to total assets		0.06	%	0.09%	6	0.14%	6	0.56%	ó	0.56%
Non-performing loans to total loans		9	%	0.04%	6	0.08%	6	0.52%	ó	0.59%
Allowance for loan and lease losses to loans		0.21	%	0.26%	6	0.34%	6	0.55%	ó	0.63%
Allowance for loan and lease losses to non-performing loans		7,667.39	%	590.43%	6	452.94%	6	105.46%	ó	107.89%
Net charge-offs (recoveries)	\$	(1,868)	\$	1,004	\$	3,722	\$	50	\$	2,312
Net charge-offs (recoveries) to average total loans		$(0.03)^{\circ}$	%	0.02%	6	0.10%	6	%	ó	0.09%
Capital ratios:										
Average equity to average assets		8.29	%	8.49%	6	8.65%	6	9.56%	ó	10.43%
Tier 1 leverage ratio		7.54	%	7.28%	6	7.25%	6	7.90%	ó	9.05%
Common equity tier 1 risk-based capital ratio		9.32 9	%	9.64%	6	11.14%	6	11.49%	ó	12.20%
Tier 1 risk-based capital ratio		11.75	%	10.58%	6	11.14%	6	11.49%	ó	12.20%
Total risk-based capital ratio		12.05	%	10.86%	6	11.72%	6	12.66%	ó	13.88%
Investment Management Segment:										
Assets under management	\$	9,701,000	\$	9,189,000	\$	8,309,000	\$	8,055,000	\$	8,005,000

These measures are not measures recognized under GAAP and are therefore considered to be non-GAAP financial measures. See "*Non-GAAP Financial Measures*" for a reconciliation of these measures to their most directly comparable GAAP measures.

⁽²⁾ Net interest margin is calculated on a fully taxable equivalent basis.

Non-GAAP Financial Measures

This Annual Report on Form 10-K contains certain financial information determined by methods other than in accordance with GAAP. These non-GAAP financial measures are "tangible common equity," "tangible book value per common share," "total revenue," "pre-tax, pre-provision net revenue," "efficiency ratio" and "EBITDA." These non-GAAP financial measures are supplemental measures that we believe provide management and our investors with a more detailed understanding of our performance, although these measures are not necessarily comparable to similar measures that may be presented by other companies. These disclosures should not be viewed as a substitute for financial measures determined in accordance with GAAP.

The non-GAAP financial measures presented herein are calculated as follows:

"Tangible common equity" is defined as common shareholders' equity reduced by intangible assets, including goodwill. We believe this measure is important to management and investors to better understand and assess changes from period to period in common shareholders' equity exclusive of changes in intangible assets associated with prior acquisitions. Intangible assets are created when we buy businesses that add relationships and revenue to our Company. Intangible assets have the effect of increasing both equity and assets, while not increasing our tangible equity or tangible assets.

"Tangible book value per common share" is defined as common shareholders' equity reduced by intangible assets, including goodwill, divided by common shares outstanding. We believe this measure is important to many investors who are interested in changes from period to period in book value per common share exclusive of changes in intangible assets.

"Total revenue" is defined as net interest income and total non-interest income, excluding gains and losses on the sale and call of debt securities. We believe adjustments made to our operating revenue allow management and investors to better assess our core operating revenue by removing the volatility that is associated with certain items that are unrelated to our core business.

"Pre-tax, pre-provision net revenue" is defined as net income, without giving effect to loan and lease loss provision and income taxes and excluding gains and losses on the sale and call of investment securities. We believe this measure is important because it allows management and investors to better assess our performance in relation to our core operating revenue, excluding the volatility that is associated with provision for loan and lease losses and changes in our tax rates and other items that are unrelated to our core business.

"Efficiency ratio" is defined as non-interest expense divided by total revenue. We believe this measure allows management and investors to better assess our operating expenses in relation to our core operating revenue, particularly at the Bank.

"EBITDA" is defined as net income before interest expense, income tax expense, depreciation expense and intangible amortization expense. We use EBITDA particularly to assess the strength of our investment management business. We believe this measure is important because it allows management and investors to better assess our investment management performance in relation to our core operating earnings by excluding certain non-cash items and the volatility that is associated with certain discrete items that are unrelated to our core business.

The following tables present the financial measures calculated and presented in accordance with GAAP that are most directly comparable to the non-GAAP financial measures and a reconciliation of the differences between the GAAP financial measures and the non-GAAP financial measures.

	December 31,										
(Dollars in thousands, except per share data)		2019		2018		2017		2016		2015	
Tangible common equity and tangible book value per common share:											
Common shareholders' equity	\$	505,202	\$	440,886	\$	389,071	\$	351,807	\$	325,977	
Less: goodwill and intangible assets		65,854		67,863		65,358		67,209		50,816	
Tangible common equity (numerator)	\$	439,348	\$	373,023	\$	323,713	\$	284,598	\$	275,161	
Common shares outstanding (denominator)		29,355,986		28,878,674		28,591,101		28,415,654		28,056,195	
Tangible book value per common share	\$	14.97	\$	12.92	\$	11.32	\$	10.02	\$	9.81	

	Years Ended December 31,												
(Dollars in thousands)		2019		2018		2017		2016		2015			
Total revenue and pre-tax, pre-provision net revenue:													
Net interest income	\$	127,057	\$	113,404	\$	91,353	\$	74,813	\$	67,953			
Total non-interest income		52,782		47,917		46,966		46,508		35,483			
Less: net gain (loss) on the sale and call of debt securities		416		(70)		310		77		33			
Total revenue	\$	179,423	\$	161,391	\$	138,009	\$	121,244	\$	103,403			
Less: total non-interest expense		112,149		101,157		91,472		78,794		70,043			
Pre-tax, pre-provision net revenue	\$	67,274	\$	60,234	\$	46,537	\$	42,450	\$	33,360			

BANK SEGMENT

	Years Ended December 31,												
(Dollars in thousands)		2019		2018		2017		2016		2015			
Bank total revenue:													
Net interest income	\$	127,996	\$	115,455	\$	93,380	\$	76,727	\$	69,899			
Total non-interest income		15,467		11,042		9,864		9,470		5,873			
Less: net gain (loss) on the sale and call of debt securities		416		(70)		310		77		33			
Bank total revenue	\$	143,047	\$	126,567	\$	102,934	\$	86,120	\$	75,739			
Bank efficiency ratio:													
Total non-interest expense (numerator)	\$	77,945	\$	67,190	\$	59,073	\$	52,676	\$	47,186			
Total revenue (denominator)	\$	143,047	\$	126,567	\$	102,934	\$	86,120	\$	75,739			
Bank efficiency ratio		54.49%	6	53.09%	ó	57.39%	6	61.17%	6	62.30%			

INVESTMENT MANAGEMENT SEGMENT

	Years Ended December 31,										
(Dollars in thousands)		2019	2018	2017	2016	2015					
Investment Management EBITDA:											
Net income	\$	2,433 \$	3,851 \$	4,551 \$	6,933 \$	4,368					
Income tax expense		918	579	522	4,357	2,477					
Depreciation expense		464	502	497	165	78					
Intangible amortization expense		2,009	1,968	1,851	1,753	1,558					
EBITDA	\$	5,824 \$	6,900 \$	7,421 \$	13,208 \$	8,481					

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

This section presents management's perspective on our financial condition and results of operations and highlights material changes to our financial condition and results of operations as of and for the years ended December 31, 2019 and 2018. The following discussion and analysis should be read in conjunction with our consolidated financial statements and related notes contained herein.

To the extent that this discussion describes prior performance, the descriptions relate only to the periods listed, which may not be indicative of our future financial outcomes. In addition to historical information, this discussion contains forward-looking statements that involve risks, uncertainties and assumptions that could cause results to differ materially from management's expectations. Factors that could cause such differences are discussed in the sections titled "Cautionary Note Regarding Forward-Looking Statements" at the beginning of this document and "Item 14. Risk Factors."

General

We are a bank holding company that operates through two reportable segments: Bank and Investment Management. Through TriState Capital Bank, a Pennsylvania chartered bank (the "Bank"), the Bank segment provides commercial banking services to middle-market businesses and private banking services to high-net-worth individuals and trusts. The Bank segment generates most of its revenue from interest on loans and investments, swap fees, loan fees, and liquidity and treasury management related fees. Its primary source of funding for loans is deposits and its secondary source of funding is borrowings. The Bank's largest expenses are interest on these deposits and borrowings, and salaries and related employee benefits. Through Chartwell Investment Partners, LLC, an SEC registered investment adviser ("Chartwell"), the Investment Management segment provides advisory and sub-advisory investment management services primarily to institutional investors, mutual funds and individual investors. It also supports marketing efforts for Chartwell's proprietary investment products through ChartwellTSC Securities Corp., our registered broker/dealer subsidiary ("CTSC Securities"). The Investment Management segment generates its revenue from investment management fees earned on assets under management and its largest expenses are salaries and related employee benefits.

This discussion and analysis present our financial condition and results of operations on a consolidated basis, except where significant segment disclosures are necessary to better explain the operations of each segment and related variances. In particular, the discussion and analysis of non-interest income and non-interest expense is reported by segment.

We measure our performance primarily through our net income available to common shareholders, earnings per common share ("EPS") and total revenue. Other salient metrics include the ratio of allowance for loan and lease losses to loans; net interest margin; the efficiency ratio of the Bank segment; return on average assets; return on average common equity; regulatory leverage and risk-based capital ratios, assets under management and EBITDA of the Investment Management segment.

Executive Overview

TriState Capital Holdings, Inc. ("we," "us," "our," the "holding company," the "parent company," or the "Company") is a bank holding company headquartered in Pittsburgh, Pennsylvania. The Company has three wholly owned subsidiaries: the Bank, Chartwell, and CTSC Securities. Through the Bank, we serve middle-market businesses in our primary markets throughout the states of Pennsylvania, Ohio, New Jersey and New York. We also serve high-net-worth individuals and trusts on a national basis through our private banking channel. We market and distribute our products and services through a scalable, branchless banking model, which creates significant operating leverage throughout our business as we continue to grow. Through Chartwell, our investment management subsidiary, we provide investment management services primarily to institutional investors, mutual funds and individual investors on a national basis. CTSC Securities, our broker/dealer subsidiary, supports marketing efforts for Chartwell's proprietary investment products that require SEC or Financial Industry Regulatory Authority, Inc. ("FINRA") licensing.

2019 Compared to 2018 Operating Performance

For the year ended December 31, 2019, our net income available to common shareholders was \$54.4 million compared to \$52.3 million in 2018, an increase of \$2.1 million, or 4.1%. This increase was primarily due to the net impact of (1) a \$13.7 million, or 12.0%, increase in our net interest income; (2) an increase in the credit to provision for loan and lease losses of \$763,000; (3) an increase of \$4.9 million, or 10.2%, in non-interest income; offset by (4) an increase of \$11.0 million, or 10.9%, in our non-interest expense; (5) a \$2.5 million increase in income taxes; and (6) an increase in preferred stock dividends of \$3.6 million.

Our diluted earnings per share ("EPS") was \$1.89 for the year ended December 31, 2019, compared to \$1.81 in 2018. The increase in diluted EPS was a result of the continued growth of our business lines, which was the driver of additional net income available to common shareholders.

For the year ended December 31, 2019, total revenue increased \$18.0 million, or 11.2%, to \$179.4 million from \$161.4 million in 2018, driven largely by higher net interest income and swap fees for the Bank.

Our net interest margin was 1.97% for the year ended December 31, 2019, as compared to 2.26% in 2018. The decrease in net interest margin for the year ended December 31, 2019, was driven by an increase of 41 basis points in the cost of interest-bearing liabilities, partially offset by an increase of 10 basis points in the yield on loans.

Our loans are predominantly variable rate loans indexed to 1-month LIBOR and our deposits are a combination of fixed-rate time deposits and variable rate deposits, some of which are indexed or otherwise priced in reference to the Effective Federal Funds Rate. When the financial markets anticipate an interest rate cut, LIBOR rates typically decrease in advance of action taken by the Federal Reserve, which compresses and can invert the historical spread between 1-month LIBOR and the Effective Federal Funds Rate. This occurred at certain times during the year ended December 31, 2019. In addition, we intentionally increased our liquid assets as a component of our assets and our deposits as portion of our assets for the express purpose of carrying more on balance sheet liquidity. This increased the level of liquid assets that were generating lower returns based on the interest rate environment and interest rate term structure curve. Also, certain hedge arrangements that we had in place which provided beneficial pricing on certain liquidity expired in 2019 and could not be replicated in the 2019 interest rate environment. All of this contributed to the compression of our net interest margin, impacted our net interest income and our rate of revenue growth, and affected profitability ratios such as the Bank's efficiency ratio, return on average assets, and return on average common equity.

Our non-interest income is largely comprised of investment management fees for Chartwell, which totaled \$36.4 million for the year ended December 31, 2019, as compared to \$37.6 million in 2018. The decrease was driven by a lower weighted average fee rate from the change in asset composition across investment products, partially offset by higher assets under management. Assets under management were \$9.70 billion as of December 31, 2019, an increase of \$512.0 million from December 31, 2018, driven by market appreciation of \$1.3 billion, partially offset by net outflows of \$771.0 million. The non-interest income from the Bank's operations, which consisted of swap fee revenue, loan and service fees, and treasury management program fees, grew to \$15.5 million from \$11.0 million in 2018.

For the year ended December 31, 2019, the Bank's efficiency ratio was 54.49%, as compared to 53.09% in 2018. The Bank's efficiency ratio reflects growth in the Bank's total revenue of 13.0% and growth in the Bank's non-interest expense of 16.0%. Non-interest expense was \$112.1 million for the year ended December 31, 2019, which included approximately \$850,000 of expenses related to the due diligence with an investment management acquisition candidate, which concluded before the parties reached a definitive agreement. Our non-interest expense to average assets for the year ended December 31, 2019, was 1.66%, as compared to 1.93% in 2018.

Our return on average assets (net income to average total assets) was 0.89% for the year ended December 31, 2019, as compared to 1.04% in 2018. Our return on average common equity (net income available to common shareholders to average common equity) was 11.47% for the year ended December 31, 2019, as compared to 12.57% in 2018.

Total assets of \$7.77 billion as of December 31, 2019, increased \$1.73 billion, or 28.7%, from December 31, 2018. Loans and leases held-for-investment grew by \$1.44 billion to \$6.58 billion as of December 31, 2019, an increase of 28.1% from December 31, 2018, as a result of growth in our commercial and private banking loan and lease portfolios. Total deposits increased \$1.58 billion, or 31.4%, to \$6.63 billion as of December 31, 2019, from \$5.05 billion as of December 31, 2018.

Our ratio of adverse-rated credits to total loans increased to 0.53% at December 31, 2019, from 0.48% at December 31, 2018. Our ratio of allowance for loan and lease losses to loans decreased to 0.21% as of December 31, 2019, from 0.26% as of December 31, 2018, reflecting growing history of few credit losses, current low non-performing loans and lower levels of provision required for private banking loans. We had a credit to provision for loan and lease losses of \$968,000 for the year ended December 31, 2019, primarily due to recoveries of \$2.0 million in the commercial and industrial portfolio, partially offset by a net increase in general reserves of \$1.2 million due to growth of the loan and lease portfolio.

Our book value per common share increased \$1.94, or 12.7%, to \$17.21 as of December 31, 2019, from \$15.27 as of December 31, 2018, largely as a result of an increase in our net income available to common shareholders, partially offset by the issuance of restricted stock during year ended December 31, 2019.

2018 Compared to 2017 Operating Performance

For the year ended December 31, 2018, our net income available to common shareholders was \$52.3 million compared to \$38.0 million in 2017, an increase of \$14.3 million, or 37.7%. This increase was primarily due to the net impact of (1) a \$22.1 million, or 24.1%, increase in our net interest income; (2) a decrease in the credit to provision for loan losses of \$418,000; (3) an increase of \$951,000, or 2.0%, in non-interest income; offset by (4) an increase of \$9.7 million, or 10.6%, in our non-interest expense; (5) a \$3.5 million decrease in income taxes; and (6) an increase in preferred stock dividends of \$2.1 million.

Our diluted EPS was \$1.81 for the year ended December 31, 2018, compared to \$1.32 in 2017. The increase in diluted EPS was a result of our continued growth in net income available to common shareholders.

For the year ended December 31, 2018, total revenue increased \$23.4 million, or 16.9%, to \$161.4 million from \$138.0 million in 2017, driven by higher net interest income and swap fees for the Bank, as well as higher investment management fees for Chartwell.

Our net interest margin was 2.26% for the year ended December 31, 2018, as compared to 2.25% in 2017. The increase in net interest margin for the year ended December 31, 2018, was driven by an increase in the yield on loans, largely offset by an increase in the cost of funds.

Our non-interest income is largely comprised of investment management fees for Chartwell, which totaled \$37.6 million for the year ended December 31, 2018, as compared to \$37.1 million in 2017. The increase was driven by higher assets under management related to the Columbia acquisition and net inflows, partially offset by market depreciation.

For the year ended December 31, 2018, the Bank's efficiency ratio was 53.09%, as compared to 57.39% in 2017, primarily as a result of growth in total revenue, tempered by the growth in non-interest expense. Our non-interest expense to average assets for the year ended December 31, 2018, was 1.93%, as compared to 2.15% in 2017.

Our return on average assets was 1.00% for the year ended December 31, 2018, as compared to 0.89% in 2017. Our return on average common equity was 12.57% for the year ended December 31, 2018, as compared to 10.30% in 2017. The increase in these ratios is due to continued growth in earnings.

Total assets of \$6.04 billion as of December 31, 2018, increased \$1.26 billion, or 26.3%, from December 31, 2017. Loans held-for-investment grew by \$948.6 million to \$5.13 billion as of December 31, 2018, an increase of 22.7% from December 31, 2017, as a result of growth in our commercial and private banking loan portfolios. Total deposits increased \$1.06 billion, or 26.7%, to \$5.05 billion as of December 31, 2018, from \$3.99 billion as of December 31, 2017.

Our ratio of adverse-rated credits to total loans declined to 0.48% at December 31, 2018, from 0.71% at December 31, 2017. Our ratio of allowance for loan losses to loans decreased to 0.26% as of December 31, 2018, from 0.34% as of December 31, 2017, reflecting low non-performing loans and lower levels of provision required for private banking loans.

Our book value per common share increased \$1.66, or 12.2%, to \$15.27 as of December 31, 2018, from \$13.61 as of December 31, 2017, largely as a result of an increase in our net income available to common shareholders, partially offset by the issuance of restricted stock and the purchase of treasury shares during year ended December 31, 2018.

Results of Operations

Net Interest Income

Net interest income represents the difference between the interest received on interest-earning assets and the interest paid on interest-bearing liabilities. Net interest income is affected by changes in the volume of interest-earning assets and interest-bearing liabilities and changes in interest yields earned and interest rates paid. Net interest income comprised 70.8%, 70.3% and 66.2% of total revenue for the years ended December 31, 2019, 2018 and 2017, respectively.

The table below reflects an analysis of net interest income, on a fully taxable equivalent basis, for the periods indicated. The adjustment to convert certain income to a fully taxable equivalent basis consists of dividing tax-exempt income by one minus the statutory federal income tax rate of 21% for 2019, 21% for 2018 and 35% for 2017.

		Year	rs Ended December	r 31,		
(Dollars in thousands)		2019	2018	2018		
Interest income	\$	262,447	\$ 199,786	\$	134,295	
Fully taxable equivalent adjustment		101	112		241	
Interest income adjusted	,	262,548	199,898		134,536	
Less: interest expense		135,390	86,382		42,942	
Net interest income adjusted	\$	127,158	\$ 113,516	\$	91,594	
Yield on earning assets (1)		4.06%	3.98%	6	3.30%	
Cost of interest-bearing liabilities		2.34%	1.93%	6	1.18%	
Net interest spread (1)		1.72%	2.05%	6	2.12%	
Net interest margin (1)		1.97%	2.26%	6	2.25%	

⁽¹⁾ Calculated on a fully taxable equivalent basis.

The following table provides information regarding the average balances and yields earned on interest-earning assets and the average balances and rates paid on interest-bearing liabilities for the years ended December 31, 2019, 2018 and 2017. Non-accrual loans are included in the calculation of average loan balances, while interest payments collected on non-accrual loans are recorded as a reduction to principal. Where applicable, interest income and yield are reflected on a fully taxable equivalent basis and have been adjusted based on the statutory federal income tax rate of 21% for 2019, 21% for 2018 and 35% for 2017.

				Years Er	nded Decemb	er 31,			
		2019	1 20		2018		_	2017	
(Dollars in thousands)	Average Balance	Interest Income ⁽¹⁾ / Expense	Average Yield/ Rate	Average Balance	Interest Income ⁽¹⁾ / Expense	Average Yield/ Rate	Average Balance	Interest Income ⁽¹⁾ / Expense	Average Yield/ Rate
Assets									
Interest-earning deposits	\$ 313,413	\$ 6,628	2.11%	\$ 188,921	\$ 3,598	1.90%	\$ 126,888	\$ 1,466	1.16%
Federal funds sold	8,803	167	1.90%	8,315	156	1.88%	6,923	68	0.98%
Debt securities available- for-sale	250,064	8,119	3.25%	205,652	6,195	3.01%	144,735	3,122	2.16%
Debt securities held-to- maturity	193,443	6,921	3.58%	90,895	3,399	3.74%	58,635	2,463	4.20%
Debt securities trading	_	_	%	_	_	%	188	4	2.13%
Equity securities	6,733	115	1.71%	10,517	277	2.63%	8,539	266	3.12%
FHLB stock	18,043	1,270	7.04%	15,136	924	6.10%	13,286	603	4.54%
Total loans and leases	5,669,507	239,328	4.22%	4,500,117	185,349	4.12%	3,711,701	126,544	3.41%
Total interest-earning assets	6,460,006	262,548	4.06%	5,019,553	199,898	3.98%	4,070,895	134,536	3.30%
Other assets	281,171		•	221,467		•	193,532		
Total assets	\$ 6,741,177	_		\$ 5,241,020	_		\$ 4,264,427	_	
Liabilities and Shareholders' Equity		_			_			_	
Interest-bearing deposits:									
Interest-bearing checking accounts	\$ 1,058,064	\$ 21,480	2.03%	\$ 612,921	\$ 11,440	1.87%	\$ 336,337	\$ 3,706	1.10%
Money market deposit accounts	2,943,541	69,336	2.36%	2,429,203	45,106	1.86%	1,999,399	22,350	1.12%
Certificates of deposit	1,371,038	34,776	2.54%	1,071,556	21,947	2.05%	967,503	11,429	1.18%
Borrowings:									
FHLB borrowings	394,480	8,639	2.19%	325,356	5,555	1.71%	295,315	3,152	1.07%
Line of credit borrowings	1,234	68	5.51%	2,568	119	4.63%	2,214	90	4.07%
Subordinated notes payable, net	17,335	1,091	6.29%	34,807	2,215	6.36%	34,605	2,215	6.40%
Total interest-bearing liabilities	5,785,692	135,390	2.34%	4,476,411	86,382	1.93%	3,635,373	42,942	1.18%
Noninterest-bearing deposits	267,846			244,090			210,860		
Other liabilities	128,618			75,473			49,279		
Shareholders' equity	559,021	=		445,046	=		368,915	=	
Total liabilities and shareholders' equity	\$ 6,741,177			\$ 5,241,020			\$ 4,264,427		
Net interest income (1)		\$ 127,158			\$ 113,516			\$ 91,594	
Net interest spread			1.72%			2.05%			2.12%
Net interest margin (1)			1.97%			2.26%			2.25%

⁽¹⁾ Calculated on a fully taxable equivalent basis.

Net Interest Income for the Years Ended December 31, 2019 and 2018. Net interest income, calculated on a fully taxable equivalent basis, increased \$13.6 million, or 12.0%, to \$127.2 million for the year ended December 31, 2019, from \$113.5 million in 2018. The increase in net interest income for the year ended December 31, 2019, was primarily attributable to a \$1.44 billion, or 28.7%, increase

in average interest-earning assets driven primarily by loan growth. The increase in net interest income reflects an increase of \$62.7 million, or 31.3%, in interest income, partially offset by an increase of \$49.0 million, or 56.7%, in interest expense. Net interest margin decreased to 1.97% for the year ended December 31, 2019, as compared to 2.26% in 2018, driven higher costs of funds, partially offset by a higher yield on our loan portfolio.

The increase in interest income on interest-earning assets was primarily the result of an increase in average total loans, which are our primary earning assets, of \$1.17 billion, or 26.0% and an increase of 10 basis points in yield on our loans. The yield on our loan portfolio was primarily driven by the direction and timing of the Federal Reserve's target Federal Funds Rate changes, which impacted our floating-rate loans. The change in yield is also attributable to our continuing gradual shift towards lower-risk marketable-securities-backed private banking loans and commercial loans. The overall yield on interest-earning assets increased 8 basis points to 4.06% for the year ended December 31, 2019, as compared to 3.98% in 2018, primarily from the higher loan yields.

The increase in interest expense on interest-bearing liabilities was primarily the result of an increase of 41 basis points in the average rate paid on our average interest-bearing liabilities, as well as an increase of \$1.31 billion, or 29.2%, in average interest-bearing liabilities for the year ended December 31, 2019, compared to 2018. The increase in average rate paid was reflective of increases in rates paid in all interest-bearing deposit categories, FHLB borrowings and line of credit borrowings, which was driven by the direction and timing of the Federal Reserve's target Federal Funds Rate changes, which impacted our variable-rate liabilities. The increase in average interest-bearing liabilities was driven primarily by an increase of \$514.3 million in average money market deposit accounts, an increase of \$445.1 million in average interest-bearing checking accounts and an increase of \$299.5 million in average certificates of deposit.

Net Interest Income for the Years Ended December 31, 2018 and 2017. Net interest income, calculated on a fully taxable equivalent basis, increased \$21.9 million, or 23.9%, to \$113.5 million for the year ended December 31, 2018, from \$91.6 million in 2017. The increase in net interest income for the year ended December 31, 2018, was primarily attributable to a \$948.7 million, or 23.3%, increase in average interest-earning assets driven primarily by loan growth. The increase in net interest income reflects an increase of \$65.4 million, or 48.6%, in interest income, partially offset by an increase of \$43.4 million, or 101.2%, in interest expense. Net interest margin increased to 2.26% for the year ended December 31, 2018, as compared to 2.25% in 2017, driven by a higher yield on our loan portfolio, largely offset by the higher cost of deposits and FHLB borrowings.

The increase in interest income on interest-earning assets was primarily the result of an increase in average total loans, which are our primary earning assets, of \$788.4 million, or 21.2% and an increase of 71 basis points in yield on our loans. The most significant factor driving the yield on our loan portfolio was the effect of four Federal Reserve's increases in 2018 to the target federal funds rate on our floating-rate loans, which was partially offset by the shift toward lower-risk marketable-securities-backed private banking loans. The overall yield on interest-earning assets increased 68 basis points to 3.98% for the year ended December 31, 2018, as compared to 3.30% in 2017, primarily from the higher loan yields.

The increase in interest expense on interest-bearing liabilities was primarily the result of an increase of 75 basis points in the average rate paid on our average interest-bearing liabilities, as well as an increase of \$841.0 million, or 23.1%, in average interest-bearing liabilities for the year ended December 31, 2018, compared to 2017. The increase in average rate paid was reflective of increases in rates paid in all interest-bearing deposit categories and FHLB borrowings, which was driven by the effect of four Federal Reserve's increases in 2018 to the target federal funds rate on our variable-rate liabilities. The increase in average interest-bearing liabilities was driven primarily by an increase of \$429.8 million in average money market deposit accounts, an increase of \$276.6 million in average interest-bearing checking accounts and an increase of \$104.1 million in average certificates of deposit.

The following tables analyze the dollar amount of the change in interest income and interest expense with respect to the primary components of interest-earning assets and interest-bearing liabilities. The tables show the amount of the change in interest income or interest expense caused by either changes in outstanding balances or changes in interest rates for the periods indicated. The effect of changes in balance is measured by applying the average rate during the first period to the balance ("volume") change between the two periods. The effect of changes in rate is measured by applying the change in rate between the two periods to the average volume during the first period.

Years Ended December 31, 2019 over 2018

	2019 over 2018								
Yi	eld/Rate	Volume	Change (1)						
\$	435 \$	2,595	\$ 3,030						
	2	9	11						
	510	1,414	1,924						
	(153)	3,675	3,522						
	(80)	(82)	(162)						
	153	193	346						
	4,720	49,259	53,979						
	5,587	57,063	62,650						
	1,082	8,958	10,040						
	13,549	10,681	24,230						
	5,906	6,923	12,829						
	1,761	1,323	3,084						
	19	(70)	(51)						
	(24)	(1,100)	(1,124)						
	22,293	26,715	49,008						
\$	(16,706) \$	30,348	\$ 13,642						
	\$	Yield/Rate \$ 435 \$ 2 510 (153) (80) 153 4,720 5,587 1,082 13,549 5,906 1,761 19 (24) 22,293	Yield/Rate Volume \$ 435 \$ 2,595 2 9 510 1,414 (153) 3,675 (80) (82) 153 193 4,720 49,259 5,587 57,063 1,082 8,958 13,549 10,681 5,906 6,923 1,761 1,323 19 (70) (24) (1,100) 22,293 26,715						

The change in interest income and expense due to changes in both composition and applicable yields/rates has been allocated to volume and rate changes in proportion to the relationship of the absolute dollar amounts of the change in each.

(Dollars in thousands)	Yie	d/Rate	Volume	Change ((1)
Increase (decrease) in:					
Interest income:					
Interest-earning deposits	\$	1,216 \$	916	\$ 2,	132
Federal funds sold		72	16		88
Debt securities available-for-sale		1,491	1,582	3,	073
Debt securities held-to-maturity		(295)	1,231	!	936
Debt securities trading		_	(4)		(4)
Equity securities		(45)	56		11
FHLB stock		229	92		321
Total loans and leases		29,100	29,705	58,	805
Total increase in interest income		31,768	33,594	65,	362
Interest expense:					
Interest-bearing deposits:					
Interest-bearing checking accounts		3,539	4,195	7,	734
Money market deposit accounts		17,172	5,584	22,	756
Certificates of deposit		9,174	1,344	10,	518
Borrowings:					
FHLB borrowings		2,054	349	2,	403
Line of credit borrowings		14	15		29
Subordinated notes payable, net		(13)	13		_
Total increase in interest expense		31,940	11,500	43,	440
Total increase (decrease) in net interest income	\$	(172) \$	22,094	\$ 21,	922

The change in interest income and expense due to changes in both composition and applicable yields/rates has been allocated to volume and rate changes in proportion to the relationship of the absolute dollar amounts of the change in each.

Provision for Loan and Lease Losses

The provision for loan and lease losses represents our determination of the amount necessary to be recorded against the current period's earnings to maintain the allowance for loan and lease losses at a level that is considered adequate in relation to the estimated losses inherent in the loan and lease portfolio. For additional information regarding our allowance for loan and lease losses, see "Allowance for Loan and Lease Losses."

We recorded a credit to provision for loan and lease losses of \$968,000 for the year ended December 31, 2019, compared to a credit to provision for loan losses of \$205,000 for the year ended December 31, 2018, and a credit to provision for loan losses of \$623,000 for the year ended December 31, 2017.

The credit to provision for loan and lease losses for the year ended December 31, 2019, was comprised of recoveries of \$2.0 million related to commercial and industrial loans and a net decrease of \$266,000 in specific reserves primarily due to paydowns of these non-performing loans and collateral related to an impaired loan that was transferred to OREO, partially offset by a net increase of \$1.2 million in general reserves due to growth of the loan and lease portfolio and charge-offs of \$112,000.

The credit to provision for loan losses for the year ended December 31, 2018, was comprised of recoveries of \$1.1 million related to commercial and industrial loans, partially offset by a net increase of \$861,000 in general reserves due to growth of the loan portfolio.

The credit to provision for loan losses for the year ended December 31, 2017, was comprised of a net decrease of \$130,000 in specific reserves on non-performing loans and recoveries of \$580,000 predominately related to commercial and industrial loans, partially offset by a net increase of \$87,000 in general reserves.

Non-Interest Income

Non-interest income is an important component of our revenue and is comprised primarily of investment management fees from Chartwell coupled with fees generated from loan and deposit relationships with our Bank customers, including swap transactions. The information

provided under the caption "Parent and Other" represents general operating activity of the Company not considered to be a reportable segment, which includes parent company activity as well as eliminations and adjustments that are necessary for purposes of reconciliation to the consolidated amounts.

The following table presents the components of our non-interest income by operating segment for the years ended December 31, 2019 and 2018:

		Year Ended December 31, 2018										
		Ir	vestment	Parent				In	vestment	Parent		
(Dollars in thousands)	Bank	M	anagement	and Other	Consolidated		Bank	Ma	nagement	and Othe	er (Consolidated
Investment management fees	\$	— \$	36,889	\$ (447) \$ 36,442	\$	_	\$	37,939	\$ (2	92) \$	37,647
Service charges on deposits	5	59	_		559		570		_	-	_	570
Net gain (loss) on the sale and call of debt securities	4	16	_		416		(70))	_		_	(70)
Swap fees	11,0	29	_	_	11,029		7,311		_		_	7,311
Commitment and other loan fees	1,7	88	_	_	1,788		1,411		_		_	1,411
Bank owned life insurance income	1,7	36	_		1,736		1,716		_		_	1,716
Other income (loss)	(61)	31	842	812		104		1	(7	73)	(668)
Total non-interest income	\$ 15,4	67 \$	36,920	\$ 395	\$ 52,782	\$	11,042	\$	37,940	\$ (1,0	65) \$	47,917

Non-Interest Income for the Years Ended December 31, 2019 and 2018. Our non-interest income was \$52.8 million for the year ended December 31, 2019, an increase of \$4.9 million, or 10.2%, from \$47.9 million for 2018. This increase was primarily related to increases in swap fees and commitment and other loan fees and higher net gain on debt securities, partially offset by lower investment management fees and other income (loss), as follows:

Bank Segment:

- Swap fees increased \$3.7 million for the year ended December 31, 2019, as compared to 2018, due to an increase in the number of customer swap transactions closed during the year. While level and frequency of income associated with swap transactions can vary materially from period to period based on customers' expectations of market conditions and term loan originations, there is strong customer demand for long-term interest rate protection in the current interest rate environment and we continue to run the business to increase demand through targeted loan production, enhanced messaging of the opportunity, process optimization and refined emphasis on marketing swaps to a broader portion of our loan portfolio, including loans collateralized by marketable securities.
- There was a net gain on the sale and call of debt securities of \$416,000 for the year ended December 31, 2019, as compared to a net loss of \$70,000 for the year ended December 31, 2018.
- Commitment and other loan fees increased \$377,000 for the year ended December 31, 2019 primarily due to higher unused commitment fee income and other loan fee income due to the continued growth in our loan and lease portfolio.
- Other income (loss) decreased \$165,000 for the year ended December 31, 2019, as compared to 2018, primarily due to a loss on the sale of OREO and lower unrealized gains on swaps.

Investment Management Segment:

• Investment management fees decreased \$1.1 million for the year ended December 31, 2019, as compared to 2018, primarily due to a shift in the asset composition across investment products which resulted in a lower weighted average fee rate of 0.36% for the year ended December 31, 2019, compared to 0.39% for the year ended December 31, 2018, partially offset by higher assets under management of \$512.0 million. For additional information on assets under management, refer to Item 1, Business - Investment Management Products.

Parent and Other

• Other income was comprised of a net gain on equity securities of \$842,000 for the year ended December 31, 2019, as compared to a net loss of \$773,000 for the year ended December 31, 2018. These equity securities were related to our mutual funds invested in short-duration, corporate bonds and mid-cap value equities, which were sold by December 31, 2019.

The following table presents the components of our non-interest income by operating segment for the years ended December 31, 2018 and 2017:

	 ,	Year :	Ended Dec	cemb	er 31, 20)18		Year Ended December 31, 2017							
		Inv	estment	P	arent					I	nvestment	Pa	rent		
(Dollars in thousands)	Bank	Maı	nagement	and	l Other	Cor	solidated		Bank	M	lanagement	and	Other	Cons	olidated
Investment management fees	\$ _	\$	37,939	\$	(292)	\$	37,647	\$	_	\$	37,309	\$	(209)	\$	37,100
Service charges on deposits	570		_		_		570		399		_		_		399
Net gain on the sale and call of debt securities	(70)		_		_		(70)		310		_		_		310
Swap fees	7,311		_		_		7,311		5,353		_		_		5,353
Commitment and other loan fees	1,411		_		_		1,411		1,462		_		_		1,462
Bank owned life insurance income	1,716		_		_		1,716		1,778		_		_		1,778
Other income	104		1		(773))	(668)		562		2		_		564
Total non-interest income	\$ 11,042	\$	37,940	\$	(1,065)	\$	47,917	\$	9,864	\$	37,311	\$	(209)	\$	46,966

Non-Interest Income for the Years Ended December 31, 2018 and 2017. Our non-interest income was \$47.9 million for the year ended December 31, 2018, an increase of \$951,000, or 2.0%, from \$47.0 million for 2017. This increase was primarily related to increases in swap fees and investment management fees, partially offset by decreases in net gain (loss) on debt securities and other income (loss), as follows:

Bank Segment:

- Swap fees increased \$2.0 million for the year ended December 31, 2018, as compared to 2017, driven by increases in customer
 demand for long-term interest rate protection. The level and frequency of income associated with swap transactions can vary
 materially from period to period based on customers' expectations of market conditions and loan originations.
- There was a net loss on the sale and call of debt securities of \$70,000 for the year ended December 31, 2018, as compared to a net gain of \$310,000 for the year ended December 31, 2017.
- Other income (loss) decreased \$458,000 for the year ended December 31, 2018, as compared to 2017, primarily due to lower gain on the sale of OREO and lower unrealized gains on swaps.

Investment Management Segment:

• Investment management fees increased \$630,000 for the year ended December 31, 2018, as compared to 2017, which included higher assets under management related to the Columbia acquisition, which closed on April 6, 2018, and net inflows, partially offset by market depreciation. Assets under management were \$9.19 billion as of December 31, 2018, an increase of \$880.0 million from December 31, 2017.

Parent and Other

• Other income (loss) reflected \$775,000 of unrealized losses on equity securities for the year ended December 31, 2018, related to our mutual funds invested in short-duration, corporate bonds and mid-cap value equities.

Non-Interest Expense

Our non-interest expense represents the operating cost of maintaining and growing our business. The largest portion of non-interest expense for each segment is compensation and employee benefits, which include employee payroll expense as well as the cost of incentive compensation, benefit plans, health insurance and payroll taxes, all of which are impacted by the growth in our employee base, coupled with increases in the level of compensation and benefits of our existing employees. The information provided under the caption "Parent and Other" represents general operating activity of the Company not considered to be a reportable segment, which includes parent company activity as well as eliminations and adjustments that are necessary for purposes of reconciliation to the consolidated amounts.

The following table presents the components of our non-interest expense by operating segment for the years ended December 31, 2019 and 2018:

	,	Yea	r Ended De	cen	nber 31, 2019		Year Ended December 31, 2018						
		Iı	nvestment		Parent				I	nvestment	Parent		
(Dollars in thousands)	Bank	M	anagement	a	nd Other Co	onsolidated		Bank	M	Ianagement	and Other	Co	nsolidated
Compensation and employee benefits	\$ 46,841	\$	22,335	\$	- \$	69,176	\$	41,226	\$	23,545	\$ _	- \$	64,771
Premises and occupancy costs	5,546		1,195		_	6,741		4,444		1,136	_		5,580
Professional fees	5,170		1,159		(141)	6,188		3,642		1,058	29)	4,729
FDIC insurance expense	5,292		_		_	5,292		4,543		_	_		4,543
General insurance expense	825		272		_	1,097		762		268	_		1,030
State capital shares tax	420		_		_	420		1,521		_	_		1,521
Travel and entertainment expense	3,481		1,139		_	4,620		2,864		952	_		3,816
Data processing expense	1,848		_		_	1,848		1,565		_	_		1,565
Charitable contributions	1,136		21		_	1,157		1,028		11	_		1,039
Intangible amortization expense	_		2,008		_	2,008		_		1,968	_		1,968
Change in fair value of acquisition earn out	_		_		_	_		_		(218)	_		(218)
Other operating expenses (1)	7,386		5,440		776	13,602		5,595		4,790	428		10,813
Total non-interest expense	\$ 77,945	\$	33,569	\$	635 \$	112,149	\$	67,190	\$	33,510	\$ 457	\$	101,157
Full-time equivalent employees (2)	219		57		_	276		189		68			257

Other operating expenses largely include items such as organizational dues and subscriptions, investment research fees, sub-advisory fees, telephone, marketing, employee-related expenses and other general operating expenses.

Non-Interest Expense for the Years Ended December 31, 2019 and 2018. Our non-interest expense for the year ended December 31, 2019, increased \$11.0 million, or 10.9%, as compared to 2018, of which \$10.8 million relates to the increase in expenses of the Bank segment and \$59,000 relates to the increase in expenses of the Investment Management segment. Notable changes in each segment's expenses are as follows:

Bank Segment:

- Compensation and employee benefits of the Bank segment for the year ended December 31, 2019, increased by \$5.6 million compared to 2018, primarily due to an increase in the number of full-time equivalent employees, increases in the overall annual wage and benefits costs of our existing employees, and increases in incentive and stock-based compensation expenses.
- Premises and occupancy costs for the year ended December 31, 2019, increased by \$1.1 million compared to 2018, primarily due to continued improvements to our infrastructure, including additional office space in our Pittsburgh headquarters and investments in technology.
- Professional fees for the year ended December 31, 2019, increased by \$1.5 million compared to 2018, primarily due to continued growth in loan production and certain routine accounting and regulatory matters.
- FDIC insurance expense for the year ended December 31, 2019, increased by \$749,000 compared to 2018, due to the increase in the Bank's assets. This variance also included a bank assessment credit applicable to certain banks related to the deposit insurance fund reserve ratio exceeding a target threshold.
- State capital shares tax for the year ended December 31, 2019, decreased by \$1.1 million compared to 2018, due to a recent favorable tax ruling received by the Company.
- Travel and entertainment expense for the year ended December 31, 2019, increased by \$617,000 compared to 2018, primarily due to a higher level of officer and relationship manager business development efforts consistent with our continued growth.
- Other operating expenses for the year ended December 31, 2019, increased by \$1.8 million compared to 2018, primarily due to a valuation adjustment on OREO, an increase in organization dues and subscriptions, higher marketing expenses and higher loan related expenses due to the continued growth in our loan and lease portfolio.

⁽²⁾ Full-time equivalent employees shown are as of the end of the period presented.

Investment Management Segment:

- Chartwell's compensation and employee benefits costs for the year ended December 31, 2019, decreased by \$1.2 million compared to 2018, primarily due to decreases in full-time equivalent employees and incentive and stock-based compensation expenses.
- Professional fees for the year ended December 31, 2019, increased by \$101,000 compared to 2018, primarily related to costs for due diligence on and discussions with an investment management acquisition, which concluded before the parties reached a definitive agreement, partially offset by lower organizational costs associated with the mutual fund complex.
- Travel and entertainment expense for the year ended December 31, 2019, increased by \$187,000 compared to 2018, primarily related to the previous mentioned due diligence on an investment management acquisition candidate.
- Other operating expenses for the year ended December 31, 2019, increased by \$650,000 compared to 2018, primarily due to higher investment research fees and marketing fees, partially offset by lower mutual fund platform distribution expense.

The following table presents the components of our non-interest expense by operating segment for the years ended December 31, 2018 and 2017:

		Ye	ar Ended De	cember 31, 2	018	3	Year Ended December 31, 2017							
			Investment	Parent					Ir	vestment	P	arent		
(Dollars in thousands)	Bank	N	Management	and Other	C	Consolidated		Bank	Ma	anagement	and	Other	Con	solidated
Compensation and employee benefits	\$ 41,226	\$	23,545	\$ _	- \$	64,771	\$	36,415	\$	22,901	\$	_	\$	59,316
Premises and occupancy costs	4,444		1,136	_		5,580		3,850		1,160		_		5,010
Professional fees	3,642		1,058	29)	4,729		3,199		789		(115)		3,873
FDIC insurance expense	4,543		_	_		4,543		4,238		_		_		4,238
General insurance expense	762		268	_	-	1,030		738		309		_		1,047
State capital shares tax	1,521		_	_		1,521		1,546		_		_		1,546
Travel and entertainment expense	2,864		952	_		3,816		2,212		906		_		3,118
Data processing expense	1,565		_	_	-	1,565		582		_		_		582
Charitable contributions	1,028		11	_		1,039		1,027		30		_		1,057
Intangible amortization expense	_		1,968	_	-	1,968		_		1,851		_		1,851
Change in fair value of acquisition earn out	_		(218)			(218)		_		_		_		_
Other operating expenses (1)	5,595		4,790	428		10,813		5,266		4,292		276		9,834
Total non-interest expense	\$ 67,190	\$	33,510	\$ 457	\$	101,157	\$	59,073	\$	32,238	\$	161	\$	91,472
Full-time equivalent employees (2)	189		68			257		167		63		_		230

⁽¹⁾ Other operating expenses largely include items such as organizational dues and subscriptions, investment research fees, sub-advisory fees, telephone, marketing, employee-related expenses and other general operating expenses.

Non-Interest Expense for the Years Ended December 31, 2018 and 2017. Our non-interest expense for the year ended December 31, 2018, increased \$9.7 million, or 10.6%, as compared to 2017, of which \$8.1 million relates to the increase in expenses of the Bank segment and \$1.3 million relates to the increase in expenses of the Investment Management segment. Notable changes in each segment's expenses are as follows:

Bank Segment:

- Compensation and employee benefits of the Bank segment for the year ended December 31, 2018, increased by \$4.8 million compared to 2017, primarily due to an increase in the number of full-time equivalent employees, increases in the overall annual wage and benefits costs of our existing employees, and increases in incentive and stock-based compensation expenses.
- Premises and occupancy costs for the year ended December 31, 2018, increased by \$594,000 compared to 2017, primarily due to continued improvements to our infrastructure.
- Professional fees for the year ended December 31, 2018, increased by \$443,000 compared to 2017, due to general growth in the business.

Full-time equivalent employees shown are as of the end of the period presented.

- FDIC insurance expense for the year ended December 31, 2018, increased by \$305,000 compared to 2017, due to the growth in the Bank's assets.
- Travel and entertainment expense for the year ended December 31, 2018, increased by \$652,000 compared to 2017, primarily due to a higher level of officer and relationship manager business development activity consistent with our continued growth.
- Data processing expense for the year ended December 31, 2018, increased by \$983,000 compared to 2017. In 2017, we received certain one-time credits related to certain technology applications.
- Other operating expenses for the year ended December 31, 2018, increased by \$329,000 compared to 2017, primarily due to higher costs of information services of \$337,000 associated with our private banking loans and higher provision for unfunded commitments of \$184,000, partially offset by lower marketing expenses of \$298,000.

Investment Management Segment:

- Chartwell's compensation and employee benefits costs for the year ended December 31, 2018, increased by \$644,000 compared to 2017, primarily driven by normal increases in compensation expenses.
- Professional fees for the year ended December 31, 2018, increased by \$269,000 compared to 2017, which included costs related to the Columbia acquisition and general growth in the business.
- There was a decrease in the fair value of the Columbia acquisition earn out of \$218,000 for the year ended December 31, 2018, based on management's final determination of the annualized run-rate revenue of Columbia at December 31, 2018. For additional information, refer to Note 2, Investment Securities, to our consolidated financial statements.
- Other operating expenses for the year ended December 31, 2018, increased by \$498,000 compared to 2017, primarily due to higher investment research fees.

Income Taxes

We utilize the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the tax effects of differences between the financial statement and tax basis of assets and liabilities. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities with regard to a change in tax rates is recognized in income in the period that includes the enactment date. We evaluate whether it is more likely than not that we will be able to realize the benefit of identified deferred tax assets.

Income Taxes for the Years Ended December 31, 2019 and 2018. For the year ended December 31, 2019, we recognized income tax expense of \$8.5 million, or 12.3% of income before tax, as compared to income tax expense of \$5.9 million, or 9.8% of income before tax, for 2018. Our effective tax rate for the year ended December 31, 2019, increased to 12.3% as compared to the prior year largely due to the amount and timing of tax credits recognized during the year ended December 31, 2019 compared to 2018.

Income Taxes for the Years Ended December 31, 2018 and 2017. For the year ended December 31, 2018, we recognized income tax expense of \$5.9 million, or 9.8% of income before tax, as compared to income tax expense of \$9.5 million, or 20.0% of income before tax, for 2017. Our effective tax rate for the year ended December 31, 2018, decreased to 9.8% as compared to the prior year largely due to the decrease in the statutory federal income tax rate from 35% to 21% and additional tax credit investments made in the year ended December 31, 2018.

Financial Condition

Our total assets as of December 31, 2019, were \$7.77 billion, an increase of \$1.73 billion, or 28.7%, from December 31, 2018, driven primarily by growth in our loan and lease portfolio and cash and cash equivalents. As of December 31, 2019, our loan portfolio was \$6.58 billion, an increase of \$1.44 billion, or 28.1%, from \$5.13 billion, as of December 31, 2018. Total investment securities increased \$2.4 million, or 0.5%, to \$469.2 million, as of December 31, 2019, from \$466.8 million as of December 31, 2018. Cash and cash equivalents increased \$213.9 million to \$403.9 million as of December 31, 2019, from \$190.0 million as of December 31, 2018. Our Asset and Liability Committee ("ALCO") is responsible for managing the investment portfolio and liquidity of the Bank, among other responsibilities. Given the current overall interest rate environment and the strength of our loan growth, our ALCO has kept excess liquidity in interest-earning cash deposits.

As of December 31, 2019, our total deposits were \$6.63 billion, an increase of \$1.58 billion, or 31.4%, from December 31, 2018, and were primarily used to fund loan growth. Net borrowings decreased \$49.2 million, or 12.2%, to \$355.0 million as of December 31, 2019, compared to \$404.2 million as of December 31, 2018. Our shareholders' equity increased \$141.9 million to \$621.3 million as of December 31, 2019, compared to \$479.4 million as of December 31, 2018. This increase was primarily the result of the issuance of \$77.6 million in preferred stock, \$60.2 million in net income, the impact of \$8.8 million in stock-based compensation, an increase of \$2.5 million in other accumulated comprehensive income and \$900,000 in proceeds from stock option exercises, partially offset by preferred stock dividends declared of \$5.8 million and the purchase of \$2.3 million in treasury stock.

Our total assets as of December 31, 2018, were \$6.04 billion, an increase of \$1.26 billion, or 26.3%, from December 31, 2017, driven primarily by growth in our loan and investment portfolios. As of December 31, 2018, our loan portfolio was \$5.13 billion, an increase of \$948.6 million, or 22.7%, from \$4.18 billion, as of December 31, 2017. Total investment securities increased \$246.2 million, or 111.6%, to \$466.8 million, as of December 31, 2018, from \$220.6 million as of December 31, 2017, largely as a result of securities purchases made to continue to strengthen the balance sheet and liquidity of the Bank. Cash and cash equivalents increased \$33.8 million to \$190.0 million as of December 31, 2018, from \$156.2 million as of December 31, 2017. As of December 31, 2018, our total deposits were \$5.05 billion, an increase of \$1.06 billion, or 26.7%, from December 31, 2017, and were primarily used to fund loan growth. Net borrowings increased \$68.3 million, or 20.3%, to \$404.2 million as of December 31, 2018, compared to \$335.9 million as of December 31, 2017. Our shareholders' equity increased \$90.3 million to \$479.4 million as of December 31, 2018, compared to \$389.1 million as of December 31, 2017. This increase was primarily the result of the issuance of \$38.5 million in preferred stock, \$54.4 million in net income, the impact of \$8.2 million in stock-based compensation and \$1.7 million in proceeds from the stock option exercises, partially offset by the purchase of \$6.8 million in treasury stock, a decrease of \$3.1 million in other accumulated comprehensive income (loss) and preferred stock dividends declared of \$2.1 million.

Loans and Leases

Our loan and lease portfolio, which represents our largest earning asset, primarily consists of loans to our private banking clients, commercial and industrial loans and leases, and real estate loans secured by commercial properties.

The following table presents the composition of our loan portfolio as of the dates indicated:

		De	ecember 31,		
(Dollars in thousands)	 2019	2018	2017	2016	2015
Private banking loans	\$ 3,695,402 \$	2,869,543 \$	2,265,737 \$	1,735,928 \$	1,344,864
Middle-market banking loans:					
Commercial and industrial	1,085,709	785,320	667,684	587,423	634,232
Commercial real estate	1,796,448	1,478,010	1,250,823	1,077,703	862,188
Total middle-market banking loans	2,882,157	2,263,330	1,918,507	1,665,126	1,496,420
Loans and leases held-for-investment	\$ 6,577,559 \$	5,132,873 \$	4,184,244 \$	3,401,054 \$	2,841,284

Loans and Leases Held-for-Investment. Loans and leases held-for-investment increased by \$1.44 billion, or 28.1%, to \$6.58 billion as of December 31, 2019, as compared to December 31, 2018. Our growth for the year ended December 31, 2019, was comprised of an increase in private banking loans of \$825.9 million, or 28.8%; an increase in commercial real estate loans of \$318.4 million, or 21.5%; and an increase in commercial and industrial loans and leases of \$300.4 million, or 38.3%.

Loans and leases held-for-investment increased by \$948.6 million, or 22.7%, to \$5.13 billion as of December 31, 2018, as compared to December 31, 2017. Our growth for the year ended December 31, 2018, was comprised of an increase in private banking loans of \$603.8 million, or 26.6%; an increase in commercial real estate loans of \$227.2 million, or 18.2%; and an increase in commercial and industrial loans and leases of \$117.6 million, or 17.6%.

Primary Loan Categories

Private Banking Loans. Our private banking loans include personal and commercial loans that are sourced through our private banking channel (which operates on a national basis), including referral relationships with financial intermediaries. These loans primarily consist of loans made to high-net-worth individuals, trusts and businesses that are secured by cash, marketable securities. We also originate loans that are secured by cash value life insurance and to a lessor extent residential property or other financial assets. The primary source of repayment for these loans is the income and assets of the borrower. We also have a limited number of unsecured loans and lines of credit in our private banking loan portfolio.

As of December 31, 2019, private banking loans were approximately \$3.70 billion, or 56.2% of loans held-for-investment, of which \$3.60 billion, or 97.4%, were secured by cash, marketable securities and/or cash value life insurance. As of December 31, 2018, private banking loans were approximately \$2.87 billion, or 55.9% of loans held-for-investment, of which \$2.77 billion, or 96.7%, were secured by cash, marketable securities and/or cash value life insurance. Our private banking lines of credit are typically due on demand. The growth in these loans is expected to increase, as a result of our continued focus on this portion of our private banking business. We believe we have strong competitive advantages in this line of business given our proprietary technology and distribution channels. These loans tend to have a lower risk profile and are an efficient use of capital because they typically are zero percent risk-weighted for regulatory capital purposes. On a daily basis, we monitor the collateral of loans secured by cash, marketable securities and/or cash value life insurance, which further reduces the risk profile of the private banking portfolio. Since inception, we have had no charge-offs related to our loans secured by cash, marketable securities and/or cash value life insurance.

Loans sourced through our private banking channel also include loans that are classified for regulatory purposes as commercial, most of which are also secured by cash, marketable securities or cash value life insurance. The table below includes all loans made through our private banking channel, by collateral type, as of the dates indicated.

	D	ecember 31,	
(Dollars in thousands)	2019	2018	2017
Private banking loans:			
Secured by cash, marketable securities and/or cash value life insurance	\$ 3,599,198 \$	2,774,800 \$	2,142,384
Secured by real estate	62,782	69,766	93,169
Other	33,422	24,977	30,184
Total private banking loans	\$ 3,695,402 \$	2,869,543 \$	2,265,737

As of December 31, 2019, there were \$3.53 billion of total private banking loans with a floating interest rate and \$169.4 million with a fixed interest rate, as compared to \$2.75 billion and \$122.6 million, respectively, as of December 31, 2018.

Middle-Market Banking: Commercial and Industrial Loans and Leases. Our commercial and industrial loan and lease portfolio primarily includes loans and leases made to financial and other service companies or manufacturers generally for the purposes of financing production, operating capacity, accounts receivable, inventory, equipment, acquisitions and recapitalizations. Cash flow from the borrower's operations is the primary source of repayment for these loans and leases, except for certain commercial loans that are secured by marketable securities.

As of December 31, 2019, our commercial and industrial loans comprised \$1.09 billion, or 16.5% of loans held-for-investment, as compared to \$785.3 million, or 15.3%, as of December 31, 2018. As of December 31, 2019, there were \$867.7 million of total commercial and industrial loans with a floating interest rate and \$218.0 million with a fixed interest rate, as compared to \$645.5 million and \$139.8 million, respectively, as of December 31, 2018.

Middle-Market Banking: Commercial Real Estate Loans. Our commercial real estate loan portfolio includes loans secured by commercial purpose real estate, including both owner-occupied properties and investment properties for various purposes, including office, industrial, multifamily, retail, hospitality, healthcare and self-storage. Also included are commercial construction loans to finance the construction or renovation of structures as well as to finance the acquisition and development of raw land for various purposes. Individual project cash flows, global cash flows and liquidity from the developer, or the sale of the property, are the primary sources of repayment for commercial real estate loans secured by investment properties. The primary source of repayment for commercial real estate loans secured by owner-occupied properties is cash flow from the borrower's operations. There were \$210.7 million and \$183.7 million of owner-occupied commercial real estate loans as of December 31, 2019 and December 31, 2018, respectively.

Commercial real estate loans as of December 31, 2019, totaled \$1.80 billion, or 27.3% of loans held-for-investment, as compared to \$1.48 billion, or 28.8%, as of December 31, 2018. As of December 31, 2019, \$1.69 billion of total commercial real estate loans had a floating interest rate and \$111.2 million had a fixed interest rate, as compared to \$1.34 billion and \$137.5 million, respectively, as of December 31, 2018.

The following table presents the contractual maturity ranges and the amount of such loans with fixed rates and adjustable rates in each maturity range as of the date indicated.

					December	r 31	, 2019	
(Dollars in thousands)	_	One Year or Less (1)]	One to Five Years		reater Than Five Years	Total
Maturity:								
Private banking	\$	5	3,507,874	\$	88,150	\$	99,378 \$	3,695,402
Commercial and industrial			279,245		593,741		212,723	1,085,709
Commercial real estate			212,140		812,693		771,615	1,796,448
Loans and leases held-for-investment	\$	\$	3,999,259	\$	1,494,584	\$	1,083,716 \$	6,577,559
Interest rate sensitivity:								
Fixed interest rates	\$	5	156,733	\$	174,490	\$	167,345 \$	498,568
Floating or adjustable interest rates			3,842,526		1,320,094		916,371	6,078,991
Loans and leases held-for-investment	\$	5	3,999,259	\$	1,494,584	\$	1,083,716 \$	6,577,559

The amounts outstanding reflected in the One Year or Less category in the table above include \$3.47 billion of loans that are due on demand with no stated maturity.

Large Credit Relationships

We originate and maintain large credit relationships with numerous customers in the ordinary course of our business. We have established a preferred limit on loans that is significantly lower than our legal lending limit of approximately \$82.1 million as of December 31, 2019. Our present preferred lending limit is \$10.0 million based upon our total credit exposure to any one borrowing relationship. However, exceptions to this limit may be made based on the strength of the underlying credit and sponsor, type and composition of the credit exposure, collateral support, including over-collateralization and liquidity nature of collateral, structure of the credit facilities as well as the presence of other potential positive credit factors. Additionally, we review this along with other aspects of our credit policy which can change from time to time. As of December 31, 2019, our average commercial loan size was approximately \$4.0 million and average private banking loan size was approximately \$466,000.

The following table summarizes the aggregate committed and outstanding balances of our larger credit relationships as of December 31, 2019 and December 31, 2018.

		Dece	mber 31, 2019)			Dec	ember 31, 2018	8	
(Dollars in thousands)	Number of Relationships		ommitment (based on vailability)		Outstanding Balance	Number of Relationships		Commitment (based on availability)		Outstanding Balance
Large credit relationships:										
>\$25 million	17	\$	645,608	\$	442,437	6	\$	211,908	\$	192,083
>\$20 million to \$25 million	12	\$	273,908	\$	185,651	13	\$	297,174	\$	217,061
>\$15 million to \$20 million	38	\$	679,411	\$	423,893	22	\$	389,673	\$	259,635
>\$10 million to \$15 million	93	\$	1,138,966	\$	803,301	65	\$	832,005	\$	569,071

Approximately \$1.27 billion and \$817.1 million of commitments to large credit relationships were secured by cash, marketable securities and/or cash value life insurance as of December 31, 2019 and December 31, 2018, respectively.

Loan Pricing

We generally extend variable-rate loans on which the interest rate fluctuations are based upon a predetermined indicator, such as the LIBOR or United States prime rate. Our use of variable-rate loans is designed to mitigate our interest rate risk to the extent that the rates that we charge on our variable-rate loans will rise or fall in tandem with rates that we must pay to acquire deposits and vice versa. As of December 31, 2019, approximately 92.4% of our loans had a floating rate.

Interest Reserve Loans

As of December 31, 2019, loans with interest reserves totaled \$348.0 million, which represented 5.3% of loans held-for-investment, as compared to \$255.4 million, or 5.0%, as of December 31, 2018, largely attributable to growth in the commercial real estate portfolio.

Certain loans reserve a portion of the proceeds to be used to pay interest due on the loan. These loans with interest reserves are common for construction and land development loans. The use of interest reserves is based on the feasibility of the project, the creditworthiness of the borrower and guarantors, and the loan to value coverage of the collateral. The interest reserve may be used by the borrower, when certain financial conditions are met, to draw loan funds to pay interest charges on the outstanding balance of the loan. When drawn, the interest is capitalized and added to the loan balance, subject to conditions specified during the initial underwriting and at the time the credit is approved. We have procedures and controls for monitoring compliance with loan covenants, advancing funds and determining default conditions. In addition, most of our construction lending is performed within our geographic footprint and our lenders are familiar with trends in the local real estate market.

Allowance for Loan and Lease Losses

Our allowance for loan and lease losses represents our estimate of probable loan and lease losses inherent in the loan portfolio at a specific point in time. This estimate includes losses associated with specifically identified loans, as well as estimated probable credit losses inherent in the remainder of the loan and lease portfolio. Additions are made to the allowance through both periodic provisions recorded in the consolidated statements of income and recoveries of losses previously incurred. Reductions to the allowance occur as loans are charged off or when the credit history of any of the three loan portfolios improves. Refer to Note 1, Summary of Significant Accounting Policies and Note 6, Allowance for Loan and Lease Losses, for more details on the Company's allowance for loan and lease losses.

The following table summarizes the allowance for loan and lease losses, as of the dates indicated:

	December 31,												
(Dollars in thousands)		2019		2018		2017	2016	2015					
General reserves	\$	13,937	\$	12,771	\$	11,910 \$	11,823 \$	13,429					
Specific reserves		171		437		2,507	6,939	4,545					
Total allowance for loan and lease losses	\$	14,108	\$	13,208	\$	14,417 \$	18,762 \$	17,974					
Allowance for loan and lease losses to loans and leases		0.21%	6	0.26%	6	0.34%	0.55%	0.63%					

As of December 31, 2019, we had specific reserves totaling \$171,000 related to impaired loans with an aggregated total outstanding balance of \$171,000. As of December 31, 2018, we had specific reserves totaling \$437,000 related to impaired loans with an aggregated total outstanding balance of \$2.2 million. All loans with specific reserves were on non-accrual status as of December 31, 2019 and December 31, 2018.

The following tables summarize allowance for loan and lease losses and the percentage of loans by loan category, as of the dates indicated:

					Decem	ber 31,				
	20	19	20	18	20	17	20	16	20	15
(Dollars in thousands)	Reserve	Percent of Loans								
Private banking	\$ 1,973	56.2%	\$ 1,942	55.9%	\$ 1,577	54.1%	\$ 1,424	51.0%	\$ 1,566	47.3%
Commercial and industrial	5,262	16.5%	5,764	15.3%	8,043	16.0%	12,326	17.3%	11,064	22.4%
Commercial real estate	6,873	27.3%	5,502	28.8%	4,797	29.9%	5,012	31.7%	5,344	30.3%
Total allowance for loan and lease losses	\$ 14,108	100.0%	\$ 13,208	100.0%	\$ 14,417	100.0%	\$ 18,762	100.0%	\$ 17,974	100.0%

Allowance for Loan and Lease Losses as of December 31, 2019 and 2018. Our allowance for loan and lease losses was \$14.1 million, or 0.21% of loans, as of December 31, 2019, as compared to \$13.2 million, or 0.26% of loans, as of December 31, 2018. Our allowance for loan and lease losses related to private banking loans increased \$31,000 from December 31, 2018 to December 31, 2019, which was attributable to higher general reserves due to growth in this portfolio, partially offset by lower specific reserves on non-performing loans. Our allowance for loan and lease losses related to commercial and industrial loans decreased \$502,000 from December 31, 2018 to December 31, 2019, which was attributable to lower general reserves due to an improved credit loss history. Our allowance for loan and lease losses related to commercial real estate loans increased \$1.4 million from December 31, 2018 to December 31, 2019, which was attributable to higher general reserves primarily due to growth in this portfolio.

Allowance for Loan and Lease Losses as of December 31, 2018 and 2017. Our allowance for loan losses was \$13.2 million, or 0.26% of loans, as of December 31, 2018, as compared to \$14.4 million, or 0.34% of loans, as of December 31, 2017, which reflects the change in composition of our loan portfolio over the past year, with a higher percentage of the portfolio in private banking loans secured by marketable securities, and also a decline in our adverse-rated credits. Our allowance for loan losses related to private banking loans

increased \$365,000 to \$1.9 million as of December 31, 2018, as compared to \$1.6 million as of December 31, 2017, which was attributable to higher general reserves due to growth in this portfolio and higher specific reserves on non-performing loans. Our allowance for loan losses related to commercial and industrial loans decreased \$2.3 million to \$5.8 million as of December 31, 2018, as compared to \$8.0 million as of December 31, 2017, which was largely attributable to decreased specific reserves related to a charge-off. Our allowance for loan losses related to commercial real estate loans increased \$705,000 to \$5.5 million as of December 31, 2018, as compared to \$4.8 million as of December 31, 2017, which was attributable to higher general reserves primarily due to growth in this portfolio.

Charge-Offs and Recoveries

Our charge-off policy for commercial and private banking loans and leases requires that obligations that are not collectible be promptly charged off in the month the loss becomes probable, regardless of the delinquency status of the loan or lease. We recognize a partial charge-off when we have determined that the value of the collateral is less than the remaining ledger balance at the time of the evaluation. An obligation is not required to be charged off, regardless of delinquency status, if we have determined there exists sufficient collateral to protect the remaining loan or lease balance and there exists a strategy to liquidate the collateral. We may also consider a number of other factors to determine when a charge-off is appropriate, including: the status of a bankruptcy proceeding, the value of collateral and probability of successful liquidation; and the status of adverse proceedings or litigation that may result in collection.

The following table provides an analysis of the allowance for loan and lease losses and charge-offs, recoveries and provision for loan and lease losses for the years indicated:

			Yea	rs Eı	nded Decemb	er 31	,			
(Dollars in thousands)	2019		2018		2017		2016		2015	
Beginning balance	\$ 13,208	\$	14,417	\$	18,762	\$	17,974	\$	20,273	
Charge-offs:										
Private banking	(112)		_		_		_		_	
Commercial and industrial	_		(2,068)		(4,302)		(4,258)		(3,353)	
Commercial real estate	_		_		_		_			
Total charge-offs	(112)		(2,068)		(4,302)		(4,258)		(3,353)	
Recoveries:										
Private banking	_				_		_		13	
Commercial and industrial	1,980		1,064		575		797		1,028	
Commercial real estate	_		_		5		3,411			
Total recoveries	1,980		1,064		580		4,208		1,041	
Net recoveries (charge-offs)	1,868		(1,004)		(3,722)		(50)		(2,312)	
Provision (credit) for loan and lease losses	(968)		(205)		(623)		838		13	
Ending balance	\$ 14,108	\$	13,208	\$	14,417	\$	18,762	\$	17,974	
Net loan charge-offs (recoveries) to average total loans and leases	(0.03)%	ó	0.02%	, 0	0.10 %	6	%)	0.09%	
Provision (credit) for loan and lease losses to average total loans and leases	(0.02)%	ó		, 0	(0.02)%	6	0.03%)	%	

Non-Performing Assets

Non-performing assets consist of non-performing loans and OREO. Non-performing loans are loans that are on non-accrual status. OREO is real property acquired through foreclosure on the collateral underlying defaulted loans and including in-substance foreclosures. We record OREO at fair value, less estimated costs to sell the assets.

Our policy is to place loans in all categories on non-accrual status when collection of interest or principal is doubtful, or when interest or principal payments are 90 days or more past due. There were no loans 90 days or more past due and still accruing interest as of December 31, 2019, 2018 and 2017, and there was no interest income recognized on loans while on non-accrual status for the years ended December 31, 2019, 2018 and 2017. As of December 31, 2019, non-performing loans were \$184,000, or 0% of total loans, compared to \$2.2 million, or 0.04%, and \$3.2 million, or 0.08%, as of December 31, 2018 and 2017, respectively. We had specific reserves of \$171,000, \$437,000 and \$2.5 million as of December 31, 2019, 2018 and 2017, respectively, on these non-performing loans. The net loan balance of our non-performing loans was 6.3%, 74.3% and 18.4% of the customer's outstanding balance after payments, charge-offs and specific reserves as of December 31, 2019, 2018 and 2017, respectively.

For additional information on our non-performing loans as of December 31, 2019, 2018 and 2017, refer to Note 6, Allowance for Loan and Lease Losses, to our consolidated financial statements.

Once the determination is made that a foreclosure is necessary, the loan is reclassified as "in-substance foreclosure" until a sale date and title to the property is finalized. Once we own the property, it is maintained, marketed, rented and/or sold to repay the original loan. Historically, foreclosure trends in our loan portfolio have been low due to the seasoning of our portfolio. Any loans that are modified or extended are reviewed for potential classification as a TDR loan. For borrowers that are experiencing financial difficulty, we complete a process that outlines the terms of the modification, the reasons for the proposed modification and documents the current status of the borrower.

We had non-performing assets of \$4.4 million, or 0.06% of total assets, as of December 31, 2019, as compared to \$5.7 million, or 0.09% of total assets, as of December 31, 2018. The decrease in non-performing assets was due to \$6.4 million in charge-offs and paydowns on non-performing loans, partially offset by the addition of a new non-performing loan of \$5.1 million. This decrease was considered within the assessment of the determination of the allowance for loan and lease losses. As of December 31, 2019, we had OREO properties totaling \$4.3 million as compared to \$3.4 million as of December 31, 2018.

We had non-performing assets of \$5.7 million, or 0.09% of total assets, as of December 31, 2018, as compared to \$6.8 million, or 0.14% of total assets, as of December 31, 2017. The decrease in non-performing assets was due to \$3.1 million in charge-offs and paydowns on non-performing loans, partially offset by the addition of a new non-performing loan of \$2.0 million. This decrease was considered within the assessment of the determination of the allowance for loan losses. As of December 31, 2018, we had OREO properties totaling \$3.4 million as compared to \$3.6 million as of December 31, 2017.

The following table summarizes our non-performing assets as of the dates indicated:

				De	ecember 31,				
(Dollars in thousands)	2019		2018		2017		2016		2015
Non-performing loans:									
Private banking	\$ 184	\$	2,237	\$	368	\$	517	\$	1,948
Commercial and industrial	_		_		2,815		17,273		11,800
Commercial real estate	_		_		_		_		2,912
Total non-performing loans	184		2,237		3,183		17,790		16,660
Other real estate owned	4,250		3,424		3,576		4,178		1,730
Total non-performing assets	\$ 4,434	\$	5,661	\$	6,759	\$	21,968	\$	18,390
Non-performing troubled debt restructured loans	\$ 171	\$	237	\$	3,183	\$	17,273	\$	12,894
Performing troubled debt restructured loans	\$ _	\$	_	\$	3,371	\$	471	\$	510
Non-performing loans to total loans	%	6	0.04%	6	0.08%	6	0.52%	6	0.59%
Allowance for loan and lease losses to non-performing loans	7,667.39%	6	590.43%	6	452.94%	6	105.46%	6	107.89%
Non-performing assets to total assets	0.06%	6	0.09%	6	0.14%	6	0.56%	6	0.56%

Potential Problem Loans

Potential problem loans are those loans that are not categorized as non-performing loans, but where current information indicates that the borrower may not be able to comply with repayment terms. Among other factors, we monitor the past due status as an indicator of credit deterioration and potential problem loans. A loan is considered past due when the contractual principal and/or interest due in accordance with the terms of the loan agreement remains unpaid after the due date of the scheduled payment. To the extent that loans become past due, we assess the potential for loss on such loans as we would with other problem loans and consider the effect of any potential loss in determining any provision for loan losses. We also assess alternatives to maximize collection of any past due loans, including and without limitation, restructuring loan terms, requiring additional loan guarantee(s) or collateral, or other planned action.

For additional information on the age analysis of past due loans segregated by class of loan for December 31, 2019 and 2018, refer to Note 6, Allowance for Loan and Lease Losses, to our consolidated financial statements.

On a monthly basis, we monitor various credit quality indicators for our loan portfolio, including delinquency, non-performing status, changes in risk ratings, changes in the underlying performance of the borrowers and other relevant factors. On a daily basis, we monitor the collateral of loans secured by cash, marketable securities and/or cash value life insurance within the private banking portfolio, which further reduces the risk profile of that portfolio.

Loan risk ratings are assigned based on the creditworthiness of the borrower and the quality of the collateral for loans secured by marketable securities. Loan risk ratings are reviewed on an ongoing basis according to internal policies. Loans within the pass rating are believed to have a lower risk of loss than loans that are risk rated as special mention, substandard or doubtful, which are believed to have an increasing risk of loss. Our internal risk ratings are consistent with regulatory guidance. We also monitor the loan portfolio through a formal periodic review process. All non-pass rated loans are reviewed monthly and higher risk-rated loans within the pass category are reviewed three times a year.

For additional information on the definitions of our internal risk rating and the recorded investment in loans by credit quality indicator for December 31, 2019 and 2018, refer to Note 6, Allowance for Loan and Lease Losses, to our consolidated financial statements.

Investment Securities

We utilize investment activities to enhance net interest income while supporting liquidity management and interest rate risk management. Our securities portfolio consists of available-for-sale debt securities, held-to-maturity debt securities and, from time to time, debt securities held for trading purposes and equity securities. Also included in our investment securities is FHLB Stock. For additional information on FHLB stock, refer to Note 3, Investment Securities, to our consolidated financial statements. Debt securities purchased with the intent to sell under trading activity and equity securities are recorded at fair value and changes to fair value are recognized in non-interest income in the consolidated statements of income. Debt securities categorized as available-for-sale are recorded at fair value and changes in the fair value of these securities are recognized as a component of total shareholders' equity, within accumulated other comprehensive income (loss), net of deferred taxes. Debt securities categorized as held-to-maturity are debt securities that the Company intends to hold until maturity and are recorded at amortized cost.

The Bank has engaged Chartwell to provide securities portfolio advisory services, subject to the investment parameters set forth in our investment policy.

As of December 31, 2019, we reported debt securities in available-for-sale and held-to-maturity categories, we also reported equity securities at certain times throughout the year, but no longer hold a position in these securities as of December 31, 2019. In general, fair value is based upon quoted market prices of identical assets, when available. Where sufficient data is not available to produce a fair valuation, fair value is based on broker quotes for similar assets. We validate the prices received from these third parties by comparing them to prices provided by a different independent pricing service. We have also reviewed the valuation methodologies provided to us by our pricing services. Broker quotes may be adjusted to ensure that financial instruments are recorded at fair value. Adjustments may include unobservable parameters, among other things. Securities, like loans, are subject to interest rate risk and credit risk. In addition, by their nature, securities classified as available-for-sale are also subject to fair value risks that could negatively affect the level of liquidity available to us, as well as shareholders' equity.

We perform a quarterly review of our investment securities to identify those that may indicate other-than-temporary impairment ("OTTI"). Our policy for OTTI is based on a number of factors, including but not limited to, the length of time and extent to which the estimated fair value has been less than cost, the financial condition of the underlying issuer, the ability of the issuer to meet contractual obligations, the likelihood of the security's ability to recover any decline in its estimated fair value and, for debt securities, whether we intend to sell the security or if it is more likely than not that we will be required to sell the security prior to its recovery. If the financial markets experience deterioration, charges to income could occur in future periods as a result of OTTI determinations.

As of December 31, 2019, our available-for-sale debt securities portfolio consists of U.S. government agency obligations, mortgage-backed securities, corporate bonds and single-issuer trust preferred securities, all with varying contractual maturities. Our held-to-maturity debt securities portfolio consists of certain municipal bonds, agency obligations, mortgage-backed securities and corporate bonds while our trading portfolio, when active, typically consists of U.S. treasury notes, also with varying contractual maturities. However, these maturities do not necessarily represent the expected life of the securities as certain securities may be called or paid down without penalty prior to their stated maturities. The effective duration of our debt securities portfolio as of December 31, 2019, was approximately 1.8, where duration is defined as the approximate percentage change in price for a 100 basis point change in rates. No investment in any of these securities exceeds any applicable limitation imposed by law or regulation. The ALCO reviews the investment portfolio on an ongoing basis to ensure that the investments conform to our investment policy.

Available-for-Sale Debt Securities. We held \$248.8 million and \$233.3 million in debt securities available-for-sale as of December 31, 2019 and December 31, 2018, respectively. The increase of \$15.5 million was primarily attributable to purchases of \$59.1 million made to strengthen the liquidity of the balance sheet, net of prepayments, including calls and maturities, of \$43.7 million and sales of \$7.0 million, of certain securities during the year ended December 31, 2019.

On a fair value basis, 45.8% of our available-for-sale debt securities as of December 31, 2019, were floating-rate securities for which yields increase or decrease based on changes in market interest rates. As of December 31, 2018, floating-rate securities comprised 31.4% of our available-for-sale debt securities.

On a fair value basis, 22.1% of our available-for-sale debt securities as of December 31, 2019, were U.S. agency securities, which tend to have a lower risk profile, than certain corporate bonds and single-issuer trust preferred securities, which comprised the remainder of the portfolio. As of December 31, 2018, agency securities comprised 27.9% of our available-for-sale debt securities.

Held-to-Maturity Debt Securities. We held \$196.0 million and \$196.1 million in debt securities held-to-maturity as of December 31, 2019 and December 31, 2018, respectively. The decrease was primarily attributable to purchases of \$258.4 million, net of calls and maturities of \$258.6 million, of certain securities during the year ended December 31, 2019. As part of our asset and liability management strategy, we determined that we have the intent and ability to hold these bonds until maturity, and these securities were reported at amortized cost as of December 31, 2019.

Trading Debt Securities. We held no trading debt securities as of December 31, 2019 and December 31, 2018. From time to time, we may identify opportunities in the marketplace to generate supplemental income from trading activity, principally based on the volatility of U.S. treasury notes with maturities up to ten years.

Equity Securities: Equity securities consisted of mutual funds investing in short-duration, corporate bonds and mid-cap value equities. The investments in these securities were \$0 and \$12.7 million as of December 31, 2019 and 2018, respectively.

The following tables summarize the amortized cost and fair value of debt securities available-for-sale and held-to-maturity, as of the dates indicated:

_	December 31, 2019											
(Dollars in thousands)	Amortized Cost			Gross Unrealized Appreciation		Gross Unrealized Depreciation		Estimated Fair Value				
Debt securities available-for-sale:												
Corporate bonds	\$	172,704	\$	2,821	\$	107	\$	175,418				
Trust preferred securities		18,092		216		48		18,260				
Agency collateralized mortgage obligations		27,262		11		80		27,193				
Agency mortgage-backed securities		18,058		451		_		18,509				
Agency debentures		8,961		441				9,402				
Total debt securities available-for-sale		245,077		3,940		235		248,782				
Debt securities held-to-maturity:												
Corporate bonds		24,678		619		_		25,297				
Agency debentures		149,912		628		935		149,605				
Municipal bonds		17,094		144		_		17,238				
Agency mortgage-backed securities		4,360		255		_		4,615				
Total debt securities held-to-maturity		196,044		1,646		935		196,755				
Total debt securities	\$	441,121	\$	5,586	\$	1,170	\$	445,537				

	December 31, 2018								
(Dollars in thousands)		Amortized Cost	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Estimated Fair Value				
Debt securities available-for-sale:			,						
Corporate bonds	\$	152,691	\$ 33	\$ 1,661	\$ 151,063				
Trust preferred securities		17,964	_	1,115	16,849				
Non-agency collateralized loan obligations		393	_	3	390				
Agency collateralized mortgage obligations		33,680	42	4	33,718				
Agency mortgage-backed securities		21,575	37	348	21,264				
Agency debentures		9,994	67	49	10,012				
Total debt securities available-for-sale		236,297	179	3,180	233,296				
Debt securities held-to-maturity:									
Corporate bonds		27,184	353	22	27,515				
Agency debentures		141,575	472	34	142,013				
Municipal bonds		22,963	11	61	22,913				
Agency mortgage-backed securities		4,409	_	27	4,382				
Total debt securities held-to-maturity		196,131	836	144	196,823				

\$

432,428 \$

Total debt securities

1,015 \$

December 31 2017

3,324 \$

430,119

		December 31, 2017									
(Dollars in thousands)		Amortized Cost	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Estimated Fair Value						
Debt securities available-for-sale:					,						
Corporate bonds	\$	61,616	\$ 216	\$ 143	\$ 61,689						
Trust preferred securities		17,840	741	_	18,581						
Non-agency collateralized loan obligations		811	_	6	805						
Agency collateralized mortgage obligations		38,873	25	76	38,822						
Agency mortgage-backed securities		19,007	96	150	18,953						
Total debt securities available-for-sale		138,147	1,078	375	138,850						
Debt securities held-to-maturity:											
Corporate bonds		32,189	785	33	32,941						
Agency debentures		1,984	3	_	1,987						
Municipal bonds		25,102	122	11	25,213						
Total debt securities held-to-maturity		59,275	910	44	60,141						
Total debt securities	\$	197,422	\$ 1,988	\$ 419	\$ 198,991						

The changes in the fair values of our municipal bonds, agency debentures, agency collateralized mortgage obligations and agency mortgage-backed securities are primarily the result of interest rate fluctuations. To assess for credit impairment, management evaluates the underlying issuer's financial performance and related credit rating information through a review of publicly available financial statements and other publicly available information. This most recent assessment for credit impairment did not identify any issues related to the ultimate repayment of principal and interest on these debt securities. In addition, the Company has the ability and intent to hold debt securities in an unrealized loss position until recovery of their amortized cost. Based on this, the Company considers all of the unrealized losses to be temporary.

Debt securities available-for-sale of \$2.8 million as of December 31, 2019, were held in safekeeping at the FHLB and were included in the calculation of borrowing capacity.

The following table sets forth the fair value, contractual maturities and approximated weighted average yield, calculated on a fully taxable equivalent basis, of our available-for-sale and held-to-maturity debt securities portfolios as of December 31, 2019, based on estimated annual income divided by the average amortized cost of these securities. Contractual maturities may differ from expected maturities because issuers and/or borrowers may have the right to call or prepay obligations with or without penalties, which would also impact the corresponding yield.

					Decembe	er 31, 2019				
	Less T One Y		One Five Y		Five 10 Ye		Greater 10 Ye		Tota	al
(Dollars in thousands)	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
Debt securities available-for-sale:										
Corporate bonds	\$ 48,400	3.02%	\$ 95,120	3.10%	\$ 31,898	3.36%	\$ —	%	\$ 175,418	3.12%
Trust preferred securities	_	<u> </u>	_	%	9,444	3.86%	8,816	3.90%	18,260	3.88%
Agency collateralized mortgage obligations	_	%	508	2.27%	_	%	26,685	2.19%	27,193	2.19%
Agency mortgage-backed securities	_	%	_	%	_	%	18,509	2.75%	18,509	2.75%
Agency debentures	_	<u> </u>	_	%	_	<u> </u>	9,402	3.18%	9,402	3.18%
Total debt securities available- for-sale	48,400		95,628		41,342		63,412	-	248,782	
Weighted average yield		3.02%		3.09%		3.48%	-	2.73%		3.05%
Debt securities held-to-maturity:										
Corporate bonds	_	%	7,150	5.56%	18,147	5.32%	_	%	25,297	5.38%
Agency debentures	_	%	_	%	124,999	2.74%	24,606	3.18%	149,605	2.81%
Municipal bonds	3,632	1.68%	9,255	2.19%	4,351	2.39%	_	%	17,238	2.13%
Agency mortgage-backed securities	_	%	_	_%	_	_%	4,615	3.59%	4,615	3.59%
Total debt securities held-to- maturity	3,632		16,405		147,497		29,221		196,755	
Weighted average yield		1.68%	_	3.63%		3.04%		3.24%		3.09%
Total debt securities	\$ 52,032		\$112,033		\$188,839		\$ 92,633		\$ 445,537	
Weighted average yield		2.92%		3.17%		3.13%		2.89%		3.07%

For additional information regarding our investment securities portfolios, refer to Note 3, Investment Securities, to our consolidated financial statements.

Deposits

Deposits are our primary source of funds to support our earning assets. We have focused on creating and growing diversified, stable, and lower all-in cost deposit channels without operating through a traditional branch network. We market liquidity and treasury management products to middle-market commercial clients as well as other deposit products to high-net-worth individuals, family offices, trust companies, wealth management firms, municipalities, endowments and foundations, broker/dealers, futures commission merchants, investment management firms, property management firms, payroll providers and other financial institutions. We believe that our deposit base is stable and diversified. We further believe we have the ability to attract new deposits, which is the primary source of funding our projected loan growth. With respect to our treasury management business, we utilize hybrid interest-bearing accounts that provide our clients with enhanced client experience and certainty around the returns for their total cash position while enhancing our ability to obtain their full liquidity relationship and balance their expectations with our cost of funds expectations.

The table below depicts average balances of, and rates paid on our deposit portfolio broken out by deposit type, for the years ended December 31, 2019, 2018 and 2017.

Years Ended December 31, 2019 2018 2017 Average Average Rate Average Average Rate Average Average Rate Paid Paid (Dollars in thousands) Paid Amount Amount Amount Interest-bearing checking accounts 1,058,064 2.03% 612,921 1.87% 336,337 1.10% Money market deposit accounts 2,943,541 2.36% 2,429,203 1.86% 1,999,399 1.12% Certificates of deposit 1,371,038 2.54% 1,071,556 2.05% 967,503 1.18% Total average interest-bearing deposits 5,372,643 2.34% 4,113,680 1.91% 3,303,239 1.13% Noninterest-bearing deposits 267,846 244,090 210,860

2.23%

4,357,770

1.80%

3,514,099

1.07%

5,640,489

Average Deposits for the Years Ended December 31, 2019 and 2018. For the year ended December 31, 2019, our average total deposits were \$5.64 billion, representing an increase of \$1.28 billion, or 29.4%, from 2018. The average deposit growth was driven by increases in all deposit categories. Our average cost of interest-bearing deposits increased 43 basis points to 2.34% for the year ended December 31, 2019, from 1.91% in 2018, as average rates paid were higher in all interest-bearing deposit categories, which was driven by the direction and timing of the Federal Reserve's target Federal Funds Rate changes, which impacted our variable-rate deposits. Average money market deposits decreased to 54.8% of total average interest-bearing deposits for the year ended December 31, 2019, from 59.1% in 2018. Average certificates of deposit decreased to 25.5% of total average interest-bearing deposits for the year ended December 31, 2019. Compared to 26.0% in 2018. Average interest-bearing checking accounts increased to 19.7% of total average interest-bearing deposits for the year ended December 31, 2019, compared to 14.9% in 2018. Average noninterest-bearing deposits increased 9.7% for the year ended December 31, 2019, from 2018, and the average cost of total deposits increased 43 basis points to 2.23% for the year ended December 31, 2019, from 1.80% for the year ended December 31, 2018.

Average Deposits for the Years Ended December 31, 2018 and 2017. For the year ended December 31, 2018, our average total deposits were \$4.36 billion, representing an increase of \$843.7 million, or 24.0%, from 2017. The average deposit growth was driven by increases in all deposit categories. Our average cost of interest-bearing deposits increased 78 basis points to 1.91% for the year ended December 31, 2018, from 1.13% in 2017, as average rates paid were higher in all interest-bearing deposit categories. Average money market deposits decreased to 59.1% of total average interest-bearing deposits for the year ended December 31, 2018, from 60.5% in 2017. Average certificates of deposit decreased to 26.0% of total average interest-bearing deposits for the year ended December 31, 2018, compared to 29.3% in 2017. Average interest-bearing checking accounts increased to 14.9% of total average interest-bearing deposits for the year ended December 31, 2018, compared to 10.2% in 2017. Average noninterest-bearing deposits increased 15.8% for the year ended December 31, 2018, from 2017, and the average cost of total deposits increased 73 basis points to 1.80% for the year ended December 31, 2018, from 1.07% for the year ended December 31, 2017.

Certificates of Deposit

Total average deposits

Maturities of certificates of deposit of \$100,000 or more outstanding are summarized below, as of the date indicated.

(Dollars in thousands)	De	ecember 31, 2019
Months to maturity:		2019
Three months or less	\$	557,475
Over three to six months		177,494
Over six to 12 months		215,778
Over 12 months		177,830
Total	\$	1,128,577

Reciprocal and Brokered Deposits

As of December 31, 2019, we consider approximately 88% of our total deposits to be relationship-based deposits, which include reciprocal certificates of deposit placed through CDARS® service and reciprocal demand deposits placed through ICS®. As of December 31, 2019, the Bank had CDARS® and ICS® reciprocal deposits totaling \$857.9 million, which are classified as non-brokered deposits as a result of current legislation. We continue to utilize brokered deposits as a tool for us to manage our cost of funds and to efficiently match changes in our liquidity needs based on our loan growth with our deposit balances and origination activity. As of December 31, 2019,

brokered deposits were approximately 12% of total deposits. For additional information on our deposits, refer to Note 10, Deposits, to our consolidated financial statements.

Borrowings

Deposits are the primary source of funds for our lending and investment activities, as well as general business purposes. As an alternative source of liquidity, we may obtain advances from the Federal Home Loan Bank of Pittsburgh, sell investment securities subject to our obligation to repurchase them, purchase Federal funds or engage in overnight borrowings from the FHLB or our correspondent banks.

The following table presents certain information with respect to our outstanding borrowings, as of the following dates.

	December 31, 2019					December 31, 2018					
(Dollars in thousands)	Amount	Weighted Average Spot Rate	Maximum Balance at Any Month End	Average Balance During Year	Maximum Original Term	Amount	Weighted Average Spot Rate	Maximum Balance at Any Month End	Average Balance During Year	Maximum Original Term	
FHLB borrowings	\$ 355,000	1.89%	\$ 605,000	\$ 394,480	12 months	\$ 365,000	2.61%	\$ 565,000	\$ 325,356	12 months	
Line of credit borrowings	_	%	4,250	1,234	12 months	4,250	5.47%	6,200	2,568	12 months	
Subordinated notes payable	_	<u> </u> %	35,000	17,356	5 years	35,000	5.75%	35,000	35,000	5 years	
Total borrowings outstanding	\$ 355,000	1.89%	\$ 644,250	\$ 413,070	_	\$ 404,250	2.91%	\$ 606,200	\$ 362,924		

	December 31, 2017								
(Dollars in thousands)	Amount	Weighted Average Spot Rate	Maximum Balance at Any Month End	Average Balance During Year	Maximum Original Term				
FHLB borrowings	\$ 295,000	1.60%	\$ 470,000	\$ 295,315	3 months				
Line of credit borrowings	6,200	4.56%	6,200	2,214	12 months				
Subordinated notes payable	35,000	5.75%	35,000	35,000	5 years				
Total borrowings outstanding	\$ 336,200	2.09%	\$ 511,200	\$ 332,529					

The Company entered into cash flow hedge transactions to establish the interest rate paid on \$200.0 million of its FHLB borrowings at varying rates and maturities. For additional information on cash flow hedges, refer to Note 18, Derivatives and Hedging Activity, to our consolidated financial statements.

Liquidity

We evaluate liquidity both at the holding company level and at the Bank level. As of December 31, 2019, the Bank and Chartwell represent our only material assets. Our primary sources of funds at the parent company level are cash on hand, dividends paid to us from the Bank and Chartwell, availability on our line of credit, and the net proceeds from the issuance of our debt and/or equity securities. As of December 31, 2019, our primary liquidity needs at the parent company level were the quarterly dividends on our preferred stock and our share repurchase program. All other liquidity needs were minimal and related solely to reimbursing the Bank for management, accounting and financial reporting services provided by Bank personnel. During the year ended December 31, 2019, the parent company repaid \$35.0 million on the repayment of principal of subordinated debt, paid \$5.8 million for our preferred stock dividends, repurchased \$2.3 million of shares and paid \$1.1 million of interest payments on our subordinated notes and other borrowings. During the year ended December 31, 2018, the parent company paid \$7.8 million related to our share repurchase programs (including stock cancellations), \$2.2 million for interest payments on subordinated notes and other borrowings, \$2.1 million for preferred stock dividends and \$1.3 million related to the Columbia acquisition. We believe that our cash on hand at the parent company level, coupled with the dividend paying capacity of the Bank and Chartwell, were adequate to fund any foreseeable parent company obligations as of December 31, 2019. In addition, the holding company maintains an unsecured line of credit of \$50.0 million with Texas Capital Bank, of which the full amount was available as of December 31, 2019.

Our goal in liquidity management at the Bank level is to satisfy the cash flow requirements of depositors and borrowers, as well as our operating cash needs. These requirements include the payment of deposits on demand at their contractual maturity, the repayment of borrowings as they mature, the payment of our ordinary business obligations, the ability to fund new and existing loans and other funding commitments, and the ability to take advantage of new business opportunities. The ALCO, has established an asset/liability management policy designed to achieve and maintain earnings performance consistent with long-term goals while maintaining acceptable levels of interest rate risk, well capitalized regulatory status and adequate levels of liquidity. The ALCO has also established a contingency funding plan to address liquidity crisis conditions. The ALCO is designated as the body responsible for the monitoring and implementation of these policies. The ALCO reviews liquidity on a frequent basis and approves significant changes in strategies that affect balance sheet or cash flow positions.

Sources of asset liquidity are cash, interest-earning deposits with other banks, federal funds sold, certain unpledged debt and equity securities, loan repayments (scheduled and unscheduled), and future earnings. Sources of liability liquidity include a stable deposit base, the ability to renew maturing certificates of deposit, borrowing availability at the FHLB of Pittsburgh, unsecured lines with other financial institutions, access to reciprocal CDARS® and ICS® deposits and brokered deposits, and the ability to raise debt and equity. Customer deposits, which are an important source of liquidity, depend on the confidence of customers in us. Deposits are supported by our capital position and, up to applicable limits, the protection provided by FDIC insurance.

We measure and monitor liquidity on an ongoing basis, which allows us to more effectively understand and react to trends in our balance sheet. In addition, the ALCO uses a variety of methods to monitor our liquidity position, including a liquidity gap, which measures potential sources and uses of funds over future periods. We have established policy guidelines for a variety of liquidity-related performance metrics, such as net loans to deposits, brokered funding composition, cash to total loans and duration of certificates of deposit, among others, all of which are utilized in measuring and managing our liquidity position. The ALCO also performs contingency funding and capital stress analyses at least annually to determine our ability to meet potential liquidity and capital needs under various stress scenarios.

We believe that our liquidity position continues to be strong due to our ability to generate strong growth in deposits, which is evidenced by our ratio of total deposits to total assets of 85.4%, 83.7% and 83.5% as of December 31, 2019, 2018 and 2017, respectively. As of December 31, 2019, we had available liquidity of \$1.14 billion, or 14.6% of total assets. These sources consisted of available cash and cash equivalents totaling \$167.7 million, or 2.2% of total assets, certain unpledged investment securities of \$400.2 million, or 5.2% of total assets, and the ability to borrow from the FHLB and correspondent bank lines totaling \$569.1 million, or 7.3% of total assets. Available cash excludes pledged accounts for derivative and letter of credit transactions and the reserve balance requirement at the Federal Reserve.

The following table shows our available liquidity, by source, as of the dates indicated:

	December 31,								
(Dollars in thousands)		2019	2018	2017					
Available cash	\$	167,695 \$	97,703 \$	91,060					
Certain unpledged investment securities		400,222	389,010	143,499					
Net borrowing capacity		569,132	476,686	535,907					
Total liquidity	\$	1,137,049 \$	963,399 \$	770,466					

For the year ended December 31, 2019, we generated \$68.2 million in cash from operating activities, compared to \$82.7 million in 2018. This change in cash flow was primarily the result of an increase in net income of \$5.8 million for the year ended December 31, 2019, more than offset by changes in working capital items largely related to timing. In addition, we received a federal income net tax refund of \$5.7 million during the year ended December 31, 2019, compared to a \$6.5 million refund during the year ended December 31, 2018.

Investing activities resulted in a net cash outflow of \$1.46 billion for the year ended December 31, 2019, as compared to a net cash outflow of \$1.21 billion in 2018. The outflows for the year ended December 31, 2019, were primarily due to \$1.44 billion in net loan growth and \$317.5 million for the purchase of investment securities, partially offset by proceeds from the sale, principal repayments and maturities of investments securities of \$323.0 million. The outflows for the year ended December 31, 2018, were primarily due to \$956.7 million in net loan growth and the purchase of investment securities of \$305.0 million, partially offset by proceeds from the sale, principal repayments and maturities of investments securities of \$64.1 million.

Financing activities resulted in a net inflow of \$1.60 billion for the year ended December 31, 2019, compared to a net inflow of \$1.16 billion in 2018, primarily as a result of the net growth in deposits of \$1.58 billion and the net proceeds from the issuance of preferred stock of \$77.6 million, partially offset by the repayment of subordinated debt of \$35.0 million and a decrease of \$10.0 million in FHLB advances for the year ended December 31, 2019. The inflows for the year ended December 31, 2018 consisted of net growth of \$1.06 billion in deposits and an increase in FHLB advances of \$70.0 million, partially offset by payments of \$7.8 million for share repurchase programs (including stock option cancellations).

We continue to evaluate the potential impact on liquidity management of various regulatory proposals, including those being established under the Dodd-Frank Wall Street Reform and Consumer Protection Act, as government regulators continue the final rule-making process.

Capital Resources

The access to and cost of funding for new business initiatives, the ability to engage in expanded business activities, the ability to pay dividends, the level of deposit insurance costs and the level and nature of regulatory oversight depend, in part, on our capital position. The Company filed a registration statement on Form S-3 with the SEC on December 26, 2019, which provides a means to allow us to issue registered securities to finance our growth objectives.

The assessment of capital adequacy depends on a number of factors, including asset quality, liquidity, earnings performance, changing competitive conditions and economic forces. We seek to maintain a strong capital base to support our growth and expansion activities, to provide stability to current operations and to promote public confidence.

Shareholders' Equity. Shareholders' equity increased to \$621.3 million as of December 31, 2019, compared to \$479.4 million as of December 31, 2018. The \$141.9 million increase during the year ended December 31, 2019, was primarily attributable to the issuance of \$77.6 million in preferred stock, net income of \$60.2 million, the impact of \$8.8 million in stock-based compensation, an increase of \$2.5 million in accumulated other comprehensive income and \$900,000 in proceeds from stock options exercised, partially offset by preferred stock dividends declared of \$5.8 million and the purchase of \$2.3 million in treasury stock.

Shareholders' equity increased to \$479.4 million as of December 31, 2018, compared to \$389.1 million as of December 31, 2017. The \$90.3 million increase during the year ended December 31, 2018, was primarily attributable to the issuance of \$38.5 million in preferred stock, net income of \$54.4 million, the impact of \$8.2 million in stock-based compensation and \$1.7 million in proceeds from stock options exercised, partially offset by the purchase of \$6.8 million in treasury stock, preferred stock dividends declared of \$2.1 million, \$945,000 in cancellation of stock options and a decrease of \$3.1 million in accumulated other comprehensive income (loss).

In May 2019, the Company completed the issuance and sale of a registered, underwritten public offering of 3.2 million depositary shares, each representing a 1/40th interest in a share of its 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock, no par value (the "Series B Preferred Stock"), with a liquidation preference of \$1,000 per share (equivalent to \$25 per depository share). The Company received net proceeds of \$77.6 million from the sale of 80,500 shares of its Series B Preferred Stock (equivalent to 3.2 million depositary shares), after deducting underwriting discounts, commissions and direct offering expenses. The preferred stock provides Tier 1 capital for the holding company under federal regulatory capital rules.

When, as, and if declared by the board of directors (the "Board") of the Company, dividends will be payable on the Series B Preferred Stock from the date of issuance to, but excluding July 1, 2026, at a rate of 6.375% per annum, payable quarterly, in arrears, and from and including July 1, 2026, dividends will accrue and be payable at a floating rate equal to three-month LIBOR plus a spread of 408.8 basis points per annum (subject to potential adjustment as provided in the definition of three-month LIBOR), payable quarterly, in arrears. The Company may redeem the Series B Preferred Stock at its option, subject to regulatory approval, on or after July 1, 2024, as described in the prospectus supplement relating to the offering filed with the SEC on May 23, 2019.

In March 2018, the Company completed the issuance and sale of a registered, underwritten public offering of 1.6 million depositary shares, each representing a 1/40th interest in a share of its 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock, no par value (the "Series A Preferred Stock"), with a liquidation preference of \$1,000 per share (equivalent to \$25 per depository share). The Company received net proceeds of \$38.5 million from the sale of 40,250 shares of its Series A Preferred Stock (equivalent to 1.6 million depositary shares), after deducting underwriting discounts, commissions and direct offering expenses. The preferred stock provides Tier 1 capital for the holding company under federal regulatory capital rules.

When, as, and if declared by the board of directors of the Company, dividends will be payable on the Series A Preferred Stock from the date of issuance to, but excluding April 1, 2023, at a rate of 6.75% per annum, payable quarterly, in arrears, and from and including April 1, 2023, dividends will accrue and be payable at a floating rate equal to three-month LIBOR plus a spread of 398.5 basis points per annum, payable quarterly, in arrears. The Company may redeem the Series A Preferred Stock at its option, subject to regulatory approval, on or after April 1, 2023, as described in the prospectus supplement relating to the offering filed with the SEC on March 19, 2018.

Regulatory Capital. As of December 31, 2019 and 2018, TriState Capital Holdings, Inc. and TriState Capital Bank were in compliance with all applicable regulatory capital requirements, and TriState Capital Bank was categorized as well capitalized for purposes of the FDIC's prompt corrective action regulations. As we employ our capital and continue to grow our operations, our regulatory capital levels may decrease. However, we will monitor our capital in order to remain categorized as well capitalized under the applicable regulatory guidelines and in compliance with all regulatory capital standards applicable to us.

The Basel III regulatory capital framework (the "Basel III"), which began phasing in on January 1, 2015, has replaced the regulatory capital rules for the Company and the Bank. The Basel III final rules required new minimum capital ratio standards, established a new common equity tier 1 to total risk-weighted assets ratio, subjected banking organizations to certain limitations on capital distributions and discretionary bonus payments, and established a new standardized approach for risk weightings.

The final rules subject a banking organization to certain limitations on capital distributions and discretionary bonus payments to executive officers if the organization does not maintain a capital conservation buffer of risk-based capital ratios in an amount greater than 2.5% of its total risk-weighted assets. The implementation of the capital conservation buffer began on January 1, 2016, at 0.625%, and was phased in over a four-year period (increasing by that amount ratably on each subsequent January 1, until it reached 2.5% on January 1, 2019). As of December 31, 2019 and December 31, 2018, the capital conservation buffer was 2.5% and 1.875%, respectively, in addition to the minimum capital adequacy levels in the tables below. Thus, both the Company and the Bank were above the levels required to avoid limitations on capital distributions and discretionary bonus payments.

The following tables present the actual capital amounts and regulatory capital ratios for the Company and the Bank as of the dates indicated:

	December 31, 2019									
	Actual				For Capital Adequacy Purposes			To be Well Capitalized Under Prompt Corrective Action Provisions		
(Dollars in thousands)		Amount	Ratio	Amount		Ratio	Amount		Ratio	
Total risk-based capital ratio										
Company	\$	572,221	12.05%	\$	379,911	8.00%		N/A	N/A	
Bank	\$	547,532	11.57%	\$	378,623	8.00%	\$	473,279	10.00%	
Tier 1 risk-based capital ratio										
Company	\$	558,068	11.75%	\$	284,933	6.00%		N/A	N/A	
Bank	\$	532,779	11.26%	\$	283,967	6.00%	\$	378,623	8.00%	
Common equity tier 1 risk-based capital ratio										
Company	\$	442,385	9.32%	\$	213,700	4.50%		N/A	N/A	
Bank	\$	532,779	11.26%	\$	212,975	4.50%	\$	307,631	6.50%	
Tier 1 leverage ratio										
Company	\$	558,068	7.54%	\$	296,038	4.00%		N/A	N/A	
Bank	\$	532,779	7.22%	\$	295,277	4.00%	\$	369,097	5.00%	

	December 31, 2018									
	Actual				For Capital Adequacy Purposes			To be Well Capitalized Under Prompt Corrective Action Provisions		
(Dollars in thousands)	Amount		Ratio	Amount		Ratio	Amount		Ratio	
Total risk-based capital ratio										
Company	\$	426,066	10.86%	\$	313,789	8.00%		N/A	N/A	
Bank	\$	437,849	11.25%	\$	311,497	8.00%	\$	389,371	10.00%	
Tier 1 risk-based capital ratio										
Company	\$	414,808	10.58%	\$	235,342	6.00%		N/A	N/A	
Bank	\$	424,418	10.90%	\$	233,622	6.00%	\$	311,497	8.00%	
Common equity tier 1 risk-based capital ratio										
Company	\$	378,117	9.64%	\$	176,506	4.50%		N/A	N/A	
Bank	\$	424,418	10.90%	\$	175,217	4.50%	\$	253,091	6.50%	
Tier 1 leverage ratio										
Company	\$	414,808	7.28%	\$	227,851	4.00%		N/A	N/A	
Bank	\$	424,418	7.49%	\$	226,762	4.00%	\$	283,453	5.00%	

Contractual Obligations and Commitments

The following table presents significant fixed and determinable contractual obligations of principal, interest and expenses that may require future cash payments as of the date indicated.

December 31, 2019 One Year One to Greater Than Three to (Dollars in thousands) or Less Three Years Five Years Five Years Total Transaction deposits 100,000 \$ 5,181,111 4,724,884 \$ 356,227 \$ \$ Certificates of deposit 1,244,838 208,664 1,453,502 Borrowings outstanding 355,000 355,000 Interest payments on certificates of deposit and borrowings 25.071 18,578 2.841 46,490 20,281 5,181 2,556 4,093 32,111 Operating leases Commitments for low income housing and historic tax credits 16,347 11,423 323 196 28,289 Commitments for small business investment companies 5.576 5.576 Preferred dividends declared (1) 1,979 1,979 Total contractual obligations 600,073 \$ 107,257 \$ \$ 6,376,251 \$ 20,477 7,104,058

Off-Balance Sheet Arrangements

In the normal course of business, we enter into various transactions that are not included in our consolidated balance sheets in accordance with GAAP. These transactions include commitments to extend credit in the ordinary course of business to approved customers.

Loan commitments, including standby letters of credit are recorded on our statement of financial condition as they are funded. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Loan commitments include unused commitments for open end lines secured by cash, marketable securities, and/or cash value life insurance or residential properties, and commitments to fund loans secured by commercial real estate, construction loans, business lines of credit and other unused commitments of loans in various stages of funding. Not all commitments fund or fully fund. Often customers only draw on a portion of their available credit. We have the liquidity available to fund all unused loan commitments.

Standby letters of credit are written conditional commitments issued by us to guarantee the performance of our customer to a third party. In the event our customer does not perform in accordance with the terms of the agreement with the third party, we would be required to fund the commitment. The maximum potential amount of future payments we could be required to make is represented by the contractual amount of the commitment. If the commitment is funded, we would be entitled to seek recovery from the customer.

We minimize our exposure to loss under loan commitments and standby letters of credit by subjecting them to credit approval and monitoring procedures. The effect on our revenues, expenses, cash flows and liquidity of the unused portions of these commitments cannot be reasonably predicted because, while the borrower has the ability to draw upon these commitments at any time, these commitments often expire without being drawn. There is no guarantee that the lines of credit will be used.

The following table is a summary of the total notional amount of unused loan commitments and standby letters of credit commitments, based on the availability of eligible collateral or other terms under the loan agreement, by contractual maturities as of the date indicated.

	December 31, 2019							
(Dollars in thousands)	One Year or Less (1)	One to Three Years	Three to Five Years		eater Than live Years	Total		
Unused loan commitments	\$ 4,264,342	\$ 407,809	\$ 143,48	5 \$	17,387 \$	4,833,023		
Standby letters of credit	53,023	10,101	8,92	2	800	72,846		
Total off-balance sheet arrangements	\$ 4,317,365	\$ 417,910	\$ 152,40	7 \$	18,187 \$	4,905,869		

The off-balance sheet amounts reflected in the One Year or Less category in the table above include \$3.87 billion in unused loan commitments and \$1.0 million in standby letters of credit that are due on demand with no stated maturity.

Market Risk

Market risk refers to potential losses arising from changes in interest rates, foreign exchange rates, equity prices and commodity prices. Our primary component of market risk is interest rate volatility. Fluctuations in interest rates will ultimately impact the level of both

⁽¹⁾ On January 16, 2020, the Company's board of directors declared a dividend payable. For more information, refer to Note 25, Subsequent Event, to our consolidated financial statements.

income and expense recorded on most of our assets and liabilities, and the market value of all interest-earning assets and interest-bearing liabilities, other than those that have a short term to maturity. Because of the nature of our operations, we are not subject to foreign exchange or commodity price risk. From time to time we hold market risk sensitive instruments for trading purposes. The summary information provided in this section should be read in conjunction with our consolidated financial statements and related notes.

Interest rate risk is comprised of re-pricing risk, basis risk, yield curve risk and option risk. Re-pricing risk arises from differences in the cash flow or re-pricing between asset and liability portfolios. Basis risk arises when asset and liability portfolios are related to different market rate indexes, which do not always change by the same amount or at the same time. Yield curve risk arises when asset and liability portfolios are related to different maturities on a given yield curve; when the yield curve changes shape, the risk position is altered. Option risk arises from embedded options within asset and liability products as certain borrowers may prepay their loans and certain depositors may redeem their certificates when rates change.

Our ALCO actively measures and manages interest rate risk. The ALCO is responsible for the formulation and implementation of strategies to improve balance sheet positioning and earnings, and for reviewing our interest rate sensitivity position. This involves devising policy guidelines, risk measures and limits, and managing the amount of interest rate risk and its effect on net interest income and capital.

We utilize an asset/liability model to measure and manage interest rate risk. The specific measurement tools used by management on at least a quarterly basis include net interest income ("NII") simulation, economic value of equity ("EVE") and gap analysis. All are static measures that do not incorporate assumptions regarding future business. All are also measures of interest rate sensitivity used to help us develop strategies for managing exposure to interest rate risk rather than projecting future earnings.

In our view, all three measures also have specific benefits and shortcomings. NII simulation explicitly measures exposure to earnings from changes in market rates of interest but does not provide a long-term view of value. EVE helps identify changes in optionality and price over a longer-term horizon, but its liquidation perspective does not convey the earnings-based measures that are typically the focus of managing and valuing a going concern. Gap analysis compares the difference between the amount of interest-earning assets and interest-bearing liabilities subject to re-pricing over a period of time but only captures a single rate environment. Reviewing these various measures collectively helps management obtain a comprehensive view of our interest risk rate profile.

The following NII simulation and EVE metrics were calculated using rate shocks that represent immediate rate changes that move all market rates by the same amount instantaneously. The variance percentages represent the change between the NII simulation and EVE calculated under the particular rate scenario versus the NII simulation and EVE calculated assuming market rates as of the dates indicated.

	December	31, 2019	December 31, 2018				
(Dollars in thousands)	ount Change from Base Case	Percent Change from Base Case		ount Change from Base Case	Percent Change from Base Case		
Net interest income (loss):							
+300	\$ 45,787	31.65 %	\$	26,950	22.28 %		
+200	\$ 30,367	20.99 %	\$	18,056	14.93 %		
+100	\$ 15,128	10.46 %	\$	9,399	7.77 %		
-100	\$ (16,822)	(11.63)%	\$	(9,712)	(8.03)%		
-200	\$ (30,475)	(21.06)%	\$	(22,079)	(18.25)%		
Economic value of equity:							
+300	\$ 6,511	1.10 %	\$	(19,782)	(4.09)%		
+200	\$ 3,691	0.62 %	\$	(12,468)	(2.58)%		
+100	\$ 1,513	0.26 %	\$	(3,526)	(0.73)%		
-100	\$ (10,886)	(1.84)%	\$	(505)	(0.10)%		
-200	\$ (15,989)	(2.70)%	\$	(1,380)	(0.29)%		

We plan to continue to manage an asset sensitive interest rate risk position when it comes to net interest income due to the ongoing desire for some duration in the liability portfolio. Given the longer-term nature of the EVE analysis and the absolute low level of interest rates, we have migrated to a more asset sensitive interest rate risk position when it comes to economic value of equity. It is our belief that managing for rates falling further from the current levels is expensive and involves an imbalanced risk-reward component.

The following gap analysis presents the amounts of interest-earning assets and interest-bearing liabilities and related cash flow hedging instruments that are subject to re-pricing within the periods indicated.

							December	31,	2019						
(Dollars in thousands)	Less Than 90 Days		91 to 180 Days	1	181 to 365 Days	O	ne to Three Years	Th	ree to Five Years	7	Greater Than Five Years	N	on-Sensitive		Total Balance
Assets:															
Interest-earning deposits	\$ 395,860	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	395,860
Federal funds sold	7,638		_		_		_		_		_		_		7,638
Total investment securities	256,026		22,563		55,748		48,281		34,711		50,479		1,342		469,150
Total loans	6,173,428		27,578		65,331		168,902		75,247		61,101		5,972		6,577,559
Other assets	_		_		_		_		_		_		315,603		315,603
Total assets	\$ 6,832,952	\$	50,141	\$	121,079	\$	217,183	\$	109,958	\$	111,580	\$	322,917	\$	7,765,810
Liabilities:															
Transaction deposits	\$ 4,208,193	\$	72,000	\$	88,589	\$	356,227	\$	100,000	\$	_	\$	356,102	\$	5,181,111
Certificates of deposit	701,782		316,745		226,311		208,664		_				_		1,453,502
Borrowings, net	155,000		_		_		100,000		100,000		_		_		355,000
Other liabilities	_		_		_		_		_		_		154,916		154,916
Total liabilities	5,064,975		388,745		314,900		664,891		200,000		_		511,018		7,144,529
Equity	_		_		_		_		_		_		621,281		621,281
Total liabilities and equity	\$ 5,064,975	\$	388,745	\$	314,900	\$	664,891	\$	200,000	\$	_	\$	1,132,299	\$	7,765,810
Interest rate sensitivity gap	\$ 1,767,977	\$	(338,604)	\$	(193,821)	\$	(447,708)	\$	(90,042)	\$	111,580	\$	(809,382)	_	
Cumulative interest rate sensitivity gap	\$ 1,767,977	\$	1,429,373	\$	1,235,552	\$	787,844	\$	697,802	\$	809,382			_	
Cumulative interest rate sensitive assets to rate sensitive liabilities	134.9%	6	126.2%		121.4%		112.2%	,	110.5%)	112.2%	, 0	108.7%	, D	
Cumulative gap to total assets	22.8%	6	18.4%	1	15.9%)	10.1%	, D	9.0%		10.4%	ó			

The cumulative twelve-month ratio of interest rate sensitive assets to interest rate sensitive liabilities increased to 121.4% as of December 31, 2019, as compared to 112.2% as of December 31, 2018.

The Company entered into cash flow hedge transactions to fix the interest rate on certain of the Company's borrowings for varying periods of time. These transactions have the effect on our gap analysis of moving \$200.0 million of borrowings from the less than 90 days repricing category to the one to three years re-pricing category and the three to five years re-pricing category of \$100.0 million each. For additional information on cash flow hedges, refer to Note 18, Derivatives and Hedging Activity, to our consolidated financial statements.

Additionally, in all of these analyses (NII, EVE and gap), we use what we believe is a conservative treatment of non-maturity, interest-bearing deposits. In our gap analysis, the allocation of non-maturity, interest-bearing deposits is fully reflected in the less than 90 days re-pricing category. The allocation of non-maturity, noninterest-bearing deposits is fully reflected in the non-sensitive category. In taking this approach, we provide ourselves with no benefit to either NII or EVE from a potential time-lag in the rate increase of our non-maturity, interest-bearing deposits.

Impact of Inflation

Our financial statements and related data presented herein have been prepared in accordance with GAAP, which requires the measure of financial position and operating results in terms of historic dollars, without considering changes in the relative purchasing power of money over time due to inflation.

Inflation generally increases the costs of funds and operating overhead, and to the extent loans and other assets bear variable rates, the yields on such assets. Unlike most industrial companies, virtually all of the assets and liabilities of a financial institution are monetary

in nature. As a result, interest rates generally have a more significant effect on the performance of a financial institution than the effects of general levels of inflation. In addition, inflation affects a financial institution's cost of goods and services purchased, the cost of salaries and benefits, occupancy expense and similar items. Inflation and related increases in interest rates generally decrease the market value of investments and loans held and may adversely affect liquidity, earnings and shareholders' equity.

Application of Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with GAAP and with general practices within the financial services industry. The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of certain assets and liabilities, disclosure of contingent assets and liabilities and the reported amount of related revenues and expenses. Although our current estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect the financial results of our operations and financial condition.

Our most significant accounting policies are presented in Part II, Item 8, Note 1, Summary of Significant Accounting Policies, in this Report. These policies, along with the disclosures presented in the Notes to Consolidated Financial Statements, provide information on how significant assets and liabilities are valued in the Consolidated Financial Statements and how those values are determined.

Certain accounting policies are based inherently to a greater extent on estimates, assumptions and judgments of management and, as such, have a greater possibility of producing results that could be materially different than originally reported. Management views critical accounting policies to be those which are highly dependent on subjective or complex judgments, estimates and assumptions and where changes in those estimates and assumptions could have a significant impact on our consolidated financial statements. Management currently views the following accounting policies and estimates as critical accounting policies: investment securities, allowance for loan and lease losses, goodwill and other intangible assets, income taxes, and fair value measurement.

Investment Securities. The Company's investments are classified as either: (1) held-to-maturity, which are debt securities that the Company intends to hold until maturity and are reported at amortized cost; (2) trading, which are debt securities bought and held principally for the purpose of selling them in the near term and reported at fair value, with unrealized gains and losses included in non-interest income; (3) available-for-sale, which are debt securities not classified as either held-to-maturity or trading securities and reported at fair value, with unrealized gains and losses reported as a component of accumulated other comprehensive income (loss), on an after-tax basis; or (4) equity securities, which are reported at fair value, with unrealized gains and losses included in non-interest income.

The cost of securities sold is determined on a specific identification basis. Amortization of premiums and accretion of discounts are recorded to interest income on investments over the estimated life of the security utilizing the level yield method. We evaluate impaired investment securities quarterly to determine if impairments are temporary or other-than-temporary. For impaired debt and equity securities, management first determines whether it intends to sell or if it is more likely than not that it will be required to sell the impaired securities. This determination considers current and forecasted liquidity requirements, regulatory and capital requirements, and securities portfolio management. If the Company intends to sell a security with a fair value below amortized cost or if it is more-likely than not that it will be required to sell such a security before recovery, an other-than-temporary impairment ("OTTI") charge is recorded through current period earnings for the full decline in fair value below amortized cost. For debt securities that the Company does not intend to sell or it is more likely than not that it will not be required to sell before recovery, an OTTI charge is recorded through current period earnings for the amount of the valuation decline below amortized cost that is attributable to credit losses. The remaining difference between the security's fair value and amortized cost (that is, the decline in fair value not attributable to credit losses) is recognized in other comprehensive income (loss), in the consolidated statements of comprehensive income and the shareholders' equity section of the consolidated statements of financial condition, on an after-tax basis.

Allowance for Loan and Lease Losses. The allowance for loan and lease losses is established through provisions for loan and lease losses that are recorded in the consolidated statements of income. Loans and leases are charged off against the allowance for loan and lease losses when management believes that the principal is uncollectible. If, at a later time, amounts are recovered with respect to loans and leases previously charged off, the recovered amount is credited to the allowance for loan and lease losses.

In management's judgment, the allowance was appropriate to cover probable losses inherent in the loan and lease portfolio as of December 31, 2019 and 2018. Management's judgment takes into consideration general economic conditions, diversification and seasoning of the loan portfolio, historic loss experience, identified credit problems, delinquency levels and adequacy of collateral. Although management believes it has used the best information available to it in making such determinations, and that the present allowance for loan and lease losses is adequate, future adjustments to the allowance may be necessary, and net income may be adversely affected if circumstances differ substantially from the assumptions used in determining the level of the allowance. In addition, as an integral part of their periodic examination, certain regulatory agencies review the adequacy of the Bank's allowance for loan and lease losses and may

direct the Bank to make additions to the allowance based on their judgments about information available to them at the time of their examination.

The two components of the allowance for loan and lease losses represent estimates of general reserves based upon Accounting Standards Codification ("ASC") Topic 450, Contingencies; and specific reserves based upon ASC Topic 310, Receivables. ASC Topic 450 applies to homogeneous loan pools such as commercial loans, consumer lines of credit and residential mortgages that are not individually evaluated for impairment. ASC Topic 310 is applied to commercial and consumer loans that are individually evaluated for impairment.

In management's opinion, a loan or lease is impaired, based upon current information and events, when it is probable that the loan or lease will not be repaid according to its original contractual terms, including both principal and interest, or if a loan is designated as a TDR. Management performs individual assessments of impaired loans and leases to determine the existence of loss exposure based upon a discounted cash flows method or where a loan is collateral dependent, based upon the fair value of the collateral less estimated selling costs.

In estimating probable loan and lease loss of general reserves management considers numerous factors, including historical charge-offs and subsequent recoveries. Management also considers qualitative factors that influence our credit quality, including but not limited to, delinquency and non-performing loan trends, changes in loan underwriting guidelines and credit policies, and the results of internal loan reviews. Finally, management considers the impact of changes in current local and regional economic conditions in the markets that we serve.

Management bases the computation of the allowance for loan and lease losses of general reserves on two factors: the primary factor and the secondary factor. The primary factor is based on the inherent risk identified by management within each of the Company's three loan portfolios based on the historical loss experience of each loan portfolio in addition to the loss emergence period. Management has developed a methodology that is applied to each of the three primary loan portfolios: private banking loans, commercial and industrial ("C&I") loans and leases, and commercial real estate ("CRE") loans. As the loan loss history, mix, and risk ratings of each loan portfolio change, the primary factor adjusts accordingly. The allowance for loan and lease losses related to the primary factor is based on our estimates as to probable losses for each loan portfolio. The secondary factor is intended to capture risks related to events and circumstances that management believes have an impact on the performance of the loan portfolio. Although this factor is more subjective in nature, the methodology focuses on internal and external trends in pre-specified categories (risk factors) and applies a quantitative percentage that drives the secondary factor. Nine risk factors have been identified and each risk factor is assigned a reserve level based on management's judgment as to the probable impact of each risk factor on each loan portfolio and is monitored on a quarterly basis. As the trend in any risk factor changes, a corresponding change occurs in the reserve associated with each respective risk factor, such that the secondary factor remains current to changes in each loan portfolio.

The Company also maintains a reserve for losses on unfunded commitments. This reserve is reflected as a component of other liabilities and, in management's judgment, is sufficient to cover probable losses inherent in the loan commitments. Management tracks the level and trends in unused commitments and takes into consideration the same factors as those considered for purposes of the allowance for loan and lease losses on outstanding loans.

Goodwill and Other Intangible Assets. Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. Goodwill is not amortized and is subject to at least annual assessments for impairment by applying a fair value-based test. The Company reviews goodwill annually and again at any quarter-end if a material event occurs during the quarter that may affect goodwill. If goodwill testing is required, an assessment of qualitative factors can be completed before performing the two-step goodwill impairment test. If an assessment of qualitative factors determines it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, then the two step goodwill impairment test is not required. Goodwill is evaluated for potential impairment by determining if the fair value has fallen below carrying value.

Other intangible assets represent purchased assets that may lack physical substance but can be distinguished from goodwill because of contractual or other legal rights. The Company has determined that certain of its acquired mutual fund client relationships meet the criteria to be considered indefinite-lived assets because the Company expects both the renewal of these contracts and the cash flows generated by these assets to continue indefinitely. Accordingly, the Company does not amortize these intangible assets, but instead reviews these assets annually or more frequently whenever events or circumstances occur indicating that the recorded indefinite-lived assets may be impaired. Each reporting period, the Company assesses whether events or circumstances have occurred which indicate that the indefinite life criteria are no longer met. If the indefinite life criteria are no longer met, the Company assesses whether the carrying value of these assets exceeds its fair value. If the carrying value exceeds the fair value of the asset, an impairment loss is recorded in an amount equal to any such excess and the asset is reclassified to finite-lived. Other intangible assets that the Company has determined to have finite lives, such as its trade names, client lists and non-compete agreements are amortized over their estimated useful lives. These finite-lived intangible assets are amortized on a straight-line basis over their estimated useful lives, which range from four to 25 years. Finite-lived intangibles are evaluated for impairment on an annual basis or more frequently whenever events or circumstances occur indicating that the carrying amount may not be recoverable.

Income Taxes. The Company utilizes the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the tax effects of differences between the financial statement and tax basis of assets and liabilities. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities with regard to a change in tax rates is recognized in income in the period that includes the enactment date. Management assesses all available evidence to determine the amount of deferred tax assets that are more-likely-than-not to be realized. The available evidence used in connection with the assessments includes taxable income in prior periods, projected taxable income, potential tax planning strategies and projected reversals of deferred tax items. These assessments involve a degree of subjectivity and may undergo significant change. Changes to the evidence used in the assessments could have a material adverse effect on the Company's results of operations in the period in which they occur. The Company considers uncertain tax positions that it has taken or expects to take on a tax return. Any interest and penalties related to unrecognized tax benefits would be recognized in income tax expense in the consolidated statements of income.

Fair Value Measurement. Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability in a principal or most advantageous market for the asset or liability in an orderly transaction between market participants as of the measurement date, using assumptions market participants would use when pricing such an asset or liability. An orderly transaction assumes exposure to the market for a customary period for marketing activities prior to the measurement date and not a forced liquidation or distressed sale. Fair value measurement and disclosure guidance provides a three-level hierarchy that prioritizes the inputs of valuation techniques used to measure fair value into three broad categories:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 Observable inputs such as quoted prices for similar assets and liabilities in active markets, quoted prices for similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies, and similar techniques that use significant unobservable inputs.

Fair value must be recorded for certain assets and liabilities every reporting period on a recurring basis or, under certain circumstances, on a non-recurring basis.

Recent Accounting Pronouncements and Developments for Adoption

In December 2019, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2019-12, "Simplifying the Accounting for Income Taxes," which removes certain exceptions for: recognizing deferred taxes for investments, performing intraperiod allocation and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax goodwill and allocating taxes to members of a consolidated group. This standard is effective for public business entities for annual and interim periods in fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company is currently evaluating the impact this standard will have on our results of operations and financial position.

In August 2018, the FASB ASU 2018-13, "Fair Value Measurement (Topic 820)," which aims to improve the overall usefulness of disclosures to financial statement users and reduce unnecessary costs to companies when preparing fair value measurement disclosures. This ASU is effective for all entities for annual and interim periods in fiscal years beginning after December 15, 2019. Retrospective adoption is required except for the following changes, which are required to be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption: (1) changes in unrealized gains and losses included in other comprehensive income for Level 3 instruments; (2) the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements; and (3) the narrative description of measurement uncertainty. The adoption of this standard on January 1, 2020, did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," which requires an entity to no longer perform a hypothetical purchase price allocation to measure goodwill impairment. Instead, impairment will be measured using the difference between the carrying amount and the fair value of the reporting unit. The changes are effective for public business entities, for annual and interim periods in fiscal years beginning after December 15, 2019. The adoption of this standard on January 1, 2020, did not have a material impact on the Company's consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments," along with several other subsequent codification updates related to accounting for credit losses, which significantly change the way entities recognize impairment of many financial assets by requiring immediate recognition of estimated credit losses expected to occur over their

remaining life. The new impairment methodology, under this accounting standard, known as the current expected credit loss ("CECL") model, replaces the current incurred loss model and requires financial assets measured at amortized cost basis, such as loans, debt securities, net investments in leases, and off-balance-sheet credit exposures, to be presented at the net amount expected to be collected. CECL requires use of expected credit losses based on a standard of relevant information about past events, including historical experience, current conditions, and reasonable and supportable economic forecasts that affect the collectability of the reported amount. Entities will apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The changes are effective for public business entities that are SEC filers for annual and interim periods in fiscal years beginning after December 15, 2019.

Management is currently in the final stages of implementation, including validation of our third-party model and development of internal controls and processes. Much of the expected change of implementing CECL is a result of changing from an "incurred loss" model, which encompasses allowances for current known and inherent losses within the portfolio, to an "expected loss" model, which encompasses allowances for losses expected to be incurred over the life of the portfolio. The CECL methodology may or may not be more effective at quantifying estimated future loss experience. More than half of our loan portfolio is over-collateralized by marketable securities which are monitored daily and under the collateral maintenance provision of this standard, will require minimal reserves. The impact of the adoption of this standard as of January 1, 2020, is not expected to be material to our overall capital or regulatory capital ratios. Furthermore, this standard requires that we establish an allowance for expected credit losses for certain debt securities and other financial assets; and we do not expect these allowances to be material. Once adopted, this standard could have a material impact to our results of operations in future periods depending on the impact and accuracy of reasonable and supportable economic forecast, rate of new loan growth, accuracy and impact of historical experience estimates, and composition of our loan portfolio at that time. Our company has very limited loss experience over its life. As a result, our implementation of CECL involved using general industry loss data to estimate historic loss experience. The availability and quality of relevant historical information under this estimation process, the accuracy of forecasts that are required under the CECL methodology, and the development of effective modeling to implement the CECL methodology can have material impacts on current and future provision reserve requirements.

Note 1, Summary of Significant Accounting Policies, in the Notes to the Consolidated Financial Statements, which is included in Part II, Item 8 of this Report, discusses new accounting pronouncements that we have previously adopted.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and qualitative disclosures about market risk are presented under the caption "Market Risk" in Part II, Item 7, of this Annual Report on Form 10-K.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Consolidated Financial Statements:

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors TriState Capital Holdings, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial condition of TriState Capital Holdings, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 24, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2007.

Pittsburgh, Pennsylvania February 24, 2020

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION

(Dollars in thousands)	De	ecember 31, 2019	December 31, 2018
ASSETS			
Cash	\$	357 \$	367
Interest-earning deposits with other institutions		395,860	183,625
Federal funds sold		7,638	5,993
Cash and cash equivalents	,	403,855	189,985
Debt securities available-for-sale, at fair value		248,782	233,296
Debt securities held-to-maturity, at cost		196,044	196,131
Equity securities, at fair value		_	12,661
Federal Home Loan Bank stock		24,324	24,671
Total investment securities		469,150	466,759
Loans and leases held-for-investment		6,577,559	5,132,873
Allowance for loan and lease losses		(14,108)	(13,208)
Loans and leases held-for-investment, net		6,563,451	5,119,665
Accrued interest receivable		22,326	20,702
Investment management fees receivable, net		7,560	7,299
Goodwill and other intangibles, net		65,854	67,863
Office properties and equipment, net		9,569	5,126
Operating lease right-of-use asset		22,589	_
Bank owned life insurance		70,044	68,309
Prepaid expenses and other assets		131,412	89,947
Total assets	\$	7,765,810 \$	6,035,655
LIABILITIES AND SHAREHOLDERS' EQUITY			
Liabilities:			
Deposits	\$	6,634,613 \$	5,050,461
Borrowings, net		355,000	404,166
Accrued interest payable on deposits and borrowings		5,490	5,204
Deferred tax liability, net		6,931	3,513
Acquisition earn out liability		_	2,920
Operating lease liability		23,644	_
Other accrued expenses and other liabilities		118,851	90,037
Total liabilities		7,144,529	5,556,301
Shareholders' Equity:			
Preferred stock, no par value; Shares authorized - 150,000; Series A Shares issued and outstanding - 40,250 and 40,250, respectively Series B Shares issued and outstanding - 80,500 and 0, respectively		116,079	38,468
Common stock, no par value; Shares authorized - 45,000,000; Shares issued - 31,482,408 and 30,893,584, respectively; Shares outstanding - 29,355,986 and 28,878,674, respectively		295,349	293,355
Additional paid-in capital		23,095	15,364
Retained earnings		218,449	164,009
Accumulated other comprehensive income (loss), net		1,132	(1,331)
Treasury stock (2,126,422 and 2,014,910 shares, respectively)		(32,823)	(30,511)
Total shareholders' equity		621,281	479,354
Total liabilities and shareholders' equity	\$	7,765,810 \$	

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME

	Years Ended December 31,						
(Dollars in thousands, except per share data)		2019	2018	2017			
Interest income:							
Loans and leases	\$	239,328 \$	185,349 \$	126,544			
Investments		16,324	10,683	6,21			
Interest-earning deposits		6,795	3,754	1,534			
Total interest income		262,447	199,786	134,295			
Interest expense:							
Deposits		125,592	78,493	37,485			
Borrowings		9,798	7,889	5,45			
Total interest expense		135,390	86,382	42,942			
Net interest income		127,057	113,404	91,353			
Provision (credit) for loan and lease losses		(968)	(205)	(623			
Net interest income after provision for loan and lease losses		128,025	113,609	91,976			
Non-interest income:							
Investment management fees		36,442	37,647	37,100			
Service charges on deposits		559	570	399			
Net gain (loss) on the sale and call of debt securities		416	(70)	310			
Swap fees		11,029	7,311	5,353			
Commitment and other loan fees		1,788	1,411	1,462			
Bank owned life insurance income		1,736	1,716	1,778			
Other income (loss)		812	(668)	564			
Total non-interest income		52,782	47,917	46,966			
Non-interest expense:							
Compensation and employee benefits		69,176	64,771	59,316			
Premises and occupancy costs		6,741	5,580	5,010			
Professional fees		6,188	4,729	3,873			
FDIC insurance expense		5,292	4,543	4,238			
General insurance expense		1,097	1,030	1,047			
State capital shares tax		420	1,521	1,546			
Travel and entertainment expense		4,620	3,816	3,118			
Data processing expense		1,848	1,565	582			
Charitable contributions		1,157	1,039	1,057			
Intangible amortization expense		2,009	1,968	1,851			
Change in fair value of acquisition earn out		_	(218)	_			
Other operating expenses		13,601	10,813	9,834			
Total non-interest expense		112,149	101,157	91,472			
Income before tax		68,658	60,369	47,470			
Income tax expense		8,465	5,945	9,482			
Net income	\$	60,193 \$	54,424 \$	37,988			
Preferred stock dividends		5,753	2,120	_			
Net income available to common shareholders	\$	54,440 \$	52,304 \$	37,988			
Earnings per common share:							
Basic	\$	1.95 \$	1.90 \$	1.38			
Diluted	\$	1.89 \$	1.81 \$	1.32			

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

		Years E	nded December 31,		
(Dollars in thousands)		2019	2018	2017	
Net income	\$	60,193 \$	54,424 \$	37,988	
Other comprehensive income (loss):					
Unrealized holding gains (losses) on debt securities, net of tax expense (benefit) of \$1,696, \$(901) and \$387, respectively		5,356	(2,913)	655	
Reclassification adjustment for losses (gains) included in net income on debt securities, net of tax benefit (expense) of \$(76), \$17 and \$(109), respectively		(237)	53	(186)	
Unrealized holding gains (losses) on derivatives, net of tax expense (benefit) of \$(538), \$254 and \$107, respectively		(1,701)	773	180	
Reclassification adjustment for gains included in net income on derivatives, net of tax expense of \$(304), \$(330) and \$(138), respectively		(955)	(1,050)	(233)	
Other comprehensive income (loss)		2,463	(3,137)	416	
Total comprehensive income	\$	62,656 \$	51,287 \$	38,404	

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

(Dollars in thousands)	F	referred Stock	Common Stock		Additional Paid-in- Capital	Retained Carnings	Accumulated Other Comprehensive Income (Loss), Net		Treasury Stock	Total Shareholders' Equity
Balance, December 31, 2016	\$		\$ 285,480	\$	6,782	\$ 73,744	\$ 830	\$	(15,029) \$	351,807
Net income		_	_	-	_	37,988	_		_	37,988
Other comprehensive income		_		-	_	_	416		_	416
Exercise of stock options		_	4,027	,	(2,364)	_	_		_	1,663
Purchase of treasury stock		_	_	-	_	_	_		(8,675)	(8,675)
Stock-based compensation		_	_	-	5,872	_	_		_	5,872
Balance, December 31, 2017	\$	_	\$ 289,507	\$	10,290	\$ 111,732	\$ 1,246	\$	(23,704) \$	389,071
Net income		_	_			54,424	_		_	54,424
Impact of adoption of ASU 2014-09		_	_	-	_	533	_		_	533
Reclassification for equity securities under ASU 2016-01		_	_	-	_	(286)	286		_	_
Reclassification for certain income tax effects under ASU 2018-02		_		-	_	(274)	274		_	_
Other comprehensive loss		_	_	-	_	_	(3,137)	_	(3,137)
Issuance of preferred stock (net of offering costs of \$1,782)		38,468	_	-	_	_	_		_	38,468
Preferred stock dividends		_	_	-	_	(2,120)	_		_	(2,120)
Exercise of stock options		_	3,848	}	(2,181)	_	_		_	1,667
Purchase of treasury stock		_	_	-	_	_	_		(6,807)	(6,807)
Cancellation of stock options		_	_	-	(945)	_	_		_	(945)
Stock-based compensation		_	_	-	8,200	_	_		_	8,200
Balance, December 31, 2018	\$	38,468	\$ 293,355	\$	15,364	\$ 164,009	\$ (1,331) \$	(30,511) \$	479,354
Net income		_	_	-	_	60,193	_		_	60,193
Other comprehensive income		_	_	-	_	_	2,463		_	2,463
Issuance of preferred stock (net of offering costs of \$2,889)		77,611	_	-	_	_	_		_	77,611
Preferred stock dividend		_		-	_	(5,753)	_		_	(5,753)
Exercise of stock options		_	1,994	ļ	(1,094)	_	_		_	900
Purchase of treasury stock		_		-	_	_	_		(2,312)	(2,312)
Stock-based compensation		_	_		8,825	_	_		_	8,825
Balance, December 31, 2019	\$	116,079	\$ 295,349	\$	23,095	\$ 218,449	\$ 1,132	\$	(32,823) \$	621,281

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

		nded December 31,	
(Dollars in thousands)	2019	2018	2017
Cash flows from operating activities:			
Net income	\$ 60,193 \$	54,424 \$	37,988
Adjustments to reconcile net income to net cash provided by operating activities:	2 (1)	2.500	2.266
Depreciation and intangible amortization expense	3,646	3,509	3,366
Amortization of deferred financing costs	84	203	203
Provision (credit) for loan and lease losses	(968)	(205)	(623)
Net gain on the sale of loans	0.025	(19)	(17)
Stock-based compensation expense	8,825	8,200	5,872
Net loss (gain) on the sale or call of debt securities available-for-sale	(312)	73	(295)
Net gain on the call of debt securities held-to-maturity Net loss (gain) from equity securities	(104) (842)	(3) 775	(15)
Income from debt securities trading	(042)	113	(48)
Purchase of debt securities trading	_		(9,802)
Proceeds from the sale of debt securities trading	_	_	9,850
Net amortization of premiums and discounts on debt securities	16	606	9,830
Decrease (increase) in investment management fees receivable, net	(261)	421	29
Increase in accrued interest receivable	(1,624)	(7,183)	(3,905
Increase in accrued interest payable	286	2,705	632
Bank owned life insurance income	(1,736)	(1,716)	(1,778)
Change in fair value of acquisition earn out	(1,730)	(218)	(1,776
Increase (decrease) in income taxes payable	(156)	(9)	166
Decrease (increase) in prepaid income taxes	5,189	8,369	(10,222)
Deferred tax provision	2,640	234	11,110
Increase (decrease) in accounts payable and other accrued expenses	(6,361)	9,566	(1,508)
Other, net	(322)	2,966	(3,709)
Net cash provided by operating activities	 68,193	82,698	38,213
Cash flows from investing activities:	 00,175	02,070	30,213
Purchase of debt securities available-for-sale	(59,110)	(155,632)	(30,204)
Purchase of debt securities held-to-maturity	(258,428)	(144,127)	(8,467)
Purchase of equity securities	_	(5,224)	(266
Proceeds from the sale of debt securities available-for-sale	6,993	31,306	2,527
Proceeds from the sale of equity securities	13,679	_	_
Principal repayments and maturities of debt securities available-for-sale	43,704	25,652	55,621
Principal repayments and maturities of debt securities held-to-maturity	258,581	7,176	3,000
Investment in low income housing and historic tax credits	(12,505)	(4,834)	(5,502
Investment in small business investment companies	(1,283)	(736)	(1,405
Net redemption (purchase) of Federal Home Loan Bank stock	347	(10,879)	(4,151
Net increase in loans and leases	(1,442,818)	(956,706)	(793,762
Proceeds from loan sales	_	7,092	6,867
Proceeds from the sale of other real estate owned	169	_	597
Additions to office properties and equipment	(6,080)	(1,782)	(929)
Acquisition	_	(1,335)	_
Net cash used in investing activities	 (1,456,751)	(1,210,029)	(776,074)
Cash flows from financing activities:			
Net increase in deposit accounts	1,584,152	1,062,850	700,832
Net increase (decrease) in Federal Home Loan Bank advances	(10,000)	70,000	90,000
Net increase (decrease) in line of credit advances	(4,250)	(1,950)	6,200
Net proceeds from issuance of preferred stock	77,611	38,468	_
Repayment of subordinated debt	(35,000)	_	_
Net proceeds from exercise of stock options	900	1,667	1,663
Cancellation of stock options		(945)	_
Payment of contingent consideration	(2,920)		. —
Purchase of treasury stock	(2,312)	(6,807)	(8,675)
Dividends paid on preferred stock	 (5,753)	(2,120)	
Net cash provided by financing activities	 1,602,428	1,161,163	790,020
Net change in cash and cash equivalents during the period	213,870	33,832	52,159
Cash and cash equivalents at beginning of the period	189,985	156,153	103,994
Cash and cash equivalents at end of the period	\$ 403,855 \$	189,985 \$	156,153

	Years Ended December 31,								
(Dollars in thousands)		2019	2018	2017					
Supplemental disclosure of cash flow information:									
Cash paid (received) during the year for:									
Interest expense	\$	135,021 \$	83,474 \$	42,107					
Income taxes	\$	(2,035) \$	(4,331) \$	7,266					
Other non-cash activity:									
Operating lease right-of-use asset	\$	22,589 \$	— \$	_					
Loan foreclosures and repossessions	\$	1,492 \$	— \$	_					
Contingent consideration	\$	— \$	2,920 \$	_					

TRISTATE CAPITAL HOLDINGS, INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

[1] SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

NATURE OF OPERATION

TriState Capital Holdings, Inc. ("we," "us," "our," the "holding company," the "parent company," or the "Company") is a registered bank holding company pursuant to the Bank Holding Company Act of 1956, as amended. The Company has three wholly owned subsidiaries: TriState Capital Bank, a Pennsylvania-chartered state bank (the "Bank"); Chartwell Investment Partners, LLC, a registered investment adviser, ("Chartwell"); and Chartwell TSC Securities Corp., a registered broker/dealer ("CTSC Securities").

The Bank was established to serve the commercial banking needs of middle-market businesses and private banking needs of high-net-worth individuals. The Bank has two wholly owned subsidiaries: TSC Equipment Finance LLC ("TSC Equipment Finance"), established to hold and manage loans and leases of our equipment finance business, and Meadowood Asset Management, LLC ("Meadowood"), established to hold and manage foreclosed properties for the Bank. Chartwell provides investment management services primarily to institutional investors, mutual funds and individual investors. CTSC Securities supports marketing efforts for the proprietary investment products provided by Chartwell, including shares of mutual funds advised and/or administered by Chartwell.

The Company and the Bank are subject to regulatory examination by the Federal Deposit Insurance Corporation ("FDIC"), the Pennsylvania Department of Banking and Securities, and the Board of Governors of the Federal Reserve System and its Reserve Banks, which we refer to as the Federal Reserve. Chartwell is a registered investment adviser regulated by the Securities and Exchange Commission ("SEC"). CTSC Securities is regulated by the SEC and the Financial Industry Regulatory Authority, Inc ("FINRA").

The Bank conducts business through its main office located in Pittsburgh, Pennsylvania, as well as its four additional representative offices in Cleveland, Ohio; Philadelphia, Pennsylvania; Edison, New Jersey; and New York, New York. Chartwell conducts business through its office located in Berwyn, Pennsylvania, and CTSC Securities conducts business through its office located in Pittsburgh, Pennsylvania.

USE OF ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles ("GAAP") in the United States of America requires management to make estimates and assumptions that affect the reported amounts of certain assets and liabilities, disclosure of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of related revenues and expenses during the reporting period. Although our current estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be different than those anticipated in the estimates, which could materially affect the financial results of our operations and financial condition.

Material estimates that are particularly susceptible to significant changes relate to the determination of the allowance for loan and leases losses, valuation of goodwill and other intangible assets and their evaluation for impairment, and deferred income taxes and their related recoverability, each of which is discussed later in this section.

CONSOLIDATION

Our consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries, the Bank, Chartwell and CTSC Securities, after elimination of inter-company accounts and transactions. The accounts of the Bank, in turn, include its wholly owned subsidiaries, TSC Equipment Finance and Meadowood, after elimination of inter-company accounts and transactions. In the opinion of management, all adjustments (consisting of normal, recurring adjustments) and disclosures, considered necessary for the fair presentation of the accompanying consolidated financial statements, have been included.

CASH AND CASH EQUIVALENTS

For purposes of reporting cash flows, the Company has defined cash and cash equivalents as cash, interest-earning deposits with other institutions, federal funds sold, and short-term investments that have an original maturity of 90 days or less.

BUSINESS COMBINATIONS

The Company accounts for business combinations using the acquisition method of accounting. Under this method of accounting, the acquired company's net assets are recorded at fair value as of the date of acquisition, and the results of operations of the acquired company are combined with our results from that date forward. Acquisition costs are expensed when incurred. The difference between the purchase price, which includes an initial measurement of any contingent earn out, and the fair value of the net assets acquired (including identified intangibles) is recorded as goodwill. A change in the initial estimate of any contingent earn out amounts is recorded to non-interest expense in the consolidated statements of income.

For additional detail regarding business combinations, see Note 2.

INVESTMENT SECURITIES

The Company's investments are classified as either: (1) held-to-maturity, which are debt securities that the Company intends to hold until maturity and are reported at amortized cost; (2) trading, which are debt securities bought and held principally for the purpose of selling them in the near term and reported at fair value, with unrealized gains and losses included in non-interest income; (3) available-for-sale, which are debt securities not classified as either held-to-maturity or trading securities and reported at fair value, with unrealized gains and losses reported as a component of accumulated other comprehensive income (loss), on an after-tax basis; or (4) equity securities, which are reported at fair value, with unrealized gains and losses included in non-interest income.

The cost of securities sold is determined on a specific identification basis. Amortization of premiums and accretion of discounts are recorded to interest income on investments over the estimated life of the security utilizing the level yield method. We evaluate impaired investment securities quarterly to determine if impairments are temporary or other-than-temporary. For impaired debt and equity securities, management first determines whether it intends to sell or if it is more likely than not that it will be required to sell the impaired securities. This determination considers current and forecasted liquidity requirements, regulatory and capital requirements, and securities portfolio management. If the Company intends to sell a security with a fair value below amortized cost or if it is more-likely than not that it will be required to sell such a security before recovery, an other-than-temporary impairment ("OTTI") charge is recorded through current period earnings for the full decline in fair value below amortized cost. For debt securities that the Company does not intend to sell or it is more likely than not that it will not be required to sell before recovery, an OTTI charge is recorded through current period earnings for the amount of the valuation decline below amortized cost that is attributable to credit losses. The remaining difference between the security's fair value and amortized cost (that is, the decline in fair value not attributable to credit losses) is recognized in other comprehensive income (loss), in the consolidated statements of comprehensive income and the shareholders' equity section of the consolidated statements of financial condition, on an after-tax basis.

For additional detail regarding investment securities, see Note 3.

FEDERAL HOME LOAN BANK STOCK

The Company is a member of the Federal Home Loan Bank ("FHLB") of Pittsburgh. Member institutions are required to invest in FHLB stock. The stock is carried at cost, which approximates its liquidation value, and it is evaluated for impairment based on the ultimate recoverability of the par value. The following matters are considered by management when evaluating the FHLB stock for impairment: the ability of the FHLB to make payments required by law or regulation and the level of such payments in relation to the operating performance of the FHLB; the impact of legislative and regulatory changes on the institution and its customer base; and the Company's intent and ability to hold its FHLB stock for the foreseeable future. Management believes the Company's holdings in the FHLB stock were recoverable at par value as of December 31, 2019 and 2018. Cash and stock dividends are reported as interest income on investments in the consolidated statements of income.

For additional detail regarding Federal Home Loan Bank stock, see Note 4.

LOANS AND LEASES

Loans and leases held-for-investment are stated at unpaid principal balances, net of deferred loan fees and costs. Loans held-for-sale are stated at the lower of cost or fair value. Interest income on loans is accrued at the contractual rate on the principal amount outstanding. Deferred loan fees and costs are amortized to interest income over the estimated life of the loan, taking into consideration scheduled payments and prepayments.

The Company considers a loan to be a troubled debt restructuring ("TDR") when there is a concession made to a financially troubled borrower without adequate consideration provided to the Company. Once a loan is deemed to be a TDR, the Company considers whether the loan should be placed on non-accrual status. In assessing accrual status, the Company considers the likelihood that repayment and performance according to the original contractual terms will be achieved, as well as the borrower's historical payment performance. A loan is designated and reported as a TDR until such loan is either paid off or sold, unless the restructuring agreement specifies an interest rate equal to or greater than the rate that would be accepted at the time of the restructuring for a new loan with comparable risk and it is fully expected that the remaining principal and interest will be collected according to the restructured agreement.

The recognition of interest income on a loan is discontinued when, in management's opinion, it is probable the borrower is unable to meet payments as they become due or when the loan becomes 90 days past due, whichever occurs first, at which time the loan is placed on non-accrual status. All accrued and unpaid interest on such loans is then reversed. The interest ultimately collected is applied to reduce principal if there is doubt about the collectability of principal. If a borrower brings a loan current for which accrued interest has been reversed, then the recognition of interest income on the loan is resumed once the loan has been current for a period of six consecutive months or greater.

The Company is a party to financial instruments with off-balance sheet risk, such as commitments to extend credit, in the normal course of business to meet the financing needs of its customers. Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the lending agreement with such customer. Commitments generally have fixed expiration dates or other termination clauses (i.e., loans due on demand) and may require payment of a fee. Since some of the commitments are expected to expire without being drawn upon, the unfunded commitment amount does not necessarily represent future cash requirements. The Company evaluates each customer's credit worthiness on a case-by-case basis using the same credit policies in making commitments and conditional obligations as it does for on-balance sheet instruments. The amount of collateral obtained, if deemed necessary by the Company upon extension of a commitment, is based on management's credit evaluation of the borrower.

For additional detail regarding loans and leases, see Note 5.

OTHER REAL ESTATE OWNED

Real estate owned, other than bank premises, is recorded at fair value less estimated selling costs. Fair value is determined based on an independent appraisal. Expenses related to holding the property are charged against earnings when incurred. Depreciation is not recorded on other real estate owned ("OREO") properties.

ALLOWANCE FOR LOAN AND LEASE LOSSES

The allowance for loan and lease losses is established through provisions for loan and lease losses that are recorded in the consolidated statements of income. Loans and leases are charged off against the allowance for loan and lease losses when management believes that the principal is uncollectible. If, at a later time, amounts are recovered with respect to loans and leases previously charged off, the recovered amount is credited to the allowance for loan and lease losses.

In management's judgment, the allowance was appropriate to cover probable losses inherent in the loan and lease portfolio as of December 31, 2019 and 2018. Management's judgment takes into consideration general economic conditions, diversification and seasoning of the loan portfolio, historic loss experience, identified credit problems, delinquency levels and adequacy of collateral. Although management believes it has used the best information available to it in making such determinations, and that the present allowance for loan and lease losses is adequate, future adjustments to the allowance may be necessary, and net income may be adversely affected if circumstances differ substantially from the assumptions used in determining the level of the allowance. In addition, as an integral part of their periodic examination, certain regulatory agencies review the adequacy of the Bank's allowance for loan and lease losses and may direct the Bank to make additions to the allowance based on their judgments about information available to them at the time of their examination.

The two components of the allowance for loan and lease losses represent estimates of general reserves based upon Accounting Standards Codification ("ASC") Topic 450, Contingencies; and specific reserves based upon ASC Topic 310, Receivables. ASC Topic 450 applies to homogeneous loan pools such as commercial loans, consumer lines of credit and residential mortgages that are not individually evaluated for impairment. ASC Topic 310 is applied to commercial and consumer loans that are individually evaluated for impairment.

In management's opinion, a loan or lease is impaired, based upon current information and events, when it is probable that the loan or lease will not be repaid according to its original contractual terms, including both principal and interest, or if a loan is designated as a TDR. Management performs individual assessments of impaired loans and leases to determine the existence of loss exposure based upon a discounted cash flows method or where a loan is collateral dependent, based upon the fair value of the collateral less estimated selling costs.

In estimating probable loan and lease loss of general reserves management considers numerous factors, including historical chargeoffs and subsequent recoveries. Management also considers qualitative factors that influence our credit quality, including but not limited to, delinquency and non-performing loan trends, changes in loan underwriting guidelines and credit policies, and the results of internal loan reviews. Finally, management considers the impact of changes in current local and regional economic conditions in the markets that we serve.

Management bases the computation of the allowance for loan and lease losses of general reserves on two factors: the primary factor and the secondary factor. The primary factor is based on the inherent risk identified by management within each of the Company's three loan portfolios based on the historical loss experience of each loan portfolio in addition to the loss emergence period. Management has developed a methodology that is applied to each of the three primary loan portfolios: private banking loans, commercial and industrial ("C&I") loans and leases, and commercial real estate ("CRE") loans. As the loan loss history, mix, and risk ratings of each loan portfolio change, the primary factor adjusts accordingly. The allowance for loan and lease losses related to the primary factor is based on our estimates as to probable losses for each loan portfolio. The secondary factor is intended to capture risks related to events and circumstances that management believes have an impact on the performance of the loan portfolio. Although this factor is more subjective in nature, the methodology focuses on internal and external trends in pre-specified categories (risk factors) and

applies a quantitative percentage that drives the secondary factor. Nine risk factors have been identified and each risk factor is assigned a reserve level based on management's judgment as to the probable impact of each risk factor on each loan portfolio and is monitored on a quarterly basis. As the trend in any risk factor changes, a corresponding change occurs in the reserve associated with each respective risk factor, such that the secondary factor remains current to changes in each loan portfolio.

The Company also maintains a reserve for losses on unfunded commitments. This reserve is reflected as a component of other liabilities and, in management's judgment, is sufficient to cover probable losses inherent in the loan commitments. Management tracks the level and trends in unused commitments and takes into consideration the same factors as those considered for purposes of the allowance for loan and lease losses on outstanding loans.

For additional detail regarding allowance for loan and lease losses, see Note 6.

INVESTMENT MANAGEMENT FEES

The Company recognizes investment management fee revenue when advisory services are performed. Fees are based on assets under management and are calculated pursuant to individual client contracts. Investment management fees are generally received on a quarterly basis. Certain incremental costs incurred to acquire investment management contracts are deferred and amortized to non-interest expense over the estimated life of the contract.

Investment management fees receivable represent amounts due for contractual investment management services provided to the Company's clients, primarily institutional investors, mutual funds and individual investors. Management performs credit evaluations of its customers' financial condition when it is deemed to be necessary and does not require collateral. The Company provides an allowance for uncollectible accounts based on specifically identified receivables. Bad debt expense is recorded to other non-interest expense on the consolidated statements of income and the allowance for uncollectible accounts is recorded to investment management fees receivable, net on the consolidated statements of financial position. Investment management fees receivable are considered delinquent when payment is not received within contractual terms and are charged off against the allowance for uncollectible accounts when management determines that recovery is unlikely, and the Company ceases its collection efforts. There was no bad debt expense recorded for the years ended December 31, 2019, 2018 and 2017. There was no allowance for uncollectible accounts recorded as of December 31, 2019 and 2018.

GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. Goodwill is not amortized and is subject to at least annual assessments for impairment by applying a fair value-based test. The Company reviews goodwill annually and again at any quarter-end if a material event occurs during the quarter that may affect goodwill. If goodwill testing is required, an assessment of qualitative factors can be completed before performing the two-step goodwill impairment test. If an assessment of qualitative factors determines it is more likely than not that the fair value of a reporting unit exceeds its carrying amount, then the two step goodwill impairment test is not required. Goodwill is evaluated for potential impairment by determining if the fair value has fallen below carrying value.

Other intangible assets represent purchased assets that may lack physical substance but can be distinguished from goodwill because of contractual or other legal rights. The Company has determined that certain of its acquired mutual fund client relationships meet the criteria to be considered indefinite-lived assets because the Company expects both the renewal of these contracts and the cash flows generated by these assets to continue indefinitely. Accordingly, the Company does not amortize these intangible assets, but instead reviews these assets annually or more frequently whenever events or circumstances occur indicating that the recorded indefinite-lived assets may be impaired. Each reporting period, the Company assesses whether events or circumstances have occurred which indicate that the indefinite life criteria are no longer met. If the indefinite life criteria are no longer met, the Company assesses whether the carrying value of these assets exceeds its fair value. If the carrying value exceeds the fair value of the asset, an impairment loss is recorded in an amount equal to any such excess and the asset is reclassified to finite-lived. Other intangible assets that the Company has determined to have finite lives, such as its trade names, client lists and non-compete agreements are amortized over their estimated useful lives. These finite-lived intangible assets are amortized on a straight-line basis over their estimated useful lives, which range from four to 25 years. Finite-lived intangibles are evaluated for impairment on an annual basis or more frequently whenever events or circumstances occur indicating that the carrying amount may not be recoverable.

For additional detail regarding goodwill and other intangible assets, see Note 7.

OFFICE PROPERTIES AND EQUIPMENT

Office properties and equipment are stated at cost less accumulated depreciation. Office properties include furniture, fixtures and leasehold improvements. Equipment includes computer equipment and internal use software. Depreciation is computed utilizing the straight-line method over the estimated useful lives of the related assets, except for leasehold improvements, which are amortized over the terms of the respective leases or the estimated useful lives of the improvements, whichever is shorter. Estimated useful lives are dependent upon the nature and condition of the asset and range from three to 10 years. Repairs and maintenance are charged

to expense as incurred, while improvements that extend the useful life are capitalized and depreciated to non-interest expense over the estimated remaining life of the asset.

For additional detail regarding office properties and equipment, see Note 8.

OPERATING LEASES

The Company is a lessee in noncancellable operating leases, primarily for its office spaces and other office equipment. The Company accounts for leases in accordance with ASC Topic 842, "Leases," and records operating leases as a right-of-use asset and an offsetting lease liability in the consolidated statements of financial condition at the present value of the unpaid lease payments. The Company generally uses its incremental borrowing rate as the discount rate for operating leases. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for lease payments made at or before the lease commencement date, plus any initial direct costs incurred less any lease incentives received. For operating leases, the right-of-use asset is subsequently measured throughout the lease term at the carrying amount of the lease liability, plus initial direct costs, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Upon adoption of this Accounting Standards Update ("ASU") 2016-02, we have recognized a lease liability and related right-of-use asset on our balance sheet, with no impact on our income statement. The Company adopted this standard and all standards related to Topic 842 on January 1, 2019 and elected to apply it as of the beginning of the period of adoption. Of the optional practical expedients available under this standard, all have been adopted except for the hindsight practical expedient.

For additional detail regarding operating leases, see Note 9.

BANK OWNED LIFE INSURANCE

Bank owned life insurance ("BOLI") policies on certain officers and employees are recorded at net cash surrender value on the consolidated statements of financial condition. Upon termination of the BOLI policy the Company receives the cash surrender value. BOLI benefits are payable to the Company upon death of the insured. Changes in net cash surrender value are recognized as non-interest income in the consolidated statements of income.

DEPOSITS

Deposits are stated at principal outstanding. Interest on deposits is accrued and charged to interest expense daily and is paid or credited in accordance with the terms of the respective accounts.

For additional detail regarding deposits, see Note 10.

BORROWINGS

The Company records FHLB advances, line of credit borrowings and subordinated notes payable at their principal amount net of debt issuance costs. Interest expense is recognized based on the coupon rate of the obligations. Costs associated with the acquisition of subordinated notes payable are amortized to interest expense over the expected term of the borrowing.

For additional detail regarding borrowings, see Note 11.

INCOME TAXES

The Company utilizes the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are recognized for the tax effects of differences between the financial statement and tax basis of assets and liabilities. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities with regard to a change in tax rates is recognized in income in the period that includes the enactment date. Management assesses all available evidence to determine the amount of deferred tax assets that are more-likely-than-not to be realized. The available evidence used in connection with the assessments includes taxable income in prior periods, projected taxable income, potential tax planning strategies and projected reversals of deferred tax items. These assessments involve a degree of subjectivity and may undergo significant change. Changes to the evidence used in the assessments could have a material adverse effect on the Company's results of operations in the period in which they occur. The Company considers uncertain tax positions that it has taken or expects to take on a tax return. Any interest and penalties related to unrecognized tax benefits would be recognized in income tax expense in the consolidated statements of income.

For additional detail regarding income taxes, see Note 12.

EARNINGS PER COMMON SHARE

Earnings per common share ("EPS") is computed using the two-class method, where net income is reduced by dividends declared on our preferred stock to derive net income available to common shareholders. Basic EPS is computed by dividing net income available to common shareholders by the weighted average number of common shares outstanding for the period, excluding non-vested restricted stock. Diluted EPS reflects the potential dilution upon the exercise of stock options and the vesting of restricted stock awards granted utilizing the treasury stock method.

For additional detail regarding earnings per common share, see Note 16.

STOCK-BASED COMPENSATION

The Company accounts for its stock-based compensation awards based on estimated fair values of stock-based awards made to employees and directors.

Compensation cost for all stock-based payments is based on the estimated grant-date fair value. The value of the portion of the award that is ultimately expected to vest is included in stock-based compensation expense in the consolidated statements of income and recorded as a component of additional paid-in capital, for equity-based awards. Compensation expense for all awards is recognized on a straight-line basis over the requisite service period for the entire grant.

For additional detail regarding stock-based compensation, see Note 17.

DERIVATIVES AND HEDGING ACTIVITIES

All derivatives are evaluated at inception as to whether or not they are hedging or non-hedging activities. All derivatives are recognized as either assets or liabilities on the consolidated statements of financial condition and measured at fair value. For derivatives designated as fair value hedges, changes in the fair value of the derivative and the hedged item related to the hedged risk are recognized in earnings. Any hedge ineffectiveness would be recognized in the income statement line item pertaining to the hedged item. For derivatives designated as cash flow hedges, changes in fair value of the effective portion of the cash flow hedges are reported in accumulated other comprehensive income (loss). When the cash flows associated with the hedged item are realized, the gain or loss included in accumulated other comprehensive income (loss) is recognized in the consolidated statements of income. The Company also has interest rate derivative positions that are not designated as hedging instruments. Changes in the fair value of derivatives not designated in hedging relationships are recorded directly in earnings.

The Company executes interest rate derivatives with its commercial banking customers to facilitate their respective risk management strategies which generate swap fee income. Those derivatives are simultaneously and economically hedged by offsetting derivatives that the Company executes with a third party, such that the Company eliminates its interest rate exposure resulting from such transactions and are not designated as hedging instruments. Swap fees are based on the notional amount and weighted maturity of each individual transaction and are collected and recorded to non-interest income in the consolidated statements of income when the transaction is executed

For additional detail regarding derivatives and hedging activities, see Note 18.

FAIR VALUE MEASUREMENT

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability in a principal or most advantageous market for the asset or liability in an orderly transaction between market participants as of the measurement date, using assumptions market participants would use when pricing such an asset or liability. An orderly transaction assumes exposure to the market for a customary period for marketing activities prior to the measurement date and not a forced liquidation or distressed sale. Fair value measurement and disclosure guidance provides a three-level hierarchy that prioritizes the inputs of valuation techniques used to measure fair value into three broad categories:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 Observable inputs such as quoted prices for similar assets and liabilities in active markets, quoted prices for similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies, and similar techniques that use significant unobservable inputs.

Fair value must be recorded for certain assets and liabilities every reporting period on a recurring basis or, under certain circumstances, on a non-recurring basis.

For additional detail regarding fair value measurement, see Note 19.

ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Unrealized holding gains and the non-credit component of unrealized losses on the Company's debt securities available-for-sale are included in accumulated other comprehensive income (loss), net of applicable income taxes. Also included in accumulated other comprehensive income (loss) is the remaining unamortized balance of the unrealized holding gains (non-credit losses), net of applicable income taxes, that existed on the transfer date for debt securities reclassified into the held-to-maturity category from the available-for-sale category.

Unrealized holding gains (losses) on the effective portion of the Company's cash flow hedge derivatives are included in accumulated other comprehensive income (loss), net of applicable income taxes, which will be reclassified to interest expense as interest payments are made on the Company's debt.

Income tax effects in accumulated other comprehensive income (loss) are released as investments are sold or matured and as liabilities are extinguished.

For additional detail regarding accumulated other comprehensive income (loss), see Note 20.

TREASURY STOCK

The repurchase of the Company's common stock is recorded at cost. At the time of reissuance, the treasury stock account is reduced using the average cost method. Gains and losses on the reissuance of common stock are recorded in additional paid-in capital, to the extent additional paid-in capital from any previous net gains on treasury share transactions exists. Any net deficiency is charged to retained earnings.

RECLASSIFICATION

Certain items previously reported have been reclassified to conform with the current year's reporting presentation and are considered immaterial.

[2] BUSINESS COMBINATION

On April 6, 2018, TriState Capital Holdings, Inc., through its wholly owned subsidiary, Chartwell Investment Partners, LLC, completed the acquisition of investment management contracts, select personnel and related assets from Columbia Partners, L.L.C. Investment Management ("Columbia"), totaling approximately \$1.07 billion in assets under management (the "Columbia acquisition"). Under the terms of the agreement with Columbia, investment management contracts were acquired for a purchase price consisting of \$1.3 million paid in cash at closing based on a multiple of run-rate revenue, plus an earn out. The earn out, which was limited to \$3.8 million under the terms of the agreement, was calculated based on a multiple of run-rate revenue at December 31, 2018. The earn out was estimated at closing to be approximately \$3.1 million. The foregoing summary of the agreement and the transactions contemplated by it does not purport to be complete and is subject to, and qualified in its entirety by, the full text of the agreement.

The following table summarizes total consideration at closing and assets acquired in the Columbia acquisition as of April 6, 2018:

(Dollars in thousands)	Columbia	a Acquisition
Consideration paid:		
Cash	\$	1,335
Estimated earn out, at closing		3,138
Fair value of total consideration, at closing	\$	4,473
Intangible assets acquired		1,537
Goodwill		2,936
Total net assets purchased	\$	4,473

During the year ended December 31, 2018, the fair value of the estimated acquisition earn out was decreased by \$218,000 based on management's final determination of Columbia's annualized run-rate revenue at December 31, 2018. This adjustment to the earn out was credited to non-interest expense during the year ended December 31, 2018. The remaining acquisition earn out liability of \$2.9 million was paid during the year ended December 31, 2019.

In connection with the Columbia acquisition, total acquisition-related transaction costs incurred by TriState Capital were not significant. Since the acquisition, the operations acquired in the Columbia acquisition contributed revenues of \$1.6 million and approximate earnings of \$107,000, which were included in the consolidated statement of income for the year ended December 31, 2018.

Goodwill is not amortized for book purposes but is deductible for tax purposes. The following table shows the amount of other intangible assets acquired through the Columbia acquisition as of April 6, 2018, by class and estimated useful life.

(Dollars in thousands)	Gross Amount	Weighted Average Estimated Useful Life (months)
Client Relationships:		_
Sub-advisory client list	115	132
Separate managed accounts client list	1,365	108
Non-compete agreements	57	48
Total finite-lived intangibles	\$ 1,537	108

The following table presents unaudited pro forma financial information, which combines the historical consolidated statements of income of the Company and the contracts acquired from Columbia to give effect to the acquisition as if it had occurred on January 1, 2017, for the periods indicated.

	Pro Forma Years Ended December 31,							
(Dollars in thousands, except per share data)		2018	2017					
Total revenue	\$	161,997 \$	140,806					
Net income available to common shareholders	\$	52,401 \$	38,601					
Earnings per common share:								
Basic	\$	1.90 \$	1.40					
Diluted	\$	1.82 \$	1.34					

Total revenue is defined as net interest income and non-interest income, excluding gains and losses on the sale and call of debt securities. Pro forma adjustments include intangible amortization expense and income tax expense.

[3] INVESTMENT SECURITIES

Debt securities available-for-sale and held-to-maturity were comprised of the following:

		December 31, 2019								
(Dollars in thousands)		Amortized Cost	Gross Unrealized Appreciation	Gross Unrealized Depreciation	Estimated Fair Value					
Debt securities available-for-sale:										
Corporate bonds	\$	172,704	\$ 2,821	\$ 107	\$ 175,418					
Trust preferred securities		18,092	216	48	18,260					
Agency collateralized mortgage obligations		27,262	11	80	27,193					
Agency mortgage-backed securities		18,058	451	_	18,509					
Agency debentures		8,961	441	_	9,402					
Total debt securities available-for-sale		245,077	3,940	235	248,782					
Debt securities held-to-maturity:			,		,					
Corporate bonds		24,678	619	_	25,297					
Agency debentures		149,912	628	935	149,605					
Municipal bonds		17,094	144	_	17,238					
Agency mortgage-backed securities		4,360	255	_	4,615					
Total debt securities held-to-maturity		196,044	1,646	935	196,755					
Total debt securities	\$	441,121	\$ 5,586	\$ 1,170	\$ 445,537					

December 31, 2018 Gross Gross Amortized Unrealized Unrealized Estimated Fair Value (Dollars in thousands) Cost Appreciation Depreciation Debt securities available-for-sale: Corporate bonds 151,063 \$ 152,691 \$ 33 \$ 1,661 \$ Trust preferred securities 17,964 1,115 16,849 Non-agency collateralized loan obligations 393 3 390 4 Agency collateralized mortgage obligations 33,680 42 33,718 21,575 37 348 21,264 Agency mortgage-backed securities 9,994 49 10,012 Agency debentures 67 179 3,180 Total debt securities available-for-sale 236,297 233,296 Debt securities held-to-maturity: 27,184 353 22 27,515 Corporate bonds Agency debentures 141,575 472 34 142,013 22,963 22,913 Municipal bonds 11 61 27 Agency mortgage-backed securities 4,409 4,382 196,131 836 144 Total debt securities held-to-maturity 196,823 432,428 \$ 1,015 \$ 3,324 \$ 430,119 Total debt securities

Interest income on investment securities was as follows:

	Years Ended December 31,								
(Dollars in thousands)		2019	2018	2017					
Taxable interest income	\$	14,558	\$ 9,062	\$ 4,896					
Non-taxable interest income		381	420	452					
Dividend income		1,385	1,201	869					
Total interest income on investments	\$	16,324	\$ 10,683	\$ 6,217					

As of December 31, 2019, the contractual maturities of the debt securities were:

	December 31, 2019									
		Available-		Held-to-Maturity						
(Dollars in thousands)	A	mortized Cost	Estimated Fair Value		Amortized Cost	Estimated Fair Value				
Due in less than one year	\$	48,132 \$	\$ 48,400	\$	3,621	\$	3,632			
Due from one to five years		93,406	95,628		16,135		16,405			
Due from five to 10 years		41,014	41,342		147,766		147,497			
Due after 10 years		62,525	63,412		28,522		29,221			
Total debt securities	\$	245,077	\$ 248,782	\$	196,044	\$	196,755			

The \$63.4 million fair value of debt securities available-for-sale with a contractual maturity due after 10 years as of December 31, 2019, included \$37.4 million, or 59.0%, that are floating-rate securities. The \$147.8 million amortized cost of debt securities held-to-maturity with a contractual maturity due from five to 10 years as of December 31, 2019, included \$15.7 million that have call provisions within the next three years that would either mature, if called, or become floating-rate securities after the call date.

Prepayments may shorten the contractual lives of the collateralized mortgage obligations, mortgage-backed securities and collateralized loan obligations.

Proceeds from the sale and call of debt securities available-for-sale and held-to-maturity and related gross realized gains and losses were:

		Av	vailable-for-Sale			He	eld-to-Maturity							
	Years Ended December 31,					Years Ended December 31,								
(Dollars in thousands)		2019	2018	2017		2019	2018	2017						
Proceeds from sales	\$	6,993 \$	31,306 \$	2,527	\$	— \$	— \$	_						
Proceeds from calls		17,336	6,129	21,675		255,538	1,000	3,000						
Total proceeds	\$	24,329 \$	37,435 \$	24,202	\$	255,538 \$	1,000 \$	3,000						
Gross realized gains	\$	312 \$	51 \$	297	\$	104 \$	3 \$	15						
Gross realized losses		_	124	2		_	_	_						
Net realized gains (losses)	\$	312 \$	(73) \$	295	\$	104 \$	3 \$	15						

Debt securities available-for-sale of \$2.8 million, as of December 31, 2019, were held in safekeeping at the FHLB and were included in the calculation of borrowing capacity.

The following tables show the fair value and gross unrealized losses on temporarily impaired debt securities available-for-sale and held-to-maturity, by investment category and length of time that the individual securities have been in a continuous unrealized loss position as of December 31, 2019 and 2018:

	December 31, 2019											
	Less than 12 Months					12 Months or More			Total			
(Dollars in thousands)	F	air value	U	Inrealized losses	Fa	air value	U	Inrealized losses	F	air value	U	nrealized losses
Debt securities available-for-sale:												
Corporate bonds	\$	4,942	\$	58	\$	19,951	\$	49	\$	24,893	\$	107
Trust preferred securities		_		_		4,417		48		4,417		48
Agency collateralized mortgage obligations		22,117		66		2,544		14		24,661		80
Total debt securities available-for-sale		27,059		124		26,912		111		53,971		235
Debt securities held-to-maturity:												
Agency debentures		87,879		935		_		_		87,879		935
Municipal bonds		_		_		_		_		_		_
Total debt securities held-to-maturity		87,879		935		_		_		87,879		935
Total temporarily debt impaired securities (1)	\$	114,938	\$	1,059	\$	26,912	\$	111	\$	141,850	\$	1,170

The number of investment positions with unrealized losses totaled 86 for available-for-sale securities and 53 for held-to-maturity securities.

December 31, 2018

	-	Less than 12 Months			12 Months or More				Total			
(Dollars in thousands)		Fair value		Unrealized losses		Fair value		nrealized losses	Fair value		Unrealized losses	
Debt securities available-for-sale:	,											
Corporate bonds	\$	110,200	\$	789	\$	22,954	\$	872	\$	133,154	\$ 1	,661
Trust preferred securities		16,849		1,115		_		_		16,849	1	,115
Non-agency collateralized loan obligations		_		_		390		3		390		3
Agency collateralized mortgage obligations		_		_		3,015		4		3,015		4
Agency mortgage-backed securities		5,851		51		8,690		297		14,541		348
Agency debentures		3,487		49		_		_		3,487		49
Total debt securities available-for-sale		136,387		2,004		35,049		1,176		171,436	3	,180
Debt securities held-to-maturity:												
Corporate bonds		3,978		22		_		_		3,978		22
Agency debentures		1,952		34		_		_		1,952		34
Municipal bonds		16,105		51		2,110		10		18,215		61
Agency mortgage-backed securities		4,382		27		_		_		4,382		27
Total debt securities held-to-maturity		26,417		134		2,110		10		28,527		144
Total temporarily debt impaired securities (1)	\$	162,804	\$	2,138	\$	37,159	\$	1,186	\$	199,963	\$ 3	,324

⁽¹⁾ The number of investment positions with unrealized losses totaled 78 for available-for-sale securities and 29 for held-to-maturity securities.

The changes in the fair values of our municipal bonds, agency debentures, agency collateralized mortgage obligations and agency mortgage-backed securities are primarily the result of interest rate fluctuations. To assess for credit impairment, management evaluates the underlying issuer's financial performance and the related credit rating information through a review of publicly available financial statements and other publicly available information. The most recent assessment for credit impairment did not identify any issues related to the ultimate repayment of principal and interest on these debt securities. In addition, the Company has the ability and intent to hold debt securities in an unrealized loss position until recovery of their amortized cost. Based on this, the Company considers all of the unrealized losses to be temporary.

There were no outstanding debt securities classified as trading as of December 31, 2019 or December 31, 2018.

Equity securities consisted of mutual funds investing in short-duration, corporate bonds and mid-cap value equities. The investments in these securities were \$0 and \$12.7 million as of December 31, 2019 and 2018, respectively.

[4] FEDERAL HOME LOAN BANK STOCK

The Company is a member of the FHLB system. As a member of the FHLB of Pittsburgh, the Company must maintain a minimum investment in the capital stock of the FHLB in an amount equal to 4.00% of its outstanding advances, 0.75% of its issued letters of credits, and 0.10% of its membership asset value, as defined, with the FHLB. The FHLB has the ability to change the calculation of the required stock investment at any time. At December 31, 2019, \$15.3 million of stock was required based on \$355.0 million in outstanding advances, \$5.6 million in issued letters of credit and the Bank's membership asset value of approximately \$1.08 billion. The Company held FHLB stock totaling \$24.3 million and \$24.7 million at December 31, 2019 and 2018, respectively. The Company received dividends from its holdings in FHLB capital stock of \$1.3 million, \$924,000 and \$603,000 for the years ended December 31, 2019, 2018 and 2017, respectively.

[5] LOANS AND LEASES

The Company generates loans through the private banking and middle-market banking channels. The private banking channel primarily includes loans made to high-net-worth individuals, trusts and businesses that are typically secured by cash, marketable securities and/or cash value life insurance. The middle-market banking channel consists of our C&I loan and lease portfolio and CRE loan portfolio, which serve middle-market businesses and real estate developers in our primary markets.

Loans and leases held-for-investment were comprised of the following:

		December	31, 2017	
(Dollars in thousands)	Private Banking	Commercial and Industrial	Commercial Real Estate	Total
Loans and leases held-for-investment, before deferred fees and costs	\$ 3,688,779 \$	1,080,767	\$ 1,801,375 \$	6,570,921
Net deferred loan costs (fees)	6,623	4,942	(4,927)	6,638
Loans and leases held-for-investment, net of deferred fees and costs	3,695,402	1,085,709	1,796,448	6,577,559
Allowance for loan and lease losses	(1,973)	(5,262)	(6,873)	(14,108)
Loans and leases held-for-investment, net	\$ 3,693,429 \$	1,080,447	\$ 1,789,575 \$	6,563,451

December 31, 2010

	December 31, 2018									
(Dollars in thousands)		Private Banking	and Industrial	Commercial Real Estate	Total					
(Dotturs in mousulus)		Dunking	maastrar	Tear Estate	10111					
Loans and leases held-for-investment, before deferred fees and costs	\$	2,864,094 \$	781,836	5 1,482,148 \$	5,128,078					
Net deferred loan costs (fees)		5,449	3,484	(4,138)	4,795					
Loans and leases held-for-investment, net of deferred fees and costs		2,869,543	785,320	1,478,010	5,132,873					
Allowance for loan and lease losses		(1,942)	(5,764)	(5,502)	(13,208)					
Loans and leases held-for-investment, net	\$	2,867,601 \$	779,556	5 1,472,508 \$	5,119,665					

The Company's customers have unused loan commitments based on the availability of eligible collateral or other terms and conditions under their loan agreements. Often these commitments are not fully utilized and therefore the total amount does not necessarily represent future cash requirements. The amount of unfunded commitments, including standby letters of credit, as of December 31, 2019 and 2018, was \$4.91 billion and \$3.54 billion, respectively. The interest rate for each commitment is based on the prevailing market conditions at the time of funding. The reserve for losses on unfunded commitments was \$645,000 and \$542,000 as of December 31, 2019 and 2018, respectively, which includes reserves for probable losses on unfunded loan commitments, including standby letters of credit and risk participations.

The total unfunded commitments above included loans in the process of origination totaling approximately \$20.7 million and \$64.4 million as of December 31, 2019 and 2018, respectively, which extend over varying periods of time.

The Company issues standby letters of credit in the normal course of business. Standby letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. Standby letters of credit generally are contingent upon the failure of the customer to perform according to the terms of the underlying contract with the third party. The Company would be required to perform under a standby letter of credit when drawn upon by the guaranteed party in the case of non-performance by the Company's customer. Collateral may be obtained based on management's credit assessment of the customer. The amount of unfunded commitments related to standby letters of credit as of December 31, 2019 and 2018, included in the total unfunded commitments above, was \$72.8 million and \$60.0 million, respectively. Should the Company be obligated to perform under any standby letters of credit, the Company will seek repayment from the customer for amounts paid. During the year ended December 31, 2019 and 2018, there were draws on letters of credit totaling \$163,000 and \$6.6 million, respectively, which were immediately repaid by the borrowers or converted to an outstanding loan based on the contractual terms and subsequently repaid. Most of these commitments are expected to expire without being drawn upon and the total amount does not necessarily represent future cash requirements. The potential liability for losses on standby letters of credit was included in the reserve for losses on unfunded commitments.

The Company has entered into risk participation agreements with financial institution counterparties for interest rate swaps related to loans in which we are a participant. The risk participation agreements provide credit protection to the financial institution counterparties should the customers fail to perform on their interest rate derivative contracts. The potential liability for outstanding obligations was included in the reserve for losses on unfunded commitments.

As of December 31, 2019 and 2018, 92.4% and 90.1%, respectively, of the Company's commercial loan portfolio was comprised of loans to customers within the Company's primary market areas of Pennsylvania, Ohio, New Jersey, New York and contiguous states. As a result, the commercial loan and lease portfolio is subject to the general economic conditions within those areas. The Company evaluates each customer's creditworthiness on an individual basis. The amount of collateral obtained by the Company upon extension of credit is based on management's credit evaluation of the borrower. The Company does not believe it has significant concentrations of credit risk in any one group of borrowers given its underwriting and collateral requirements.

The Company's loan and lease portfolio is comprised of amortizing loans, where scheduled principal and interest payments are applied according to the terms of the loan agreement, as well as interest-only loans. As of December 31, 2019 and 2018, interest-only loans represented 75.8% and 73.7%, respectively, of the loans held-for-investment, the majority of which were lines of credit.

There were \$3.47 billion in loans that are due on demand with no stated maturity and \$3.11 billion in loans with stated maturities which have an expected average remaining maturity of approximately five years as of December 31, 2019, compared to \$2.67 billion in loans that are due on demand with no stated maturity and \$2.46 billion in loans with stated maturities which have an expected average remaining maturity of approximately four years as of December 31, 2018. As of December 31, 2019 and 2018, 92.4% and 92.2%, respectively, of the Company's portfolio was comprised of variable rate loans.

[6] ALLOWANCE FOR LOAN AND LEASE LOSSES

Our allowance for loan and lease losses represents our estimate of probable loan and lease losses inherent in the portfolio at a specific point in time. This estimate includes losses associated with specifically identified loans and leases, as well as estimated probable credit losses inherent in the remainder of the loan and lease portfolio. Additions are made to the allowance through both periodic provisions recorded in the consolidated statements of income and recoveries of losses previously incurred. Reductions to the allowance occur as loans and leases are charged off or when the credit history of any of the Company's three primary loan portfolios (private banking loans, C&I loans and leases, and CRE loans) improves. Management evaluates the adequacy of the allowance at least quarterly, and in doing so relies on various factors including, but not limited to, assessment of historical loss experience, delinquency and non-accrual trends, portfolio growth, underlying collateral coverage and current economic conditions. This evaluation is subjective and requires material estimates that may change over time. In addition, management evaluates the overall methodology for the allowance for loan and lease losses on an annual basis. The calculation of the allowance for loan and lease losses takes into consideration the inherent risk identified within each of the Company's three primary loan portfolios. In addition, management considers the historical loss experience of each loan and lease portfolio to ensure that the allowance for loan and lease losses is sufficient to cover probable losses inherent in such loan portfolios. Refer to Note 1, Summary of Significant Accounting Policies, for more details on the Company's allowance for loan losses policy.

The following discusses key characteristics and risks within each primary loan portfolio:

Private Banking Loans

Our private banking lending activities are conducted on a national basis. This loan portfolio primarily includes loans made to high-net-worth individuals, trusts and businesses that are typically secured by cash, marketable securities and/or cash value life insurance. This portfolio also has some loans that are secured by residential real estate or other financial assets, lines of credit and unsecured loans. The primary sources of repayment for these loans are the income and/or assets of the borrower.

The underlying collateral is the most important indicator of risk for this loan portfolio. The overall lower risk profile of this portfolio is driven by loans secured by cash, marketable securities and/or cash value life insurance, which were 97.4% and 96.7% of total private banking loans as of December 31, 2019 and 2018, respectively.

Middle-Market Banking: Commercial and Industrial Loans and Leases

This loan and lease portfolio primarily include loans and leases made to financial and other service companies or manufacturers generally for the purposes of financing production, operating capacity, accounts receivable, inventory, equipment, acquisitions and recapitalizations. Cash flow from the borrower's operations is the primary source of repayment for these loans and leases, except for certain commercial loans that are secured by marketable securities.

The borrower's industry and local and regional economic conditions are important indicators of risk for this loan portfolio. Collateral for these types of loans at times does not have sufficient value in a distressed or liquidation scenario to satisfy the outstanding debt. C&I loans collateralized by marketable securities are treated the same as private banking loans for purposes of the allowance for loan and lease loss calculation.

Middle-Market Banking: Commercial Real Estate Loans

This loan portfolio includes loans secured by commercial purpose real estate, including both owner-occupied properties and investment properties for various purposes including office, industrial, multifamily, retail, hospitality, healthcare and self-storage. The primary source of repayment for CRE loans secured by owner-occupied properties is cash flow from the borrower's operations. Individual project cash flows, global cash flows and liquidity from the developer, or the sale of the property are the primary sources of repayment for CRE loans secured by investment properties. Also included are commercial construction loans to finance the construction or renovation of structures as well as to finance the acquisition and development of raw land for various purposes. The increased level of risk for these loans is generally confined to the construction period. If problems arise, the project may not be completed and as such, may not provide sufficient cash flow on its own to service the debt or have sufficient value in a liquidation to cover the outstanding principal.

The underlying purpose and collateral of the loans are important indicators of risk for this loan portfolio. Additional risks exist and are dependent on several factors such as the condition of the local and regional economies, whether or not the project is owner-occupied, the type of project, and the experience and resources of the developer.

On a monthly basis, management monitors various credit quality indicators for the loan portfolio, including delinquency, non-performing status, changes in risk ratings, changes in the underlying performance of the borrowers and other relevant factors. On a daily basis, the Company monitors the collateral of loans secured by cash, marketable securities and/or cash value life insurance within the private banking portfolio which further reduces the risk profile of that portfolio. Refer to Note 1, Summary of Significant Accounting Policies, for the Company's policy for determining past due status of loans.

Loan risk ratings are assigned based upon the creditworthiness of the borrower and the quality of the collateral for loans secured by marketable securities. Loan risk ratings are reviewed on an ongoing basis according to internal policies. Loans within the pass rating are believed to have a lower risk of loss than loans that are risk rated as special mention, substandard or doubtful, which are believed to have an increasing risk of loss. Our internal risk ratings are consistent with regulatory guidance. Management also monitors the loan portfolio through a formal periodic review process. All non-pass rated loans are reviewed monthly and higher risk-rated loans within the pass category are reviewed three times a year.

The Company's risk ratings are consistent with regulatory guidance and are as follows:

Pass – The loan is currently performing in accordance with its contractual terms.

Special Mention – A special mention loan has potential weaknesses that warrant management's close attention. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects or in our credit position at some future date. Economic and market conditions beyond the customer's control may in the future necessitate this classification.

Substandard – A substandard loan is not adequately protected by the net worth and/or paying capacity of the obligor or by the collateral pledged, if any. Substandard loans have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt. These loans are characterized by the distinct possibility that the Company will sustain some loss if the deficiencies are not corrected.

Doubtful – A doubtful loan has all the weaknesses inherent in a loan categorized as substandard 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 tables present the recorded investment in loans by credit quality indicator:

	December 31, 2019								
(Dollars in thousands)		Private Banking	Commercial and Industrial	Commercial Real Estate		Total			
Pass	\$	3,691,866 \$	1,069,932	\$ 1,780,768	\$	6,542,566			
Special mention		_	15,777	14,284		30,061			
Substandard		3,536		1,396		4,932			
Loans and leases held-for-investment	\$	3,695,402 \$	1,085,709	\$ 1,796,448	\$	6,577,559			

	December 31, 2018									
(Dollars in thousands)	Private Banking	Commercial and Industrial	Commercial Real Estate	Total						
Pass	\$ 2,864,774	\$ 767,540	\$ 1,475,793 \$	5,108,107						
Special mention	2,532	12,636	2,217	17,385						
Substandard	2,237	5,144	_	7,381						
Loans and leases held-for-investment	\$ 2,869,543	\$ 785,320	\$ 1,478,010 \$	5,132,873						

Changes in the allowance for loan and lease losses were as follows for the years ended December 31, 2019, 2018 and 2017:

	Year Ended December 31, 2019								
(Dollars in thousands)		Private Banking	Commercial and Industrial	Commercial Real Estate	Total				
Balance, beginning of period	\$	1,942 \$	\$ 5,764	\$ 5,502 \$	13,208				
Provision (credit) for loan losses		143	(2,482)	1,371	(968)				
Charge-offs		(112)	_	_	(112)				
Recoveries		_	1,980	_	1,980				
Balance, end of period	\$	1,973 \$	\$ 5,262	\$ 6,873 \$	14,108				

	Year Ended December 31, 2018									
(Dollars in thousands)		Private Banking		Commercial and Industrial	Commercia Real Estate		Total			
Balance, beginning of period	\$	1,577	\$	8,043	\$ 4,7	97 \$	14,417			
Provision (credit) for loan losses		365		(1,275)	7	05	(205)			
Charge-offs		_		(2,068)		_	(2,068)			
Recoveries		_		1,064		_	1,064			
Balance, end of period	\$	1,942	\$	5,764	\$ 5,5	02 \$	13,208			

	Year Ended December 31, 2017									
(Dollars in thousands)		Private Banking	(Commercial and Industrial	Commercial Real Estate	Total				
Balance, beginning of period	\$	1,424	\$	12,326	5,012 \$	18,762				
Provision (credit) for loan losses		153		(556)	(220)	(623)				
Charge-offs		_		(4,302)	_	(4,302)				
Recoveries		_		575	5	580				
Balance, end of period	\$	1,577	\$	8,043	4,797 \$	14,417				

The following tables present the age analysis of past due loans segregated by class of loan:

	December 31, 2019									
(Dollars in thousands)	-59 Days ast Due		60-89 Days Past Due	90 Days or More Past Due		Total Past Due	Current	Total		
Private banking	\$ 261	\$	_	\$ 184	\$	445 \$	3,694,957 \$	3,695,402		
Commercial and industrial	_		_	_		_	1,085,709	1,085,709		
Commercial real estate	_		_			_	1,796,448	1,796,448		
Loans and leases held-for-investment	\$ 261	\$	_	\$ 184	\$	445 \$	6,577,114 \$	6,577,559		

	 December 31, 2018									
(Dollars in thousands)	0-59 Days Past Due		60-89 Days Past Due		00 Days or ore Past Due	Total Past Due		Current	Total	
Private banking	\$ 1,040	\$	173	\$	2,000 \$	3,213	\$	2,866,330 \$	2,869,543	
Commercial and industrial	_		_		_	_		785,320	785,320	
Commercial real estate	_		_		_	_		1,478,010	1,478,010	
Loans and leases held-for-investment	\$ 1,040	\$	173	\$	2,000 \$	3,213	\$	5,129,660 \$	5,132,873	

Non-Performing and Impaired Loans

Management monitors the delinquency status of the Company's loan portfolio on a monthly basis. Loans are considered non-performing when interest and principal are 90 days or more past due or management has determined that it is probable the borrower is unable to meet payments as they become due. The risk of loss is generally highest for non-performing loans.

Management determines loans to be impaired when, based upon current information and events, it is probable that the loan will not be repaid according to the original contractual terms of the loan agreement, including both principal and interest, or if a loan is designated as a TDR. Refer to Note 1, Summary of Significant Accounting Policies, for the Company's policy on evaluating loans for impairment and interest income.

The following tables present the Company's investment in loans considered to be impaired and related information on those impaired loans as of and for the years ended December 31, 2019, 2018 and 2017:

	As of and for the Year Ended December 31, 2019								
(Dollars in thousands)		corded estment	Unpaid Principal Balance	Related Allowance	Average Recorded Investment	Interest Income Recognized			
With a related allowance recorded:									
Private banking	\$	171 \$	193 \$	5 171 \$	171	\$ —			
Commercial and industrial		_	_	_	_	_			
Commercial real estate		_	_	_	_	_			
Total with a related allowance recorded		171	193	171	171				
Without a related allowance recorded:									
Private banking		13	13	_	13	_			
Commercial and industrial		_	_	_	_	_			
Commercial real estate		_	_	_	_	_			
Total without a related allowance recorded		13	13	_	13				
Total:									
Private banking		184	206	171	184	_			
Commercial and industrial		_	_	_	_	_			
Commercial real estate		_	_	_	_	_			
Total	\$	184 \$	206 \$	i 171 \$	184	\$ <u> </u>			

	As of and for the Year Ended December 31, 2018										
(Dollars in thousands)		ecorded estment	Unpaid Principal Balance	Related Allowance	Average Recorded Investment	Interest Income Recognized					
With a related allowance recorded:											
Private banking	\$	2,237 \$	2,421	\$ 437	\$ 2,293	\$ —					
Commercial and industrial		_	_	_	_	_					
Commercial real estate		_	_	_	_	_					
Total with a related allowance recorded		2,237	2,421	437	2,293						
Without a related allowance recorded:											
Private banking		_	_	_	_	_					
Commercial and industrial		_	_	_	_	_					
Commercial real estate		_	_	_	_	_					
Total without a related allowance recorded			_		_						
Total:											
Private banking		2,237	2,421	437	2,293	_					
Commercial and industrial		_	_	_	_	_					
Commercial real estate		_	_	_	_	_					
Total	\$	2,237 \$	2,421	\$ 437	\$ 2,293	\$ —					

As of and for the Year Ended December 31, 2017

(Dollars in thousands)	lecorded vestment	Unpaid Principal Balance	1	Related Allowance	Average Recorded Investment	Interest Income Recognized	
With a related allowance recorded:							
Private banking	\$ 368 \$	541	\$	368 \$	438	\$ —	
Commercial and industrial	2,815	3,135		2,139	3,067	_	
Commercial real estate	_	_		_	_	_	
Total with a related allowance recorded	3,183	3,676		2,507	3,505		
Without a related allowance recorded:							
Private banking	_	_		_	_	_	
Commercial and industrial	3,371	5,330		_	4,224	146	
Commercial real estate	_	_		_	_		
Total without a related allowance recorded	3,371	5,330		_	4,224	146	
Total:							
Private banking	368	541		368	438	_	
Commercial and industrial	6,186	8,465		2,139	7,291	146	
Commercial real estate	_	_		_	_	_	
Total	\$ 6,554 \$	9,006	\$	2,507 \$	7,729	\$ 146	

Impaired loans as of December 31, 2019 and 2018, were \$184,000 and \$2.2 million, respectively. There was no interest income recognized on impaired loans that were also on non-accrual status for the years ended December 31, 2019, 2018 and 2017. As of December 31, 2019 and 2018, there were no loans 90 days or more past due and still accruing interest income.

Impaired loans were evaluated using a discounted cash flow method or based on the fair value of the collateral less estimated selling costs. Based on those evaluations there were specific reserves totaling \$171,000 and \$437,000 as of December 31, 2019 and 2018, respectively.

The following tables present the allowance for loan and lease losses and recorded investment in loans by class:

	December 31, 2019									
(Dollars in thousands)		Private Banking		Commercial and Industrial	Commercial Real Estate		Total			
Allowance for loan and lease losses:										
Individually evaluated for impairment	\$	171	\$	— \$	_	\$	171			
Collectively evaluated for impairment		1,802		5,262	6,873		13,937			
Total allowance for loan and lease losses	\$	1,973	\$	5,262 \$	6,873	\$	14,108			
Loans and leases held-for-investment:										
Individually evaluated for impairment	\$	184	\$	— \$	_	\$	184			
Collectively evaluated for impairment		3,695,218		1,085,709	1,796,448		6,577,375			
Loans and leases held-for-investment	\$	3,695,402	\$	1,085,709 \$	1,796,448	\$	6,577,559			

	December 31, 2018									
(Dollars in thousands)	Private Banking		Commercial and Industrial	Commercial Real Estate		Total				
Allowance for loan and lease losses:										
Individually evaluated for impairment	\$ 437	\$	— \$	_ 5	\$	437				
Collectively evaluated for impairment	1,505		5,764	5,502		12,771				
Total allowance for loan and lease losses	\$ 1,942	\$	5,764 \$	5,502 5	\$	13,208				
Loans and leases held-for-investment:										
Individually evaluated for impairment	\$ 2,237	\$	— \$	_ 5	\$	2,237				
Collectively evaluated for impairment	2,867,306		785,320	1,478,010		5,130,636				
Loans and leases held-for-investment	\$ 2,869,543	\$	785,320 \$	1,478,010	\$	5,132,873				

Troubled Debt Restructuring

The aggregate recorded investment of impaired loans with terms modified through a troubled debt restructuring was \$171,000 and \$237,000 as of December 31, 2019 and 2018, respectively, which were also on non-accrual. There were no unused commitments on loans designated as troubled debt restructurings as of December 31, 2019 and 2018.

The modifications made to restructured loans typically consist of an extension of the payment terms or the deferral of principal payments. There were no loans modified as TDRs within 12 months of the corresponding balance sheet date with payment defaults during the years ended December 31, 2019, 2018 or 2017.

There were no loans newly designated as TDRs during the year ended December 31, 2019 and 2018.

The financial effects of our modifications made to loans newly designated as TDRs during the year ended December 31, 2017, were as follows:

	Year Ended December 31, 2017								
(Dollars in thousands)	Count	Inve the	ecorded estment at e time of dification		Current Recorded Investment	Loa tl	lowance for an Losses at he time of lodification		Current allowance for Loan Losses
Private banking:									
Extended term, deferred principal and reduced interest rate	2	\$	433	\$	368	\$	433	\$	368
Total	2	\$	433	\$	368	\$	433	\$	368

Other Real Estate Owned

As of December 31, 2019 and 2018, the balance of OREO was \$4.3 million and \$3.4 million, respectively. During the year ended, December 31, 2019, collateral related to an impaired loan was transferred to OREO at a fair value of \$1.5 million based on the appraised value, less estimated selling costs. In addition, a property was sold from OREO totaling \$169,000 with a net loss of \$97,000 during the year ended December 31, 2019. There were no residential mortgage loans that were in the process of foreclosure as of December 31, 2019.

[7] GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill represents the excess of the purchase price over the fair value of net assets acquired. Goodwill of \$2.9 million and other intangible assets of \$1.5 million were recorded during the year ended December 31, 2018, related to the Columbia acquisition.

The following table presents the change in goodwill for the years ended December 31, 2019 and 2018:

(Dollars in thousands)	2019	2018
Balance, beginning of period	\$ 41,660 \$	38,724
Additions	_	2,936
Balance, end of period	\$ 41,660 \$	41,660

The Company determined the amount of identifiable intangible assets based upon an independent valuation. The following table presents the change in intangible assets for the years ended December 31, 2019 and 2018:

(Dollars in thousands)	2019	2018
Balance, beginning of period	\$ 26,203 \$	26,634
Additions	_	1,537
Amortization	(2,009)	(1,968)
Balance, end of period	\$ 24,194 \$	26,203

The following table presents the gross amount of intangible assets and total accumulated amortization by class:

December 31, 2019					December 31, 2018					
(Dollars in thousands)	Gro	ss Amount	Accumulated Amortization	Net Carrying Amount	Gross Amount	Accumulated Amortization	Net Carrying Amount			
Trade name	\$	4,040	\$ (765)	\$ 3,275	\$ 4,040	\$ (592)	\$ 3,448			
Client Relationships:										
Sub-advisory client list		11,645	(4,968)	6,677	11,645	(4,098)	7,547			
Separate managed accounts client list		3,175	(1,092)	2,083	3,175	(779)	2,396			
Other institutional client list		5,950	(3,155)	2,795	5,950	(2,614)	3,336			
Non-compete agreements		522	(458)	64	522	(346)	176			
Total finite-lived intangibles		25,332	(10,438)	14,894	25,332	(8,429)	16,903			
Client Relationships:										
Mutual fund client relationships (indefinite-lived)		9,300	_	9,300	9,300	_	9,300			
Total intangibles assets	\$	34,632	\$ (10,438)	\$ 24,194	\$ 34,632	\$ (8,429)	\$ 26,203			

Intangible amortization expense on finite-lived intangible assets totaled \$2.0 million, \$2.0 million and \$1.9 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The following is a summary of the expected intangible amortization expense for finite-lived intangibles assets, assuming no new additions, for each of the five years following December 31, 2019:

(Dollars in thousands)		Amount	
2020	\$	1,943	
2021		1,911	
2022		1,900	
2023		1,897	
2024		1,805	
Thereafter		5,438	
Total finite-lived intangibles	\$	14,894	

[8] OFFICE PROPERTIES AND EQUIPMENT

The following is a summary of office properties and equipment by major classification as of December 31, 2019 and 2018:

	December :	1,	
(Dollars in thousands)	 2019	2018	
Furniture, fixtures and equipment	\$ 15,752 \$	11,594	
Leasehold improvements	7,792	5,917	
Total, at cost	23,544	17,511	
Accumulated depreciation	(13,975)	(12,385)	
Net office properties and equipment	\$ 9,569 \$	5,126	

[9] OPERATING LEASES

The Company has noncancellable operating leases primarily for its six office spaces and other office equipment that expire between 2020 and 2036. These leases generally contain renewal options for periods ranging from one to five years. Because the Company is not reasonably certain that it will exercise these renewal options, the options are not considered in determining the lease terms and associated potential option payments are excluded from lease payments. The Company's leases generally do not include termination options for either party to the lease or restrictive financial or other covenants. Payments due under the lease contracts include fixed payments and, for many of the Company's leases, variable payments. Variable payments for office space leases include the Company's proportionate share of the building's property taxes, insurance and common area maintenance. For office equipment leases for which the Company has elected not to separate lease and nonlease components, maintenance services are provided by the lessor at a fixed cost and are included in the fixed lease payments for the single, combined lease component.

The Company rents office space in its six office locations which are accounted for as operating leases. The remaining lease terms have expirations from 2020 to 2036 and provide for one or more renewal options. These leases provide for annual rent escalations and payment of certain operating expenses applicable to the leased space. The Company records rent expense on a straight-line basis over the term of the lease. Operating lease cost was \$2.8 million, \$2.2 million and \$2.2 million for the years ended December 31, 2019, 2018 and 2017, respectively. The net deferred rent liability was \$1.1 million and \$661,000 as of December 31, 2019 and 2018, respectively. As of December 31, 2019, the weighted average remaining lease term was 14 years and the weighted average discount rate as 4.25%.

Maturities of lease liabilities under noncancellable leases as of December 31, 2019, are as follows:

(Dollars in thousands)	Amount	
December 31,	_	
2020	\$ 2,556	
2021	2,726	
2022	2,455	
2023	2,163	
2024	1,930	
Thereafter	20,281	
Total undiscounted lease payments	\$ 32,111	
Imputed interest	8,467	
Operating lease liability	\$ 23,644	

[10] DEPOSITS

As of December 31, 2019 and 2018, deposits were comprised of the following:

	Interest Rate Range	Weighted Average Interest Rate			Balance			
(Dollars in thousands)	December 31, 2019	December 31, 2019	December 31, 2018	December 31, 2019		December 31, 2018		
Demand and savings accounts:								
Noninterest-bearing checking accounts	_	_	_	\$	356,102	\$	258,268	
Interest-bearing checking accounts	0.05 to 3.15%	1.57%	2.29%		1,398,264		778,131	
Money market deposit accounts	0.10 to 3.25%	1.84%	2.45%		3,426,745		2,781,870	
Total demand and savings accounts					5,181,111		3,818,269	
Certificates of deposit	1.60 to 3.25%	2.24%	2.39%		1,453,502		1,232,192	
Total deposits				\$	6,634,613	\$	5,050,461	
Weighted average rate on interest-bearing accounts		1.87%	2.41%					

As of December 31, 2019 and 2018, the Bank had total brokered deposits of \$766.6 million and \$641.4 million, respectively. Reciprocal deposits through Certificate of Deposit Account Registry Service® ("CDARS®") and Insured Cash Sweep® ("ICS®") accounts totaled \$857.9 million and \$565.3 million as of December 31, 2019 and 2018, respectively and were considered non-brokered.

As of December 31, 2019 and 2018, certificates of deposit with balances of \$100,000 or more, excluding brokered and reciprocal deposits, totaled \$551.5 million and \$569.8 million, respectively. As of December 31, 2019 and 2018, certificates of deposit with balances of \$250,000 or more, excluding brokered and reciprocal deposits, totaled \$233.5 million and \$230.0 million.

The contractual maturity of certificates of deposit was as follows:

(Dollars in thousands)	D	ecember 31, 2019	D	ecember 31, 2018
12 months or less	\$	1,244,838	\$	992,468
12 months to 24 months		168,437		181,456
24 months to 36 months		40,227		58,268
Total	\$	1,453,502	\$	1,232,192

Interest expense on deposits for the years ended December 31, 2019, 2018 and 2017, was as follows:

	Years Ended December 31,							
(Dollars in thousands)	2019	2018	2017					
Interest-bearing checking accounts	\$ 21,480 \$	11,440 \$	3,706					
Money market deposit accounts	69,336	45,106	22,350					
Certificates of deposit	34,776	21,947	11,429					
Total interest expense on deposits	\$ 125,592 \$	78,493 \$	37,485					

[11] BORROWINGS

As of December 31, 2019 and 2018, borrowings were comprised of the following:

	D	December 31, 2019				December 31, 2018			
(Dollars in thousands)	Interest Rate		Ending Balance	Maturity Date	Interest Rate		Ending Balance	Maturity Date	
FHLB borrowings:									
FHLB line of credit	1.81%	\$	55,000	5/1/2020	2.62%	\$	250,000	5/1/2019	
Issued 12/12/2019	1.85%		100,000	1/13/2020			_		
Issued 12/02/2019	1.91%		150,000	3/2/2020			_		
Issued 10/08/2019	2.00%		50,000	1/8/2020			_		
Issued 12/31/2018			_		2.65%		65,000	1/2/2019	
Issued 10/10/2018			_		2.54%		50,000	1/8/2019	
Line of credit borrowings			_		5.47%		4,250	9/28/2019	
Subordinated notes payable (net of debt issuance costs of \$0 and \$84, respectively)			_		5.75%		34,916	7/1/2019	
Total borrowings, net		\$	355,000			\$	404,166	·	

The Bank's FHLB borrowing capacity is based on the collateral value of certain securities held in safekeeping at the FHLB and loans pledged to the FHLB. The Bank submits a quarterly Qualifying Collateral Report ("QCR") to the FHLB to update the value of the loans pledged. As of December 31, 2019, the Bank's borrowing capacity is based on the information provided in the September 30, 2019, QCR filing. As of December 31, 2019, the Bank had securities held in safekeeping at the FHLB with a fair value of \$2.8 million, combined with pledged loans of \$1.18 billion, for a gross borrowing capacity of \$844.1 million, of which \$355.0 million was outstanding in advances. As of December 31, 2018, there was \$365.0 million outstanding in advances from the FHLB. When the Bank borrows from the FHLB, interest is charged at the FHLB's posted rates at the time of the borrowing.

The Bank maintains an unsecured line of credit of \$10.0 million with M&T Bank and an unsecured line of credit of \$20.0 million with Texas Capital Bank. As of December 31, 2019 and 2018, there were no outstanding borrowings under these lines of credit, and they are available to the Bank at the lenders' discretion. In addition, the Bank maintains an \$8.0 million unsecured line of credit with PNC Bank for private label credit card facilities for certain existing commercial clients of the Bank, of which \$2.9 million in notional value of credit cards have been issued. The clients of the Bank are responsible for repaying any balances due on these credit cards directly to PNC, however if the customer fails to repay PNC, the Bank could be required to satisfy the obligation to PNC and initiate collection from our customer as part of the existing credit facility of that customer.

As of December 31, 2019, the company maintained an unsecured line of credit of \$50.0 million with Texas Capital Bank. As of December 31, 2019 and 2018, there was \$0 and \$4.3 million outstanding under this line of credit, respectively.

Interest expense on borrowings for the years ended December 31, 2019, 2018 and 2017, was as follows:

	Years Ended December 31,							
(Dollars in thousands)	 2019	2018	2017					
FHLB borrowings	\$ 8,639 \$	5,555 \$	3,152					
Line of credit borrowings	68	119	90					
Subordinated notes payable	1,091	2,215	2,215					
Total interest expense on borrowings	\$ 9,798 \$	7,889 \$	5,457					

[12] INCOME TAXES

The income tax provision reconciled to taxes computed at the statutory federal rate for the years ended December 31, 2019, 2018 and 2017, was as follows:

	 Years Ended December 31,					
(Dollars in thousands)	2019	2018	2017			
Tax provision at statutory rate	\$ 14,418 \$	12,677 \$	16,615			
Nondeductible expenses	919	595	294			
Bank owned life insurance	(364)	(360)	(622)			
Stock option exercises and cancellations	(668)	(844)	(674)			
State tax expense, net of federal benefit	2,481	1,927	1,024			
Impact of change in tax rates	_	(332)	(2,351)			
Adjustments to prior year tax	(121)	(133)	215			
Tax exempt income, net of disallowed interest	(71)	(79)	(151)			
Renewable energy tax credits	(1,912)	(6,568)	(4,629)			
Low income housing tax credits	(364)	(95)	(260)			
Historic tax credits	(6,036)	(860)	_			
Other	183	17	21			
Income tax provision	\$ 8,465 \$	5,945 \$	9,482			

In December 2017, the Tax Cuts and Jobs Act was signed into law, which lowered the maximum corporate tax rate from 35% to 21%. Due to this enactment, the income tax provision for the year ended December 31, 2017, was impacted by a \$2.4 million one-time benefit on the re-measurement of the Company's deferred tax liability. The adjustment was largely related to the acceleration of an incentive compensation deduction for tax purposes and favorable depreciation treatment associated with renewable energy credits.

The tax credits in the table above relate to transactions for the financing of renewable solar energy facilities, low-income housing tax credits and historic tax credits. These transactions provided federal tax credits and state tax credits (where applicable) during the 2019, 2018 and 2017 tax years. The financing of the solar energy facilities is accounted for as direct financing leases included within the C&I loan and lease portfolio. The amortization of the Company's low income housing tax credit investments has been reflected as income tax expense. The net amount of low income housing tax credits, amortization and tax benefits recorded to income tax expenses during the years ended December 31, 2019, 2018 and 2017, was \$364,000, \$95,000 and \$260,000, respectively. The carrying amount of the investment in low income housing tax credits was \$39.2 million, of which \$21.7 million was unfunded as of December 31, 2019. The carrying amount of the investment in historic tax credits was \$10.6 million, of which \$6.6 million was unfunded as of December 31, 2019.

The income tax provision for the years ended December 31, 2019, 2018 and 2017, consisted of:

	Years Ended December 31,							
(Dollars in thousands)		2019	2018	2017				
Current income tax provision (benefit) - federal	\$	4,058 \$	2,712 \$	(2,324)				
Current income tax provision - state		1,767	2,999	696				
Deferred tax provision - federal		1,312	904	10,050				
Deferred tax provision (benefit) - state		1,328	(670)	1,060				
Income tax provision	\$	8,465 \$	5,945 \$	9,482				

The tax effects of temporary differences that gave rise to significant portions of the deferred tax assets and deferred tax liabilities as of December 31, 2019 and 2018, were as follows:

	 December 31,				
(Dollars in thousands)	 2019	2018			
Deferred tax assets:					
Net operating loss - state	\$ 233 \$	143			
Start-up expenses	28	47			
Stock compensation	3,146	3,376			
Compensation related accruals	4,007	3,976			
Leasehold improvement	155	205			
Allowance for loan and lease losses	3,421	3,157			
Long-term lease	_	158			
Reserve for unfunded commitments	156	130			
Supplemental executive retirement plan	883	871			
Transaction costs	126	138			
Earn out liability non-purchase accounting	246	298			
Unrealized loss on investments and derivatives	_	733			
State bonus depreciation	2,295	1,326			
General business credits	10,677	4,424			
Other	399	325			
Gross deferred tax assets	25,772	19,307			
Deferred tax liabilities:					
Office properties and equipment	(21,857)	(13,906)			
Prepaid expenses	(874)	(370)			
Deferred loan costs	(5,110)	(4,477)			
Intangibles	(164)	(93)			
Goodwill	(4,209)	(3,813)			
State capital shares tax liability	(127)	(161)			
Capitalized Investment Management	_	_			
Unrealized gain on investments and derivatives	(362)	_			
Gross deferred tax liability	(32,703)	(22,820)			
Net deferred tax liability	\$ (6,931) \$	(3,513)			

Management believes that, as of December 31, 2019, it is more likely than not that the deferred tax assets will be fully realized upon the generation of future taxable income. The Company has certain pre-tax state net operating loss carryforwards of \$3.3 million, which will expire in years 2034-2039. The Company has general business credits of \$10.7 million, which will expire in 2038.

The change in the net deferred tax asset or liability for the years ended December 31, 2019 and 2018, was detailed as follows:

		December 3	31,
(Dollars in thousands)		2019	2018
Deferred tax provision	\$	(2,640) \$	(234)
Deferred tax impact from other comprehensive income		(778)	873
Change in net deferred tax asset or liability	\$	(3,418) \$	639

The Company considers uncertain tax positions that it has taken or expects to take on a tax return. The Company recognizes interest accrued and penalties (if any) related to unrecognized tax benefits in income tax expense. Tax years 2016 through 2019 remain subject to federal and state tax examinations as of December 31, 2019.

A reconciliation of the beginning and ending gross amounts of unrecognized tax benefits for the years ended December 31, 2019, 2018 and 2017, was as follows:

		De		
(Dollars in thousands)		2019	2018	2017
Beginning of year balance	\$	704 \$	744 \$	599
Increases in prior period tax positions		111	_	18
Decreases in prior period tax positions		_	(250)	_
Increases in current period tax positions		148	210	127
Settlements		(435)	_	_
End of year balance	\$	528 \$	704 \$	744

The total estimated unrecognized tax benefit that, if recognized, would affect the Company's effective tax rate was approximately \$478,000, \$605,000 and \$620,000 as of December 31, 2019, 2018 and 2017, respectively. The impact of interest and penalties was immaterial to the Company's financial statements for the years ended December 31, 2019, 2018 and 2017. The Company does not expect changes in its unrecognized tax benefits in the next twelve months to have a material impact on its financial statements.

[13] STOCK TRANSACTIONS

In May 2019, the Company completed the issuance and sale of a registered, underwritten public offering of 3.2 million depositary shares, each representing a 1/40th interest in a share of its 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock, no par value (the "Series B Preferred Stock"), with a liquidation preference of \$1,000 per share (equivalent to \$25 per depository share). The Company received net proceeds of \$77.6 million from the sale of 80,500 shares of its Series B Preferred Stock (equivalent to 3.2 million depositary shares), after deducting underwriting discounts, commissions and direct offering expenses. The preferred stock provides Tier 1 capital for the holding company under federal regulatory capital rules.

When, as, and if declared by the board of directors (the "Board") of the Company, dividends will be payable on the Series B Preferred Stock from the date of issuance to, but excluding July 1, 2026, at a rate of 6.375% per annum, payable quarterly, in arrears, and from and including July 1, 2026, dividends will accrue and be payable at a floating rate equal to three-month LIBOR plus a spread of 408.8 basis points per annum (subject to potential adjustment as provided in the definition of three-month LIBOR), payable quarterly, in arrears. The Company may redeem the Series B Preferred Stock at its option, subject to regulatory approval, on or after July 1, 2024, as described in the prospectus supplement relating to the offering filed with the SEC on May 23, 2019.

In March 2018, the Company completed the issuance and sale of a registered, underwritten public offering of 1.6 million depositary shares, each representing a 1/40th interest in a share of its 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock, no par value (the "Series A Preferred Stock"), with a liquidation preference of \$1,000 per share (equivalent to \$25 per depository share). The Company received net proceeds of \$38.5 million from the sale of 40,250 shares of its Series A Preferred Stock (equivalent to 1.6 million depositary shares), after deducting underwriting discounts, commissions and direct offering expenses. The preferred stock provides Tier 1 capital for the holding company under federal regulatory capital rules.

When, as, and if declared by the Board, dividends will be payable on the Series A Preferred Stock from the date of issuance to, but excluding April 1, 2023, at a rate of 6.75% per annum (subject to potential adjustment), payable quarterly, in arrears, and from and including April 1, 2023, dividends will accrue and be payable at a floating rate equal to three-month LIBOR plus a spread of 398.5 basis points per annum, payable quarterly, in arrears. The Company may redeem the Series A Preferred Stock at its option, subject to regulatory approval, on or after April 1, 2023, as described in the prospectus supplement relating to the offering filed with the SEC on March 19, 2018.

During the year ended December 31, 2019, the Company paid dividends of \$2.7 million on its Series A Preferred Stock and \$3.1 million on its Series B Preferred Stock. During the year ended December 31, 2018, the Company paid dividends of \$2.1 million on its Series A Preferred Stock.

Under authorization of the Board, the Company was permitted to repurchase shares of its common stock up to prescribed amounts of which \$10.4 million remained available as December 31, 2019. The Board also authorized the Company to utilize some of the share repurchase program authorizations to cancel certain options to purchase shares of its common stock granted by the Company.

During the year ended December 31, 2019, the Company repurchased a total of 111,512 shares of common stock for approximately \$2.3 million, at an average cost of \$20.73 per share. During the year ended December 31, 2018, the Company repurchased a total of 263,540 shares of common stock for approximately \$6.8 million, at an average cost of \$25.83 per share. During the year ended December 31, 2017, the Company repurchased a total of 376,641 shares of common stock for approximately \$8.7 million, at an average cost of \$23.03 per share. The repurchased shares are held as treasury stock.

The table below shows the changes in the Company's preferred and common shares outstanding during the periods indicated:

	Number of Preferred Shares Outstanding	Number of Common Shares Outstanding
Balance, December 31, 2016		28,415,654
Issuance of restricted common stock	_	396,175
Forfeitures of restricted common stock	_	(14,637)
Exercise of stock options	_	170,550
Purchase of treasury stock	_	(376,641)
Balance, December 31, 2017		28,591,101
Issuance of preferred stock	40,250	
Issuance of restricted common stock	_	423,113
Forfeitures of restricted common stock	_	(27,250)
Exercise of stock options	_	155,250
Purchase of treasury stock	_	(263,540)
Balance, December 31, 2018	40,250	28,878,674
Issuance of preferred stock	80,500	_
Issuance of restricted common stock	_	580,453
Forfeitures of restricted common stock	_	(78,209)
Exercise of stock options	_	86,580
Purchase of treasury stock	_	(111,512)
Balance, December 31, 2019	120,750	29,355,986

[14] REGULATORY CAPITAL

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

Quantitative measures established by regulation to ensure capital adequacy require the Company and the Bank to maintain minimum amounts and ratios (set forth in the tables below) of Common Equity Tier 1 ("CET 1"), Tier 1 and Total risk-based capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier 1 capital to average assets (as defined). As of December 31, 2019 and 2018, TriState Capital Holdings, Inc. and TriState Capital Bank exceeded all capital adequacy requirements to which they were subjected.

Financial depository institutions are categorized as well capitalized if they meet minimum capital ratios as set forth in the tables below. The Bank exceeded the capital ratios necessary to be well capitalized under the regulatory framework for prompt corrective action. There

have been no conditions or events since the filing of the most recent Call Report that management believes have changed the Bank's capital, as presented in the tables below.

The Basel III regulatory capital framework (the "Basel III"), which began phasing in on January 1, 2015, has replaced the regulatory capital rules for the Company and the Bank. The Basel III final rules required new minimum capital ratio standards, established a new CET 1 to total risk-weighted assets ratio, subjected banking organizations to certain limitations on capital distributions and discretionary bonus payments, and established a new standardized approach for risk weightings.

The final rules subject a banking organization to certain limitations on capital distributions and discretionary bonus payments to executive officers if the organization does not maintain a capital conservation buffer of risk-based capital ratios in an amount greater than 2.5% of its total risk-weighted assets. The implementation of the capital conservation buffer began on January 1, 2016, at 0.625%, and was phased in over a four-year period until it reached 2.5% on January 1, 2019. As of December 31, 2019 and 2018, the capital conservation buffer was 2.5% and 1.875%, respectively, in addition to the minimum capital adequacy levels shown in the tables below. Thus, both the Company and the Bank were above the levels required to avoid limitations on capital distributions and discretionary bonus payments.

The following tables set forth certain information concerning the Company's and the Bank's regulatory capital as of December 31, 2019 and 2018:

	December 31, 2019								
	Actual			For Capital Adequacy Purposes			To be Well Capitalized Under Prompt Corrective Action Provisions		
(Dollars in thousands)		Amount	Ratio		Amount	Ratio		Amount	Ratio
Total risk-based capital ratio									
Company	\$	572,221	12.05%	\$	379,911	8.00%		N/A	N/A
Bank	\$	547,532	11.57%	\$	378,623	8.00%	\$	473,279	10.00%
Tier 1 risk-based capital ratio									
Company	\$	558,068	11.75%	\$	284,933	6.00%		N/A	N/A
Bank	\$	532,779	11.26%	\$	283,967	6.00%	\$	378,623	8.00%
Common equity tier 1 risk-based capital ratio									
Company	\$	442,385	9.32%	\$	213,700	4.50%		N/A	N/A
Bank	\$	532,779	11.26%	\$	212,975	4.50%	\$	307,631	6.50%
Tier 1 leverage ratio									
Company	\$	558,068	7.54%	\$	296,038	4.00%		N/A	N/A
Bank	\$	532,779	7.22%	\$	295,277	4.00%	\$	369,097	5.00%

	December 31, 2018								
	Actual			For Capital Adequacy Purposes			To be Well Capitalized Under Prompt Corrective Action Provisions		
(Dollars in thousands)		Amount	Ratio		Amount	Ratio		Amount	Ratio
Total risk-based capital ratio									
Company	\$	426,066	10.86%	\$	313,789	8.00%		N/A	N/A
Bank	\$	437,849	11.25%	\$	311,497	8.00%	\$	389,371	10.00%
Tier 1 risk-based capital ratio									
Company	\$	414,808	10.58%	\$	235,342	6.00%		N/A	N/A
Bank	\$	424,418	10.90%	\$	233,622	6.00%	\$	311,497	8.00%
Common equity tier 1 risk-based capital ratio									
Company	\$	378,117	9.64%	\$	176,506	4.50%		N/A	N/A
Bank	\$	424,418	10.90%	\$	175,217	4.50%	\$	253,091	6.50%
Tier 1 leverage ratio									
Company	\$	414,808	7.28%	\$	227,851	4.00%		N/A	N/A
Bank	\$	424,418	7.49%	\$	226,762	4.00%	\$	283,453	5.00%

[15] EMPLOYEE BENEFIT PLANS

The Company participates in a qualified 401(k) defined contribution plan under which eligible employees may contribute a percentage of their salary, at their discretion. During the years ended December 31, 2019, 2018 and 2017, the Company automatically contributed three percent of each eligible employee's base salary to the individual's 401(k) plan, subject to IRS limitations. Full-time employees and certain part-time employees are eligible to participate upon the first month following their first day of employment or having attained the age of 21, whichever is later. The Company's contribution expense was \$1.0 million, \$952,000 and \$863,000 for the years ended December 31, 2019, 2018 and 2017, respectively.

On February 28, 2013, the Company entered into a supplemental executive retirement plan ("SERP") for its Chairman and Chief Executive Officer. The benefits were earned over a five-year period ended January 31, 2018, with the projected payments for this SERP of \$25,000 per month for 180 months commencing the latter of retirement or 60 months. For the years ended December 31, 2019, 2018 and 2017, the Company recorded expense related to SERP of \$8,000, \$127,000 and \$513,000, respectively, utilizing a discount rate of 3.66%, 3.70% and 3.59%, respectively. The recorded liability related to the SERP plan was \$3.7 million and \$3.6 million as of December 31, 2019 and 2018, respectively.

[16] EARNINGS PER COMMON SHARE

The computation of basic and diluted earnings per common share for the years ended December 31, 2019, 2018 and 2017, was as follows:

	Years Ended December 31,						
(Dollars in thousands, except per share data)		2019		2018		2017	
Net income available to common shareholders	\$	54,440	\$	52,304	\$	37,988	
Weighted average common shares outstanding:							
Basic		27,864,933		27,583,519		27,550,833	
Restricted stock - dilutive		633,802		780,357		649,956	
Stock options - dilutive		334,600		469,520		510,533	
Diluted		28,833,335		28,833,396		28,711,322	
Earnings per common share:							
Basic	\$	1.95	\$	1.90	\$	1.38	
Diluted	\$	1.89	\$	1.81	\$	1.32	
		Yea	rs En	ided December	r 31,		
		2019		2018		2017	
Anti-dilutive shares (1)		31,500		7,000		27,000	

⁽¹⁾ Includes stock options and/or restricted stock not considered for the calculation of diluted EPS as their inclusion would have been anti-dilutive.

[17] STOCK-BASED COMPENSATION PROGRAMS

The Company's 2006 Stock Option Plan (the "2006 Plan") provided for the granting of incentive and non-qualifying stock options to the Company's key employees, key contractors and outside directors at the discretion of the Board. The Omnibus Incentive Plan (the "Omnibus Plan"), which was approved by the Company's shareholders on May 20, 2014, provides for the granting of incentive and non-qualifying stock options, stock appreciation rights, restricted shares, restricted stock units, dividend equivalent rights and other equity-based or equity-related awards to the Company's key employees, key contractors and outside directors at the discretion of the Board. The Omnibus Plan, upon its approval, replaced the 2006 Plan. The total number of shares of common stock that may be granted under the Omnibus Plan is the number of authorized shares of common stock of the Company that remained available under the 2006 Plan as of the date of shareholder approval, plus any shares of common stock issued pursuant to the 2006 Plan that were forfeited, canceled, expired or otherwise terminated. The shares reserved for grants under the 2006 Plan are no longer available for grants under that plan but are instead reserved for grants under the Omnibus Plan.

The total shares of common stock which may be issued upon the grant or exercise of stock-based awards, as authorized by shareholders of the Company, was 4,000,000 as of December 31, 2019, under both the 2006 Plan and the Omnibus Plan (combined the "Plans"). As of December 31, 2019, the Company has issued non-qualifying stock options and restricted shares. The aggregate awards outstanding were 2,033,689 under both of the Plans. As of December 31, 2019, 1,373,507 stock options and restricted shares had been exercised or vested, respectively, leaving 592,804 additional awards available for the Company to grant under the Omnibus Plan.

The Company's stock option grants contain terms that provide for a graded vesting schedule whereby portions of the options vest in increments over the requisite service period. Options and restricted shares issued under the Plans typically vest in 2.5 to 5 years. The Company recognizes compensation expense for awards with graded vesting schedules on a straight-line basis over the requisite service period for the entire grant. The Company's compensation expense for all awards was \$8.8 million, \$8.2 million and \$5.9 million for the years ended December 31, 2019, 2018 and 2017, respectively.

In 2018, the Board approved stock option cancellation programs to allow for certain outstanding and vested stock option awards to be canceled by the option holder at a price based on the closing day's stock price less the option exercise price. During the year ended December 31, 2018, there were 65,446 options canceled for \$945,000, which was recorded as a reduction to additional paid-in capital.

STOCK OPTIONS

The fair value of each option award was estimated on the date of the grant using the Black-Scholes option pricing model. Expected term was calculated utilizing the simplified method because the Company had limited historical exercise behavior. Since the Company was newly publicly traded and there was not enough trading history, expected volatility was computed based on median historical volatility of similar entities with publicly traded shares. The risk-free rate for the expected term of the option was based on the U.S. Treasury yield curve in effect at the time of grant. The computation assumed that there would be no dividends paid to common shareholders during the contractual life of the options.

There were no stock options granted for the years ended December 31, 2019, 2018 and 2017.

Stock option activity during the periods indicated was as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)
Balance, December 31, 2016	1,133,393	\$ 10.53	5.76
Granted		_	
Exercised	(170,550)	9.75	
Forfeited	(16,500)	10.30	
Canceled	_	_	
Expired	_	_	
Balance, December 31, 2017	946,343	\$ 10.67	5.01
Granted	_	_	
Exercised	(155,250)	10.74	
Forfeited	(15,000)	11.74	
Canceled	(65,446)	10.30	
Expired	(16,500)	13.53	
Balance, December 31, 2018	694,147	\$ 10.60	4.26
Granted	<u> </u>	_	
Exercised	(86,580)	10.39	
Forfeited	(5,000)	10.31	
Canceled	_	_	
Expired	_	_	
Balance, December 31, 2019	602,567	\$ 10.64	3.47
Exercisable as of December 31, 2017	617,646	\$ 10.16	4.25
Exercisable as of December 31, 2018	429,450	\$ 9.97	3.49
Exercisable as of December 31, 2019	512,236	\$ 10.64	3.17

The weighted average grant date fair value of options exercised during the years ended December 31, 2019, 2018 and 2017 was \$5.13, \$4.94 and \$4.69, respectively.

A summary of the status of the Company's non-vested options as of and changes during the years ended December 31, 2019, 2018 and 2017, is presented below:

		Weighted Average Grant-Date	
Non-vested options:	Number of Options	Fair Value	
Balance, December 31, 2016	558,277 \$	4.95	
Granted	-	_	
Vested	(213,080)	4.97	
Forfeited	(16,500)	4.99	
Balance, December 31, 2017	328,697 \$	4.94	
Granted	_	_	
Vested	(49,000)	4.82	
Forfeited	(15,000)	5.01	
Balance, December 31, 2018	264,697 \$	4.96	
Granted		_	
Vested	(169,366)	4.94	
Forfeited	(5,000)	4.95	
Balance, December 31, 2019	90,331 \$	4.98	

As of December 31, 2019, there was \$31,000 of total unrecognized compensation cost related to non-vested options granted under the Plans, and the unrecognized compensation cost is expected to be recognized over a weighted average period of 0.9 years.

RESTRICTED SHARES

A summary of the status of the Company's non-vested restricted shares as of and changes during the years ended December 31, 2019, 2018 and 2017, is presented below:

Non-vested restricted shares:	Number of Shares	Weighted Average Grant-Date Fair Value
Balance, December 31, 2016	783,305 \$	12.05
Granted	396,175	22.07
Vested	(27,000)	10.66
Forfeited	(14,637)	13.87
Balance, December 31, 2017	1,137,843 \$	15.54
Granted	423,113	23.90
Vested	(180,694)	10.68
Forfeited	(27,250)	20.61
Balance, December 31, 2018	1,353,012 \$	18.70
Granted	580,453	21.85
Vested	(424,134)	13.20
Forfeited	(78,209)	19.13
Balance, December 31, 2019	1,431,122 \$	21.58

As of December 31, 2019, there was \$14.8 million of total unrecognized compensation cost related to non-vested restricted shares granted under the Omnibus Plan, and the unrecognized compensation cost is expected to be recognized over a weighted average period of 2.4 years.

[18] DERIVATIVES AND HEDGING ACTIVITY

RISK MANAGEMENT OBJECTIVE OF USING DERIVATIVES

The Company is exposed to certain risks arising from both its business operations and economic conditions. The Company principally manages its exposures to a wide variety of business and operational risks through management of its core business activities. The Company manages economic risks, including interest rate, liquidity and credit risk, primarily by managing the amount, sources, and duration of its

debt funding and through the use of derivative financial instruments. Specifically, the Company enters into derivative financial instruments to manage exposures that arise from business activities that result in the receipt or payment of future known and uncertain cash amounts, the value of which are determined by interest rates. The Company's derivative financial instruments are used to manage differences in the amount, timing and duration of the Company's known or expected cash payments related to certain of the Company's FHLB borrowings and to manage the volatility of the change in fair value related to certain of the Company's equity investments. The Company also has derivatives that are a result of a service the Company provides to certain qualifying customers while at the same time the Company enters into an offsetting derivative transaction in order to eliminate its interest rate risk exposure resulting from such transactions.

FAIR VALUES OF DERIVATIVE INSTRUMENTS ON THE STATEMENTS OF FINANCIAL CONDITION

The tables below present the fair value of the Company's derivative financial instruments as well as their classification on the consolidated statements of financial condition as of December 31, 2019 and 2018:

	Asset Dea as of Decemb	Liability Derivatives as of December 31, 2019				
(Dollars in thousands)	Balance Sheet Location			Balance Sheet Location	Fa	ir Value
Derivatives designated as hedging instruments:						
Interest rate products	Other assets	\$	_	Other liabilities	\$	2,184
Derivatives not designated as hedging instruments:						
Interest rate products	Other assets		55,241	Other liabilities		55,289
Total	Other assets	\$	55,241	Other liabilities	\$	57,473
	Asset De	rivativ	ves	Liability D	erivati	ves
	as of Decemb	oer 31	, 2018	as of December 31, 2018		
(Dollars in thousands)	Balance Sheet Location			Balance Sheet		ir Value
Derivatives designated as hedging instruments:						
Interest rate products	Other assets	\$	1,384	Other liabilities	\$	_
Derivatives not designated as hedging instruments:						
Interest rate products	Other assets		25,523	Other liabilities		25,518
Total	Other assets	\$	26,907	Other liabilities	\$	25,518

The following tables show the impact legally enforceable master netting agreements had on the Company's derivative financial instruments as of December 31, 2019 and 2018:

	Offsetting of Derivative Assets											
			Gross Amounts				Gross Amounts Not Offse Statement of Financial Po					
(Dollars in thousands)	of R	ss Amounts Recognized Assets	1	Statement of Financial Position	Statement of Financial Position		Financial Instruments		Cash Collateral Received			Net Amount
December 31, 2019	\$	55,241	\$	_	\$	55,241	\$	(850)	\$	_	\$	54,391
December 31, 2018	\$	26,907	\$	_	\$	26,907	\$	(9,587)	\$	_	\$	17,320

Offsetting of Derivative Liabilities

			_	ross Amounts Offset in the		let Amounts of Liabilities resented in the		Gross Amounts N Statement of Fir				
(Dollars in thousands)	of	oss Amounts Recognized Liabilities		Statement of Financial Position	Statement of Financial Position		Financial Instruments		Cash Collateral Posted		Net Amount	
December 31, 2019	\$	57,473	\$	_	\$	57,473	\$	(850)	\$	(55,753)	\$	870
December 31, 2018	\$	25,518	\$	_	\$	25,518	\$	(9,587)	\$	(3,941)	\$	11,990

CASH FLOW HEDGES OF INTEREST RATE RISK

The Company's objectives in using certain interest rate derivatives are to add stability to net interest income and to manage its exposure to interest rate movements. To accomplish this objective, the Company primarily uses interest rate swaps as part of its interest rate risk management strategy. The Company has entered into derivative contracts to hedge the variable cash flows associated with certain FHLB borrowings. These interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company effectively making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.

The effective portion of changes in the fair value of derivatives designated and that qualify as cash flow hedges is recorded in accumulated other comprehensive income (loss) and is subsequently reclassified into earnings in the period that the hedged forecasted transaction affects earnings. The ineffective portion of the change in fair value of the derivatives is recognized directly in earnings. The Company's cash flow hedge derivatives did not have any hedge ineffectiveness recognized in earnings during the years ended December 31, 2019 and 2018.

Characteristics of the Company's interest rate derivative transactions designated as cash flow hedges of interest rate risk as of December 31, 2019, were as follows:

(Dollars in thousands)	Notional Amount	Effective Rate (1)	Increase/ (Decrease) to Interest Expense in the Next Twelve Months	Maturity Date	Remaining Term (in Months)
Interest rate products:					
Issued 1/8/2018	\$ 50,000	2.21%	\$ 239	1/8/2021	12
Issued 5/30/2019	\$ 50,000	2.05%	\$ 158	6/1/2022	29
Issued 5/30/2019	\$ 50,000	2.03%	\$ 151	6/1/2023	41
Issued 5/30/2019	\$ 50,000	2.04%	\$ 157	6/1/2024	53
Total	\$ 200,000		\$ 705		

⁽¹⁾ The effective rate is adjusted for the difference between the three-month FHLB advance rate and three-month LIBOR.

The table below presents the effective portion of the Company's cash flow hedge instruments in the consolidated statements of income for the years ended December 31, 2019, 2018 and 2017:

			Ye	ars Ended December	r 31,	
(Dollars in thousands)			2019	2018	2017	
Derivatives designated as hedging instruments:	Location of Gain (Loss) Recognized in Income on Derivatives	Realized Gain (Loss) Recognized in Income on Derivatives				
Interest rate products	Interest expense	\$	1,259	\$ 1,380) \$	371

The table below presents the effective portion of the Company's cash flow hedge instruments in accumulated other comprehensive income for the years ended December 31, 2019, 2018 and 2017:

	Years Ended December 31,					
(Dollars in thousands)		2019	2018	2017		
Derivatives designated as hedging instruments:	Unre	Unrealized Gain (Loss) Recognized in Accumulated Oth Comprehensive Income on Derivatives				
Interest rate products	\$	(2,239) \$	1,027 \$	287		

NON-DESIGNATED HEDGES

The Company does not use derivatives for trading or speculative purposes. Derivatives not designated as hedges are not speculative and result from a service the Company provides to certain customers. The Company executes interest rate derivatives with its commercial banking customers to facilitate their respective risk management strategies. Those derivatives are simultaneously and economically hedged by offsetting derivatives that the Company executes with a third party, such that the Company eliminates its interest rate exposure resulting from such transactions. Changes in the fair value of derivatives not designated in hedging relationships are recorded directly in earnings. As of December 31, 2019, the Company had interest rate derivative transactions with an aggregate notional amount of \$2.86 billion related to this program.

In addition, the Company also has executed equity derivatives to economically hedge certain of its equity investments. Changes in the fair value of derivatives not designated in hedging relationships are recorded directly in earnings. As of December 31, 2019, the Company had no outstanding equity derivative transactions.

The table below presents the effect of the Company's non-designated hedge instruments in the consolidated statements of income for the years ended December 31, 2019, 2018 and 2017:

			Years I	Ended December 31,					
(Dollars in thousands)			2019	2018	2017				
Derivatives not designated as hedging instruments:				Realized Gain (Loss) Recognized in Income on Derivatives					
Interest rate products	Non-interest income	\$	(45) \$	14 \$	(1)				
Equity products	Non-interest income	\$	(176) \$	— \$	_				
Total		\$	(221) \$	14 \$	(1)				

CREDIT-RISK-RELATED CONTINGENT FEATURES

The Company has agreements with each of its derivative counterparties that contain a provision where, if the Company defaults on any of its indebtedness, including default where repayment of the indebtedness has not been accelerated by the lender, then the Company could also be declared in default on its derivative obligations.

The Company has agreements with certain of its derivative counterparties that contain a provision where, if either the Company or the counterparty fails to maintain its status as a well/adequately capitalized institution, then the Company or the counterparty could be required to terminate any outstanding derivative positions and settle its obligations under the agreement.

As of December 31, 2019, the termination value of derivatives for which the Company had master netting arrangements with the counterparty and in a net liability position was \$55.8 million, including accrued interest. As of December 31, 2019, the Company has minimum collateral posting thresholds with certain of its derivative counterparties and has posted collateral of \$59.3 million. If the Company had breached any of these provisions as of December 31, 2019, it could have been required to settle its obligations under the agreements at their termination value.

[19] DISCLOSURES ABOUT FAIR VALUE OF FINANCIAL INSTRUMENTS

Fair value estimates of financial instruments are based on the present value of expected future cash flows, quoted market prices of similar financial instruments, if available, and other valuation techniques. These valuations are significantly affected by discount rates, cash flow assumptions and risk assumptions used. Therefore, fair value estimates may not be substantiated by comparison to independent markets and are not intended to reflect the proceeds that may be realized in an immediate settlement of instruments. Accordingly, the aggregate fair value amounts presented below do not represent the underlying value of the Company.

FAIR VALUE MEASUREMENTS

In accordance with U.S. GAAP, the Company must account for certain financial assets and liabilities at fair value on a recurring and non-recurring basis. The Company utilizes a three-level fair value hierarchy of valuation techniques to estimate the fair value of its financial assets and liabilities based on whether the inputs to those valuation techniques are observable or unobservable. The fair value hierarchy gives the highest priority to quoted prices with readily available independent data in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable market inputs (Level 3). When various inputs for measurement fall within multiple levels of the fair value hierarchy, the lowest level input that has a significant impact on fair value measurement is used.

Financial assets and liabilities are categorized based upon the following characteristics or inputs to the valuation techniques:

- Level 1 Financial assets and liabilities for which inputs are observable and are obtained from reliable quoted prices for identical assets or liabilities in actively traded markets. This is the most reliable fair value measurement and includes, for example, active exchange-traded equity securities.
- Level 2 Financial assets and liabilities for which values are based on quoted prices in markets that are not active or for which values are based on similar assets or liabilities that are actively traded. Level 2 also includes pricing models in which the inputs are corroborated by market data, for example, matrix pricing.
- Level 3 Financial assets and liabilities for which values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Level 3 inputs include assumptions of a source independent of the reporting entity or the reporting entity's own assumptions that are supported by little or no market activity or observable inputs.

The Company is responsible for the valuation process and as part of this process may use data from outside sources in establishing fair value. The Company performs due diligence to understand the inputs used or how the data was calculated or derived and corroborates the reasonableness of external inputs in the valuation process.

RECURRING FAIR VALUE MEASUREMENTS

The following tables represent assets and liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2018:

		December 31, 2019					
(Dollars in thousands)	Le	vel 1	Level 2	Level 3	Total Assets / Liabilities at Fair Value		
Financial assets:							
Debt securities available-for-sale:							
Corporate bonds	\$	— \$	175,418 \$	_	- \$	175,418	
Trust preferred securities		_	18,260	_	_	18,260	
Agency collateralized mortgage obligations		_	27,193	_	_	27,193	
Agency mortgage-backed securities		_	18,509	_	_	18,509	
Agency debentures		_	9,402	_	_	9,402	
Interest rate swaps		_	55,241	_	_	55,241	
Total financial assets	\$	— \$	304,023 \$	_	- \$	304,023	
Financial liabilities:		,					
Interest rate swaps	\$	— \$	57,473 \$	_	- \$	57,473	
Total financial liabilities	\$	— \$	57,473 \$	_	- \$	57,473	

	December 31, 2018						
(Dollars in thousands)	Level 1	Level 2	Level 3	Total Assets / Liabilities at Fair Value			
Financial assets:				_			
Debt securities available-for-sale:							
Corporate bonds	\$ — \$	151,063 \$	— :	\$ 151,063			
Trust preferred securities	_	16,849	_	16,849			
Non-agency collateralized loan obligations	_	390	_	390			
Agency collateralized mortgage obligations	_	33,718	_	33,718			
Agency mortgage-backed securities	_	21,264	_	21,264			
Agency debentures	_	10,012	_	10,012			
Equity securities	12,661	_	_	12,661			
Interest rate swaps	_	26,907	_	26,907			
Total financial assets	\$ 12,661 \$	260,203 \$	_ :	\$ 272,864			
Financial liabilities:							
Interest rate swaps	\$ — \$	25,518 \$	_ :	\$ 25,518			
Acquisition earn out liability	_	_	2,920	2,920			
Total financial liabilities	\$ — \$	25,518 \$	2,920	\$ 28,438			

INVESTMENT SECURITIES

Generally, debt securities are valued using pricing for similar securities, recently executed transactions, and other pricing models utilizing observable inputs and therefore are classified as Level 2. Equity securities (including mutual funds) are classified as Level 1 because these securities are in actively traded markets.

INTEREST RATE SWAPS

The fair value of interest rate swaps is estimated using inputs that are observable or that can be corroborated by observable market data and therefore are classified as Level 2. These fair value estimations include primarily market observable inputs such as the forward LIBOR swap curve.

ACQUISITION EARN OUT LIABILITY

The fair value of the Columbia Partners, L.L.C. Investment Management ("Columbia") acquisition earn out liability was estimated based on management's estimate of the projected annualized run-rate revenue of Columbia at December 31, 2018, and therefore are classified as Level 3. The earn out liability was fully paid during the three months ended March 31, 2019, and there is no remaining earn out liability.

NON-RECURRING FAIR VALUE MEASUREMENTS

Certain financial assets and financial liabilities are measured at fair value on a non-recurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment.

The following tables represent the balances of assets measured at fair value on a non-recurring basis as of December 31, 2019 and 2018:

	December 31, 2019				
(Dollars in thousands)		Level 1	Level 2	Level 3	Total Assets at Fair Value
Loans measured for impairment, net	\$	— \$	— \$	13	\$ 13
Other real estate owned		_	_	4,250	4,250
Total assets	\$	— \$	— \$	4,263	\$ 4,263

December	31	2018
December	21.	2010

(Dollars in thousands)	Level 1	Level 2	Level 3	Total Assets at Fair Value	
Loans measured for impairment, net	\$ — \$	— \$	1,800	\$ 1,80	00
Other real estate owned	_	_	3,424	3,42	24
Total assets	\$ — \$	— \$	5,224	\$ 5,22	24

As of December 31, 2019 and 2018, the Company recorded \$171,000 and \$437,000, respectively, of specific reserves to the allowance for loan and lease losses as a result of adjusting the fair value of impaired loans.

IMPAIRED LOANS

A loan is considered impaired when management determines it is probable that all of the principal and interest due under the original terms of the loan may not be collected or if a loan is designated as a TDR. Impairment is measured based on a discounted cash flow of ongoing operations, discounted at the loan's original effective interest rate, or a calculation of the fair value of the underlying collateral less estimated selling costs. Our policy is to obtain appraisals on collateral supporting impaired loans on an annual basis, unless circumstances dictate a shorter time frame. Appraisals are reduced by estimated costs to sell the collateral and, under certain circumstances, additional factors that may arise and cause us to believe our recoverable value may be less than the independent appraised value. Accordingly, impaired loans are classified as Level 3. The Company measures impairment on all loans as part of the allowance for loan and lease losses.

OTHER REAL ESTATE OWNED

OREO is comprised of property acquired through foreclosure or voluntarily conveyed by borrowers. These assets are recorded on the date acquired at fair value, less estimated disposition costs, with the fair value being determined by appraisal. Our policy is to obtain appraisals on collateral supporting OREO on an annual basis, unless circumstances dictate a shorter time frame. Appraisals are reduced by estimated costs to sell the collateral and, under certain circumstances, additional factors that may arise and cause us to believe our recoverable value may be less than the independent appraised value. Accordingly, OREO is classified as Level 3.

LEVEL 3 VALUATION

The following tables present additional quantitative information about assets measured at fair value on a recurring and non-recurring basis and for which we have utilized Level 3 inputs to determine fair value as of December 31, 2019 and 2018:

		December 31, 2019							
(Dollars in thousands)		r Value	Valuation Techniques (1)	Significant Unobservable Inputs	Weighted Average Discount Rate				
Loans measured for impairment, net	\$	13	Collateral	Appraisal value and discount due to salability conditions	%				
Other real estate owned	\$	4,250	Collateral	Appraisal value and discount due to salability conditions	17%				

Fair value is generally determined through independent appraisals of the underlying collateral, which may include Level 3 inputs that are not identifiable, or by using the discounted cash flow of ongoing operations if the loan is not collateral dependent.

		December 31, 2018								
(Dollars in thousands)		ir Value	Valuation Techniques (1)	Significant Unobservable Inputs	Weighted Average Discount Rate					
Acquisition earn out liability	\$	2,920	Income approach	Run-rate revenue multiple; client retention	1.6 times					
Loans measured for impairment, net	\$	1,800	Collateral	Appraisal value and discount due to salability conditions	16%					
Other real estate owned	\$	3,424	Collateral	Appraisal value and discount due to salability conditions	10%					

⁽¹⁾ Fair value is generally determined through independent appraisals of the underlying collateral, which may include Level 3 inputs that are not identifiable, or by using the discounted cash flow method if the loan is not collateral dependent.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The following is a summary of the carrying amounts and estimated fair values of financial instruments:

		December 31, 2019					December 31, 2018		
(Dollars in thousands)	Fair Value Level		Carrying Amount	Estimated Fair Value		Carrying Amount		Estimated Fair Value	
Financial assets:									
Cash and cash equivalents	1	\$	403,855	\$ 403,855	\$	189,985	\$	189,985	
Debt securities available-for-sale	2		248,782	248,782		233,296		233,296	
Debt securities held-to-maturity	2		196,044	196,755		196,131		196,823	
Equity securities	1		_	_		12,661		12,661	
Federal Home Loan Bank stock	2		24,324	24,324		24,671		24,671	
Loans and leases held-for-investment, net	3		6,563,451	6,548,432		5,119,665		5,119,562	
Accrued interest receivable	2		22,326	22,326		20,702		20,702	
Investment management fees receivable, net	2		7,560	7,560		7,299		7,299	
Bank owned life insurance	2		70,044	70,044		68,309		68,309	
Other real estate owned	3		4,250	4,250		3,424		3,424	
Interest rate swaps	2		55,241	55,241		26,907		26,907	
Financial liabilities:									
Deposits	2	\$	6,634,613	\$ 6,648,546	\$	5,050,461	\$	5,048,079	
Borrowings, net	2		355,000	355,003		404,166		404,084	
Acquisition earn out liability	3		_	_		2,920		2,920	
Interest rate swaps	2		57,473	57,473		25,518		25,518	

During the years ended December 31, 2019, 2018 and 2017, there were no transfers between fair value Levels 1, 2 or 3.

The following methods and assumptions were used to estimate the fair value of each class of financial instruments as of December 31, 2019 and 2018:

CASH AND CASH EQUIVALENTS

The carrying amount approximates fair value.

INVESTMENT SECURITIES

The fair values of debt securities available-for-sale, debt securities held-to-maturity, debt securities trading and equity securities are based on quoted market prices for the same or similar securities, recently executed transactions and pricing models.

FEDERAL HOME LOAN BANK STOCK

The carrying value of our FHLB stock, which is carried at cost, approximates fair value.

LOANS AND LEASES HELD-FOR-INVESTMENT

The fair value of loans and leases held-for-investment is estimated by discounting the future cash flows using market rates (utilizing both unobservable and certain observable inputs when applicable) at which similar loans would be made to borrowers with similar credit ratings over the estimated remaining maturities. Impaired loans are generally valued at the fair value of the associated collateral.

ACCRUED INTEREST RECEIVABLE

The carrying amount approximates fair value.

INVESTMENT MANAGEMENT FEES RECEIVABLE

The carrying amount approximates fair value.

BANK OWNED LIFE INSURANCE

The fair value of general account BOLI is based on the insurance contract net cash surrender value.

OTHER REAL ESTATE OWNED

OREO is recorded on the date acquired at fair value, less estimated disposition costs, with the fair value being determined by appraisal.

DEPOSITS

The fair value of demand deposits is the amount payable on demand as of the reporting date, i.e., their carrying amounts. The fair value of fixed maturity deposits is estimated using a discounted cash flow calculation that applies the rates currently offered for deposits of similar remaining maturities.

BORROWINGS

The fair value of borrowings is calculated by discounting scheduled cash flows through the estimated maturity using period end market rates for borrowings of similar remaining maturities.

ACQUISITION EARN OUT LIABILITY

The carrying amount of the Columbia acquisition earn out liability approximates fair value.

INTEREST RATE SWAPS

The fair value of interest rate swaps is estimated through the assistance of an independent third party and compared to the fair value determined by the swap counterparty to establish reasonableness.

OFF-BALANCE SHEET INSTRUMENTS

Fair values for the Company's off-balance sheet instruments, which consist of lending commitments, standby letters of credit and risk participation agreements related to interest rate swap agreements, are based on fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements and the counterparties' credit standing. Management believes that the fair value of these off-balance sheet instruments is not significant.

[20] CHANGES IN ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table shows the changes in accumulated other comprehensive income (loss) net of tax, for the years ended December 31, 2019, 2018 and 2017:

		Years Ended December 31,										
		2019			2018			2017				
(Dollars in thousands)	Debt Securities	Derivatives	Total	Debt Securities	Derivatives	Total	Debt Securities	Derivatives	Total			
Balance, beginning of period	\$ (2,363)	\$ 1,032 \$	(1,331)	\$ 172	\$ 1,074	\$ 1,246	\$ (297)	\$ 1,127	\$ 830			
Change in unrealized holding gains (losses)	5,356	(1,701)	3,655	(2,913)	773	(2,140)	655	180	835			
Losses (gains) reclassified from other comprehensive income	(237)	(955)	(1,192)	53	(1,050)	(997)	(186)	(233)	(419)			
Reclassification for equity securities under ASU 2016-01	_	_	_	286	_	286	_	_	_			
Reclassification for certain income tax effects under ASU 2018-02	_	_	_	39	235	274	_	_	_			
Net other comprehensive income (loss)	5,119	(2,656)	2,463	(2,535)	(42)	(2,577)	469	(53)	416			
Balance, end of period	\$ 2,756	\$ (1,624) \$	1,132	\$ (2,363)	\$ 1,032	\$ (1,331)	\$ 172	\$ 1,074	\$ 1,246			

[21] RELATED PARTY TRANSACTIONS

Certain directors and executive officers of the Company have loan accounts with the Bank. Such loans were made in the ordinary course of business on substantially the same terms, including interest rates, as those prevailing at the time for comparable transactions with outsiders. As of December 31, 2019, the Bank had six loans outstanding to directors totaling \$24.1 million.

[22] CONTINGENT LIABILITIES

From time to time the Company is party to various litigation matters incidental to the conduct of its business. The Company is not aware of any material unasserted claims. In the opinion of management, there are no potential claims that would have a material adverse effect on the Company's financial position, liquidity or results of operations.

[23] CONDENSED PARENT COMPANY ONLY FINANCIAL STATEMENTS

The following condensed statements of financial condition of the parent company as of December 31, 2019 and 2018, and the related condensed statements of income and cash flows for the years ended December 31, 2019, 2018 and 2017, should be read in conjunction with our Consolidated Financial Statements and related notes:

CONDENSED STATEMENTS OF FINANCIAL CONDITION PARENT COMPANY ONLY

	December			
(Dollars in thousands)	2019	2018		
ASSETS				
Cash and cash equivalents	\$ 15,231 \$	3,561		
Equity securities	_	12,661		
Investment in subsidiaries	606,904	504,711		
Prepaid expenses and other assets	109	1,648		
Total assets	\$ 622,244 \$	522,581		
LIABILITIES AND SHAREHOLDERS' EQUITY				
Borrowings, net	\$ — \$	39,166		
Other accrued expenses and other liabilities	963	4,061		
Shareholders' equity	621,281	479,354		
Total liabilities and shareholders' equity	\$ 622,244 \$	522,581		

CONDENSED STATEMENTS OF INCOME PARENT COMPANY ONLY

		Years E			
(Dollars in thousands)		2019	2018	2017	
Interest income	\$	219 \$	284 \$	279	
Dividends received from subsidiaries		13,000	3,000	3,000	
Total interest and dividend income		13,219	3,284	3,279	
Interest expense		1,159	2,334	2,305	
Net interest income		12,060	950	974	
Non-interest income (loss)		842	(774)	_	
Non-interest expense		1,081	749	371	
Income (loss) before income taxes and undisbursed income of subsidiaries		11,821	(573)	603	
Income tax expense benefit		(467)	(490)	(251)	
Income (loss) before undisbursed income of subsidiaries	1	12,288	(83)	854	
Undisbursed income of subsidiaries		47,905	54,507	37,134	
Net income	\$	60,193 \$	54,424 \$	37,988	

CONDENSED STATEMENTS OF CASH FLOWS PARENT COMPANY ONLY

		Years Ended December 31,					
(Dollars in thousands)		2019	2018	2017			
Cash Flows from Operating Activities:							
Net income	\$	60,193 \$	54,424 \$	37,988			
Adjustments to reconcile net income to net cash provided by operating activities:							
Undisbursed income of subsidiaries		(47,905)	(54,507)	(37,134)			
Net loss (gain) on equity securities		(842)	775	_			
Amortization of deferred financing costs		84	203	203			
Increase (decrease) in accrued interest payable		(1,005)	(19)	19			
Decrease (increase) in other assets		1,539	(784)	238			
Increase (decrease) in other liabilities		(2,269)	2,729	(777)			
Net cash provided by operating activities		9,795	2,821	537			
Cash Flows from Investing Activities:							
Purchase of equity securities		_	(5,224)	(267)			
Sale of equity securities		13,679	_	_			
Net payments for investments in subsidiaries		(43,000)	(26,335)	(200)			
Net cash used in investing activities		(29,321)	(31,559)	(467)			
Cash Flows from Financing Activities:							
Net proceeds from issuance of preferred stock		77,611	38,468	_			
Repayment of subordinated debt		(35,000)	_	_			
Net increase (decrease) in line of credit advances		(4,250)	(1,950)	6,200			
Net proceeds from exercise of stock options		900	1,667	1,663			
Cancellation of stock options		_	(945)	_			
Purchase of treasury stock		(2,312)	(6,807)	(8,675)			
Dividends paid on preferred stock		(5,753)	(2,120)	_			
Net cash provided by (used in) financing activities		31,196	28,313	(812)			
Net change in cash and cash equivalents		11,670	(425)	(742)			
Cash and cash equivalents at beginning of year		3,561	3,986	4,728			
Cash and cash equivalents at end of year	\$	15,231 \$	3,561 \$	3,986			

[24] SEGMENTS

The Company operates two reportable segments: Bank and Investment Management.

- The Bank segment provides commercial banking services to middle-market businesses and private banking services to high-net-worth individuals through the TriState Capital Bank subsidiary.
- The Investment Management segment provides advisory and sub-advisory investment management services primarily to institutional investors, mutual funds and individual investors through the Chartwell subsidiary. It also supports marketing efforts for Chartwell's proprietary investment products through the CTSC Securities subsidiary.

The following tables provide financial information for the two segments of the Company as of and for the years ended December 31, 2019 and 2018. The information provided under the caption "Parent and Other" represents general operating activity of the Company not considered to be a reportable segment, which includes parent company activity as well as eliminations and adjustments that are necessary for purposes of reconciliation to the consolidated amounts.

(Dollars in thousands)	Ι	December 31, 2019	December 31, 2018
Assets:			
Bank	\$	7,686,981	\$ 5,947,165
Investment management		83,295	92,894
Parent and other		(4,466)	(4,404)
Total assets	\$	7,765,810	\$ 6,035,655

		Year Ended December 31, 2019							
(Dollars in thousands)		Bank	Investment Management	Parent and Other	Consolidated				
Income statement data:									
Interest income	\$	262,332	\$ - \$	115 \$	262,447				
Interest expense		134,336	_	1,054	135,390				
Net interest income (loss)		127,996	_	(939)	127,057				
Provision (credit) for loan and lease losses		(968)		_	(968)				
Net interest income (loss) after provision for loan and lease losses		128,964	_	(939)	128,025				
Non-interest income:									
Investment management fees		_	36,889	(447)	36,442				
Net gain on the sale and call of debt securities		416	_	_	416				
Other non-interest income		15,051	31	842	15,924				
Total non-interest income		15,467	36,920	395	52,782				
Non-interest expense:									
Intangible amortization expense		_	2,009	_	2,009				
Other non-interest expense		77,945	31,560	635	110,140				
Total non-interest expense		77,945	33,569	635	112,149				
Income (loss) before tax		66,486	3,351	(1,179)	68,658				
Income tax expense (benefit)		8,015	918	(468)	8,465				
Net income (loss)	\$	58,471	\$ 2,433 \$	(711) \$	60,193				

Year Ended December 31, 2018

Year Ended December 31, 2017

522

4,551 \$

(251)

(2,146) \$

9,482

37,988

(Dollars in thousands)		Bank	Investment Management	Parent and Other	Consolidated	
Income statement data:		,				
Interest income	\$	199,510 \$	- \$	276 \$	199,786	
Interest expense		84,055	_	2,327	86,382	
Net interest income (loss)		115,455	_	(2,051)	113,404	
Provision (credit) for loan losses		(205)	_	_	(205)	
Net interest income (loss) after provision for loan losses		115,660	_	(2,051)	113,609	
Non-interest income:						
Investment management fees		_	37,939	(292)	37,647	
Net loss on the sale and call of debt securities		(70)	_	_	(70	
Other non-interest income (loss)		11,112	1	(773)	10,340	
Total non-interest income		11,042	37,940	(1,065)	47,917	
Non-interest expense:						
Intangible amortization expense		_	1,968	_	1,968	
Change in fair value of acquisition earn out		_	(218)	_	(218	
Other non-interest expense		67,190	31,760	457	99,407	
Total non-interest expense		67,190	33,510	457	101,157	
Income (loss) before tax		59,512	4,430	(3,573)	60,369	
Income tax expense (benefit)		5,856	579	(490)	5,945	
Net income (loss)	\$	53,656 \$	3,851 \$	(3,083) \$	54,424	

(Dollars in thousands)	 Bank	Investment Management	Parent and Other	Consolidated
Income statement data:				
Interest income	\$ 134,029	- \$	266 \$	134,295
Interest expense	40,649	_	2,293	42,942
Net interest income (loss)	93,380	_	(2,027)	91,353
Provision (credit) for loan losses	(623)	_	_	(623)
Net interest income (loss) after provision for loan losses	94,003	_	(2,027)	91,976
Non-interest income:				
Investment management fees	_	37,309	(209)	37,100
Net gain on the sale and call of debt securities	310	_	_	310
Other non-interest income	9,554	2	_	9,556
Total non-interest income	9,864	37,311	(209)	46,966
Non-interest expense:				
Intangible amortization expense	_	1,851	_	1,851
Other non-interest expense	59,073	30,387	161	89,621
Total non-interest expense	59,073	32,238	161	91,472
Income (loss) before tax	44,794	5,073	(2,397)	47,470

[25] SUBSEQUENT EVENT

Income tax expense (benefit)

Net income (loss)

On January 7, 2020, the Company increased its unsecured line of credit agreement with lead bank Texas Capital Bank to \$75.0 million.

9,211

35,583 \$

On January 16, 2020, the Board declared a dividend payable of approximately \$679,000, or \$0.42 per depositary share, on the Series A Preferred Stock and a dividend payable of approximately \$1.3 million, or \$0.40 per depository share, on the Company's Series B Preferred Stock, each of which is payable on April 1, 2020, to preferred shareholders of record as of the close of business on March 18, 2020.

SELECTED QUARTERLY FINANCIAL DATA

The tables below summarize our unaudited quarterly financial information for the years ended December 31, 2019 and 2018:

2019 Third Fourth Second First Quarter Quarter (Dollars in thousands, except per share data) Quarter Quarter Income statement data: (unaudited) \$ 67,732 \$ 62,902 Interest income 65,474 \$ 66,339 \$ Interest expense 32,408 35,416 35,036 32,530 33,066 31,303 Net interest income 32,316 30,372 Provision (credit) for loan losses (607)728 (712)(377)32,338 32,923 32,015 30,749 Net interest income after provision for loan losses Non-interest income: Investment management fees 8,862 8,902 9,254 9,424 Net gain on the sale and call of debt securities 70 206 28 112 Other non-interest income 4,559 5,135 2,613 3,617 Total non-interest income 13,491 14,243 11,979 13,069 Non-interest expense: Intangible amortization expense 503 502 502 502 Other non-interest expense 29,616 27,271 27,083 26,170 30,119 Total non-interest expense 27,773 27,585 26,672 15,710 19,393 16,409 17,146 Income before tax 1,106 3,059 1,718 2,582 Income tax expense \$ 14,604 \$ 16,334 \$ 14,691 \$ 14,564 Net income Preferred stock dividends 1,962 1,962 1,150 679 \$ Net income available to common shareholders 12,642 \$ 14,372 \$ 13,541 \$ 13,885 Earnings per common share: \$ 0.45 \$ 0.50 Basic 0.52 \$ 0.49 \$ Diluted \$ 0.44 \$ 0.50 \$ 0.47 \$ 0.48

	2010					
(Dollars in thousands, except per share data)		Fourth Quarter	Third Ouarter	Second Quarter	First Quarter	
Income statement data:						
Interest income	\$	58,162 \$	52,424 \$	47,784 \$	41,416	
Interest expense		28,630	23,605	18,993	15,154	
Net interest income		29,532	28,819	28,791	26,262	
Provision (credit) for loan losses		(581)	(234)	415	195	
Net interest income after provision for loan losses		30,113	29,053	28,376	26,067	
Non-interest income:						
Investment management fees		9,225	9,828	9,686	8,908	
Net gain (loss) on the sale and call of debt securities		(76)	_	1	5	
Other non-interest income		2,426	2,923	2,815	2,176	
Total non-interest income		11,575	12,751	12,502	11,089	
Non-interest expense:						
Intangible amortization expense		503	502	502	461	
Change in fair value of acquisition earn out		(218)	_	_	_	
Other non-interest expense		26,018	25,184	24,816	23,389	
Total non-interest expense		26,303	25,686	25,318	23,850	
Income before tax		15,385	16,118	15,560	13,306	
Income tax expense		265	1,807	968	2,905	
Net income	\$	15,120 \$	14,311 \$	14,592 \$	10,401	
Preferred stock dividends	.	679	679	762	_	
Net income available to common shareholders	\$	14,441 \$	13,632 \$	13,830 \$	10,401	
Earnings per common share:						
Basic	\$	0.52 \$	0.49 \$	0.50 \$	0.38	
Diluted	\$	0.50 \$	0.47 \$	0.48 \$	0.36	

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of December 31, 2019. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company 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 U.S. Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Based on this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2019.

Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting 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 the financial statements in accordance with accounting principles generally accepted in the United States, and that receipts and expenditures of the Company are being made only in accordance with the authorization of management and the directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the consolidated financial statements. Internal control over financial reporting includes the controls themselves, monitoring and internal auditing practices and actions taken to correct any identified deficiencies. Because of inherent limitations, internal control over financial reporting can only provide reasonable assurance and may not prevent or detect misstatements. Further, because of changes in conditions, the effectiveness of our internal control over financial reporting may vary over time.

Management assessed the Company's system of internal control over financial reporting as of December 31, 2019, in relation to criteria for effective internal control over financial reporting as described in "Internal Control Integrated Framework (2013)," issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that, as of December 31, 2019, the Company's system of internal control over financial reporting was effective.

KPMG LLP, the independent registered public accounting firm that audited the consolidated financial statements of the Company included in this Annual Report on Form 10-K, has issued an attestation report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. The report, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, is included in this Item under the heading "Report of Independent Registered Public Accounting Firm."

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2019, that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors TriState Capital Holdings, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited TriState Capital Holdings, Inc. and subsidiaries (the Company) internal control over financial reporting as of December 31, 2019, based on criteria as described in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria as described in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial condition of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements), and our report dated February 24, 2020 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual 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. 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/ KPMG LLP

Pittsburgh, Pennsylvania February 24, 2020

ITEM 9B. OTHER INFORMATION

Other Matters

LIBOR Transition

On July 27, 2017, the United Kingdom's Financial Conduct Authority (the "FCA") announced that it will no longer persuade or require banks to submit rates for the calculation of the London Interbank Offered Rate ("LIBOR") after 2021. Given LIBOR's extensive use across financial markets, the transition away from LIBOR presents various risks and challenges to financial markets and institutions, including to the Company. The Company's commercial and consumer businesses issue, trade and hold various products that are currently indexed to LIBOR. As of December 31, 2019, the Company had a material amount of loans, investment securities, FHLB advances and notional value of derivatives indexed to LIBOR that will mature after 2021. If not sufficiently planned for, the discontinuation of LIBOR could result in financial, operational, legal, reputational or compliance risks to financial markets and institutions, including to the Company.

The Alternative Reference Rates Committee ("ARRC") has proposed the Secured Overnight Financing Rate ("SOFR") as its preferred rate as an alternative to LIBOR. The selection of SOFR as the alternative reference rate currently presents certain market concerns, because a term structure for SOFR has not yet developed, and there is not yet a generally accepted methodology for adjusting SOFR, which represents an overnight, risk-free rate, so that it will be comparable to LIBOR, which has various tenors and reflects a risk component.

In early 2019, the ARRC released final recommended fallback contract language for new issuances of LIBOR-indexed bilateral business loans, syndicated loans, floating rate notes and securitizations. The International Swaps and Derivatives Association, Inc. ("ISDA") is also expected to provide guidance on fallback contract language related to derivative transactions in late 2019.

Due to the uncertainty surrounding the future of LIBOR, it is expected that the transition will span several reporting periods through the end of 2021. One of the major identified risks is inadequate fallback language in the various instruments' contracts that may result in issues establishing the alternative index and adjusting the margin as applicable. The Company continues to monitor this activity and evaluate the related risks. The Company has already: (1) established a cross-functional team to identify, assess and monitor risks associated with the transition of LIBOR and other benchmark rates; (2) developed an inventory of affected products; and (3) implemented more robust fallback contract language. The Company's cross-functional team is also tasked with managing clear communication of the Company's transition plans with both internal and external stakeholders and ensuring that the Company appropriately updates its business processes, analytical tools, information systems and contract language to minimize disruption during and after the LIBOR transition. For additional information related to the potential impact surrounding the transition from LIBOR on the Company's business, see "Item 1A. Risk Factors" in this Annual Report on Form 10-K.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this item is set forth in our definitive proxy materials regarding our annual meeting of stockholders to be held on or around May 19, 2020, which proxy materials will be filed with the SEC no later than April 29, 2020, and are incorporated by reference.

ITEM 11. EXECUTIVE COMPENSATION

Information required by this item is set forth in our definitive proxy materials regarding our annual meeting of stockholders to be held on or around May 19, 2020, which proxy materials will be filed with the SEC no later than April 29, 2020, and are incorporated by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this item is set forth in our definitive proxy materials regarding our annual meeting of stockholders to be held on or around May 19, 2020, which proxy materials will be filed with the SEC no later than April 29, 2020, and are incorporated by reference.

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

Information required by this item is set forth in our definitive proxy materials regarding our annual meeting of stockholders to be held on or around May 19, 2020, which proxy materials will be filed with the SEC no later than April 29, 2020, and are incorporated by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required by this item is set forth in our definitive proxy materials regarding our annual meeting of stockholders to be held on or around May 19, 2020, which proxy materials will be filed with the SEC no later than April 29, 2020, and are incorporated by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) FINANCIAL STATEMENTS

The consolidated financial statements required in response to this item are incorporated by reference to Part II - Item 8 of this Report.

(b) **EXHIBITS**

The exhibits filed or incorporated by reference as a part of this report are incorporated by reference to the Exhibit Index in the following section of this Report.

(c) SCHEDULES

No financial statement schedules are being filed because of the absence of conditions under which they are required or because the required information is included in the consolidated financial statements and related notes thereto.

ITEM 16. FORM 10-K SUMMARY

None.

EXHIBIT INDEX

Exhibit

No. Description

- 3.1 Amended and Restated Articles of Incorporation, which is incorporated by reference to Exhibit 3.1 to Amendment No. 1 to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 16, 2013.
- 3.2 Articles of Amendment for TriState Capital Holdings, Inc. 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock, which is incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed with the SEC on March 20, 2018.
- 3.3 <u>Statement of Correction to the Articles of Amendment of TriState Capital Holdings. Inc. 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock, which is incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed with the SEC on May 29, 2019.</u>
- 3.4 Articles of Amendment for TriState Capital Holdings, Inc. 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock, which is incorporated by reference to Exhibit 4.1 of our Current Report on Form 8-K filed with the SEC on May 29, 2019.
- 3.4 Bylaws, as amended, which is incorporated by reference to Exhibit 3.2 to Amendment No. 1 to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 16, 2013.
- 4.1 <u>Description of Securities, filed herewith.</u>
- 4.2 Specimen common stock certificate, which is incorporated by reference to Exhibit 4.1 to Amendment No. 1 to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 16, 2013.
- 4.3 Form of Deposit Agreement among TriState Capital Holdings, Inc., Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the depositary receipts described therein relating to TriState Capital Holdings, Inc. 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock, which is incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed with the SEC on March 20, 2018.
- Form of Depositary Receipt representing the depositary shares, each representing a 1/40th ownership interest in a share of 6.75% Fixed-to-Floating Rate Series A Non-Cumulative Perpetual Preferred Stock (included in Exhibit 4.3).
- 4.5 Form of Deposit Agreement among TriState Capital Holdings, Inc., Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the depositary receipts described therein relating to TriState Capital Holdings, Inc. 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock, which is incorporated by reference to Exhibit 4,1 of our Current Report on Form 8-K filed with the SEC on May 29, 2019.
- 4.6 Form of Depositary Receipt representing the depositary shares, each representing a 1/40th ownership interest in a share of 6.375% Fixed-to-Floating Rate Series B Non-Cumulative Perpetual Preferred Stock, (included in Exhibit 4.5)
- 10.1 TriState Capital Holdings, Inc. 2006 Stock Option Plan ("2006 Stock Option Plan"), which is incorporated by reference to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 2, 2013.
- 10.2 Form of Nonqualified Stock Option Award Agreement under 2006 Stock Option Plan, which is incorporated by reference to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 2, 2013.
- 10.3 Agreement of Lease dated August 29, 2006 between Oxford Development Company/Grant Street, Landlord, and TriState Capital Holdings, Inc., Tenant, and amendment thereto dated September 13, 2010, which is incorporated by reference to Exhibit 10.4 to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 2, 2013.

- 10.4 Registration Rights Agreement dated August 10, 2012, by and among TriState Capital Holdings, Inc., LM III TriState Holdings LLC and LM III-A TriState Holdings LLC, which is incorporated by reference to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 2, 2013.
- 10.5 <u>TriState Capital Bank Supplemental Executive Retirement Agreement dated February 28, 2013, by and among TriState Capital Holdings, Inc., TriState Capital Bank and James F. Getz, which is incorporated by reference to Exhibit 10.9 to our Registration Statement on Form S-1 (File No. 333-187681) filed with the SEC on April 2, 2013.</u>
- 10.6 TriState Capital Holdings, Inc. 2014 Omnibus Incentive Plan, which is incorporated by reference to Appendix A to our Definitive Proxy Statement on Form DEF 14A filed with the SEC on April 15, 2014.
- 10.7 <u>Form of Three-Year Officer Restricted Stock Grant Agreement under 2014 Omnibus Incentive Plan, which is incorporated by</u> reference to Exhibit 10.8 to our Annual Report on Form 10-K filed with the SEC on February 19, 2019.
- 10.8 Form of Five-Year Officer Restricted Stock Grant Agreement under 2014 Omnibus Incentive Plan, which is incorporated by reference to Exhibit 10.9 to our Annual Report on Form 10-K filed with the SEC on February 19, 2019.
- 10.9 Form of Non-Employee Director Restricted Stock Grant Agreement under 2014 Omnibus Incentive Plan, which is incorporated by reference to Exhibit 10.10 to our Annual Report on Form 10-K filed with the SEC on February 19, 2019.
- 10.10 <u>TriState Capital Holdings, Inc. Short-Term Incentive Plan, which is incorporated by reference to Appendix B to our Definitive Proxy Statement on Form DEF 14A filed with the SEC on April 15, 2014.</u>
- Subsidiaries of TriState Capital Holdings, Inc., filed herewith.
- 23.2 Consent of KPMG LLP, Independent Registered Public Accounting Firm, filed herewith.
- Power of Attorney, filed herewith.
- 31.1 Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
- 31.2 Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
- 32 <u>Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.</u>
- The following materials from TriState Capital Holdings, Inc.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2019, formatted in XBRL: (i) the Consolidated Statements of Financial Condition, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Changes in Shareholders' Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements, furnished herewith.

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.

TRISTATE CAPITAL HOLDINGS, INC.

Date: February 24, 2020 By: /s/ James F. Getz

James F. Getz

Chairman, President and Chief Executive Officer

Date: February 24, 2020 By: /s/ David J. Demas

David J. Demas

Chief Financial Officer

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.

Date: February 24, 2020	By: /s/ James F. Getz
	James F. Getz
	Chairman, President, Chief Executive Officer and Director
	(Principal Executive Officer)
Date: February 24, 2020	By: /s/ David J. Demas
	David J. Demas
	Chief Financial Officer
	(Principal Financial and Accounting Officer)
Date: February 24, 2020	By: /s/ David L. Bonvenuto*
	David L. Bonvenuto
	Director
Date: February 24, 2020	By: /s/ Anthony J. Buzzelli*
	Anthony J. Buzzelli
	Director
Date: February 24, 2020	By: /s/ Helen Hanna Casey*
	Helen Hanna Casey
	Director
Date: February 24, 2020	By: /s/ E.H. (Gene) Dewhurst*
	E.H. (Gene) Dewhurst
	Director
Date: February 24, 2020	By: /s/ James J. Dolan*
	James J. Dolan
	Director

Date: February 24, 2020	By:	/s/ Audrey P. Dunning*
		Audrey P. Dunning
		Director
Date: February 24, 2020	By:	/s/ Brian S. Fetterolf*
		Brian S. Fetterolf
		Director
Date: February 24, 2020	By:	/s/ Kim A. Ruth*
		Kim A. Ruth
		Director
Date: February 24, 2020	By:	/s/ A. William Schenck, III*
		A. William Schenck, III
		Vice Chairman and Director
Date: February 24, 2020	By:	/s/ Richard B. Seidel*
		Richard B. Seidel
		Director
Date: February 24, 2020	By:	/s/ John B. Yasinsky*
		John B. Yasinsky
		Director
	* By:	/s/ James F. Getz
		James F. Getz, Attorney-in-Fact



TriState Capital Holdings, Inc. One Oxford Centre, Suite 2700 301 Grant Street Pittsburgh, PA 15219