

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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

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

Commission File Number 0-20288

COLUMBIA BANKING SYSTEM, INC.

(Exact name of registrant as specified in its charter)

Washington
(State or other jurisdiction of
incorporation or organization)

91-1422237
(I.R.S. Employer
Identification Number)

1301 A Street
Tacoma, Washington 98402-2156
(Address of principal executive offices and zip code)

(253) 305-1900
(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Common Stock, No Par Value

COLB

The Nasdaq Stock Market LLC

(Title of each class)

(Trading symbol)

(Name of each exchange on which registered)

Securities Registered Pursuant to Section 12(g) of the Act: None

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

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

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

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

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

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

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

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

The aggregate market value of Common Stock held by non-affiliates of the registrant at June 30, 2019 was \$2,622,530,600 based on the closing sale price of the Common Stock on that date.

The number of shares of registrant's Common Stock outstanding at January 31, 2020 was 72,146,350.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the Registrant's definitive 2020 Annual Meeting Proxy Statement.

Part III

COLUMBIA BANKING SYSTEM, INC.
FORM 10-K ANNUAL REPORT
DECEMBER 31, 2019

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Glossary of Acronyms, Abbreviations, and Terms

The acronyms, abbreviations, and terms listed below are used in various sections of the Form 10-K, including “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Item 8. Financial Statements and Supplementary Data.”

401(k) Plan	401(k) and Profit Sharing Plan	FDIC	Federal Deposit Insurance Corporation
ACH	Automated Clearing House	FDIA	Federal Deposit Insurance Act
ALLL	Allowance for Loan and Lease Losses	Federal Reserve	Board of Governors of the Federal Reserve System
ASC	Accounting Standards Codification	FHLB	Federal Home Loan Bank of Des Moines
ASU	Accounting Standards Update	FINRA/SIPC	Financial Industry Regulatory Authority/Securities Investor Protection Corporation
ATM	Automated Teller Machine	FRB	Federal Reserve Bank
B&O	Business and Occupation	GAAP	Generally Accepted Accounting Principles
Basel III	A comprehensive capital framework and rules for U.S. banking organizations approved by the FRB and the FDIC in 2013	IDI	Insured Depository Institutions
Basel Committee	Basel Committee on Banking Supervision	Interstate Act	Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994
BHCA	Bank Holding Company Act of 1956	IRAs	Individual Retirement Accounts
BOLI	Bank Owned Life Insurance	IRS	Internal Revenue Service
BSA	Bank Secrecy Act	LIBOR	London Interbank Offering Rate
Capital Rules	Risk-based capital standards currently applicable to the Company and the Bank	NIM	Net Interest Margin
CDI	Core Deposit Intangible	OCC	Office of the Comptroller of the Currency
CDARS®	Certificate of Deposit Account Registry Service	OPPO	Other Personal Property Owned
CECL	Current Expected Credit Loss	OREO	Other Real Estate Owned
CEO	Chief Executive Officer	Pacific Continental	Pacific Continental Corporation
CET1	Common Equity Tier 1	Patriot Act	Includes 2006 amendments to the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 which was intended to combat terrorism.
CFO	Chief Financial Officer	PCI	Purchased Credit Impaired
CFPB	Consumer Financial Protection Bureau	REASD	Real Estate Appraisal Services Department
COSO	Committee of Sponsoring Organizations of the Treadway Commission	SBA	Small Business Administration
CRA	Community Reinvestment Act of 1977	SEC	Securities and Exchange Commission
DIF	Dodd-Frank Act broadened the base for FDIC insurance assessments. Under the FDIC’s assessment system for determining payments to the Deposit Insurance Fund	SERP	Supplemental Executive Retirement plan
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act	SOFR	Secured Overnight Financing Rate
EPS	Earnings Per Share	SOX	Sarbanes-Oxley Act of 2002
EGRRCPA	Economic Growth, Regulatory Relief, and Consumer Protection Act	Unit Plans	Supplemental compensation arrangements
ESP Plan	Employee Stock Purchase Plan	TDRs	Troubled Debt Restructurings
FASB	Financial Accounting Standards Board	West Coast	West Coast Bancorp

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report on Form 10-K may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, but are not limited to, statements about our plans, objectives, expectations and intentions that are not historical facts, and statements identified by words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “should,” “projects,” “seeks,” “estimates” or the negative version of those words or other comparable words or phrases of a future or forward-looking nature. Forward-looking statements are based on current beliefs and expectations of management and are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control. In addition, forward-looking statements are subject to assumptions with respect to future business strategies and decisions that are subject to change. In addition to the factors set forth in the sections titled “Risk Factors,” “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in this Form 10-K, the following factors, among others, could cause actual results to differ materially from the anticipated results expressed or implied by forward-looking statements:

- national and global economic conditions could be less favorable than expected or could have a more direct and pronounced effect on us than expected and adversely affect our ability to continue internal growth and maintain the quality of our earning assets;
- the markets where we operate and make loans could face challenges;
- the risks presented by the economy, which could adversely affect credit quality, collateral values, including real estate collateral, investment values, liquidity and loan originations and loan portfolio delinquency rates;
- the efficiencies and enhanced financial and operating performance we expect to realize from investments in personnel, acquisitions and infrastructure may not be realized;
- interest rate changes could significantly reduce net interest income and negatively affect asset yields and funding sources;
- the effect of changes to or the discontinuation or replacement of LIBOR;
- projected business increases following strategic expansion could be lower than expected;
- changes in the scope and cost of FDIC insurance and other coverages;
- the impact of acquired loans on our earnings;
- changes in accounting policies or procedures as may be required by the FASB or other regulatory agencies could materially affect our financial statements and how we report those results, and expectations and preliminary analysis relating to how such changes will affect our financial results could prove incorrect;
- changes in laws and regulations affecting our businesses, including changes in the enforcement and interpretation of such laws and regulations by applicable governmental and regulatory agencies;
- increased competition among financial institutions and nontraditional providers of financial services;
- continued consolidation in the Northwest financial services industry resulting in the creation of larger financial institutions that have greater resources could change the competitive landscape;
- the goodwill we have recorded in connection with acquisitions could become impaired, which may have an adverse impact on our earnings and capital;
- our ability to identify and address cyber-security risks, including security breaches, “denial of service attacks,” “hacking” and identity theft;
- any material failure or interruption of our information and communications systems;
- inability to keep pace with technological changes;
- our ability to effectively manage credit risk, interest rate risk, market risk, operational risk, legal risk, liquidity risk and regulatory and compliance risk;
- failure to maintain effective internal control over financial reporting or disclosure controls and procedures;
- the effect of geopolitical instability, including wars, conflicts and terrorist attacks;
- our profitability measures could be adversely affected if we are unable to effectively manage our capital;
- natural disasters, including earthquakes, tsunamis, flooding, fires and other unexpected events; and
- the effects of any damage to our reputation resulting from developments related to any of the items identified above.

You should take into account that forward-looking statements speak only as of the date of this report. Given the described uncertainties and risks, we cannot guarantee our future performance or results of operations and you should not place undue reliance on forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required under federal securities laws.

PART I

ITEM 1. BUSINESS

General

Columbia Banking System, Inc. (referred to in this report as “we,” “our,” “the Company” and “Columbia”) is a registered bank holding company whose wholly owned banking subsidiary is Columbia State Bank (“Columbia Bank” or “the Bank”). Established in 1993 in Tacoma, Washington, we provide a full range of banking services to small and medium-sized businesses, professionals and individuals throughout Washington, Oregon and Idaho. The Company’s subsidiary Columbia Trust Company (“Columbia Trust”) is an Oregon trust company that provides agency, fiduciary and other related trust services with offices in Washington, Oregon and Idaho.

The vast majority of Columbia Bank’s loans and deposits are within its service areas in Washington, Oregon and Idaho. Columbia Bank is a Washington state-chartered commercial bank, the deposits of which are insured in whole or in part by the FDIC. Columbia Bank is subject to regulation by the FDIC, the Washington State Department of Financial Institutions Division of Banks, the Oregon Department of Consumer and Business Services Division of Finance and Corporate Securities, and the Idaho Department of Finance. Although Columbia Bank is not a member of the Federal Reserve System, the Federal Reserve has certain supervisory authority over the Company, which can also affect Columbia Bank.

Business Overview

Having celebrated our 26th anniversary in 2019, our goal is to continue to be a leading Northwest regional community banking company while consistently increasing shareholder value. We continue to build on our reputation for exceptional customer satisfaction in order to be recognized as the bank of choice for individual and business customers in all markets we serve.

We have established a network of 146 branches in Washington, Oregon and Idaho as of December 31, 2019, from which we intend to grow market share. We operate 71 branches in 21 counties in the state of Washington, 61 branches in 16 counties in Oregon and 14 branches in 10 counties in Idaho.

Our branch system funds our lending activities and allows us to better serve both retail and business depositors. We believe this approach enables us to expand lending activities while attracting a stable deposit base and enhancing utilization of our full range of products and services. To support our strategy of market penetration and increased profitability, while continuing our personalized banking approach, we have invested in experienced banking and administrative personnel and have incurred related costs in the creation of our branch network. Our branch system and other delivery channels are continually evaluated as an important component of ongoing efforts to improve efficiencies without compromising customer service. We are taking major steps towards enhancing our digitally enabled bank that puts the client first and ensures they can bank when, how and where they choose.

Business Strategy

Our business strategy is to provide our customers with the financial sophistication and product depth of a regional banking company while retaining the appeal and service level of a community bank. We continually evaluate our existing business processes while focusing on maintaining asset quality and a diversified loan and deposit portfolio. We continue to build our strong deposit base, expanding total revenue and controlling expenses in an effort to gain operational efficiencies and increase our return on average equity. As a result of our strong commitment to highly personalized, relationship-oriented customer service, our diverse products, our strategic branch locations and the long-standing community presence of our managers and staff, we believe we are well positioned to attract and retain new customers and to increase our market share of loans, deposits, investments and other financial services. We are dedicated to increasing market share in the communities we serve by continuing to leverage our existing branch network and considering business combinations that are consistent with our expansion strategy throughout the Northwest. We have grown our franchise over the past decade through a combination of acquisitions and organic growth.

Products & Services

We place the highest priority on customer service and assist our clients in making informed decisions when selecting from the products and services we offer. We continually review our product and service offerings to ensure that we provide our customers with the tools to meet their financial needs. A more complete listing of all the services and products available to our customers can be found on our website: www.columbiabank.com. Some of the core products and services we offer include:

<u>Personal Banking</u>	<u>Business Banking</u>	<u>Wealth Management</u>
<ul style="list-style-type: none">• Checking and Savings Accounts• Debit and Credit Cards• Digital Banking• Personal Loans• Home Loans• Foreign Currency	<ul style="list-style-type: none">• Checking and Savings Accounts• Debit and Credit Cards• Business Loans• Professional Banking• Treasury Management• Merchant Card Services• International Banking	<ul style="list-style-type: none">• Financial Services• Private Banking• Trust and Investment Services

Personal Banking: We offer our personal banking customers an assortment of account products including noninterest and interest-bearing checking, savings, money market and certificate of deposit accounts. Overdraft protection is also available with direct links to the customer’s checking account. Personal banking customers may also choose from a variety of loan products including home mortgages for purchases and refinances, home equity loans and lines of credit, and other personal loans. Eligible personal banking customers with checking accounts are provided a Visa® Debit Card. Further, a variety of Visa® Credit Cards are available to eligible personal banking customers.

In addition, Columbia Connect, our personal digital banking platform, allows our personal banking customers to safely and securely conduct their banking business 24 hours a day, 7 days a week across all of their devices. Columbia Connect has simple navigation and provides access to frequently used features such as depositing checks, paying bills, transferring funds, or locating the nearest Columbia Bank branch or ATM.

Business Banking: A variety of checking, savings, interest-bearing money market and certificate of deposit accounts are offered to business banking customers to satisfy all their banking needs. In addition to these core banking products, we provide a breadth of services to support the complete financial needs of small and middle market businesses including Business Debit and Credit Cards, Business Loans, Professional Banking, Treasury Management, Merchant Card Services, and International Banking.

Business Debit and Credit Cards

Our business banking customers are offered a selection of Visa® Cards including the Business Debit Card that works like a check wherever Visa® is accepted. We also partner with Elan Financial Services to offer a variety of Visa® Credit Cards that come with important business features including expense management tools, free employee cards and added security benefits. A specialty community card for nonprofit organizations and municipalities is also available.

Business Loans

We offer a variety of loan products tailored to meet the diverse needs of business banking customers. Business loan products include agricultural loans, asset-based loans, builder and other commercial real estate loans, and loans guaranteed by the SBA. In addition, we offer a suite of Business Edge loans designed for small businesses looking to expand, purchase equipment, or in need of working capital.

Professional Banking

Columbia Professional Bankers are uniquely qualified to help dentists, physicians and veterinarians acquire, build and grow their practice. We offer tailored banking solutions delivered by experienced bankers with the industry knowledge necessary to meet their business’s unique needs.

Treasury Management

Columbia Bank's diversified Treasury Management Programs are tailored to meet specific banking needs of each individual business. We combine technology with integrated operations and local expertise for safe, powerful, flexible solutions. Columbia's clients, of all sizes, choose from a full range of transaction and Treasury Management tools to gain more control over their money. Treasury Management solutions include Business Online and Mobile Banking, Business Bill Pay, ACH collections and payments, Remote Deposit Capture, and a variety of tools to protect against fraud and manage excess funds.

Merchant Card Services

We partner with Vantiv to provide businesses with a broad range of payment acceptance solutions to meet their customer's needs. Our Merchant Card Services provides businesses with sophisticated technology, competitive pricing and best-in-class service for their merchant needs.

International Banking

Columbia International Banking offers a range of financial services to help our business customers explore global markets and conduct international trade smoothly and expediently. We are proud to provide small and mid-size businesses with the same caliber of expertise and personalized service that national banks usually limit to large businesses. Our experience with foreign currency exchange, letters of credit, foreign collections and trade finance services can help companies open the door to new markets and suppliers overseas.

Wealth Management: We offer tailored solutions to individuals, families and professional businesses in the areas of financial services and private banking, as well as trust and investment services.

CB Financial Services

CB Financial Services⁽¹⁾ offers a comprehensive array of financial solutions that focuses on wealth management by delivering personalized service and experience through dedicated financial advisors serving various geographical areas.

Financial Services solutions include:

- **Financial Planning:** Asset Allocation, Net Worth Analysis, Estate Planning & Preservation⁽²⁾, Education Funding and Wealth Transfer.
- **Wealth Management:** Professional Asset Management, Tailored Investment Strategies and Professional Money Managers.
- **Insurance Solutions:** Long-Term Care and Life and Disability Insurance.
- **Individual Retirement Solutions:** Retirement Planning, Retirement Income Strategies and Traditional and Roth IRAs.
- **Business Solutions:** Business Retirement Plans, Key Person Insurance, Business Succession Planning and Deferred Compensation Plans.

Private Banking

Columbia Private Banking offers affluent clientele and their businesses complex financial solutions, such as deposit and treasury management services, credit services and wealth management strategies. Each private banker coordinates a relationship team of experienced financial professionals to meet the unique needs of each discerning customer.

(1) Securities and insurance products are offered through Cetera Investment Services LLC (doing insurance business in California as CFGIS Insurance Agency), member FINRA/SIPC. Advisory services are offered through Cetera Investment Advisers LLC. Neither firm is affiliated with the financial institution where investment services are offered.

* Investment products are not FDIC insured * No bank guarantee * Not a deposit * Not insured by any federal government agency * May lose value.

(2) For a comprehensive review of your personal situation, always consult a tax or legal advisor. Neither Cetera, nor any of its representatives may give legal or tax advice.

Trust and Investment Services: Through our Columbia Trust Company subsidiary, we offer a wide range of high quality fiduciary, investment and administrative trust services, coupled with local, personalized attention to the unique requirements of each trust. Services include Personal Trusts, Special Needs (Supplemental) Trusts, Estate Settlement Services, Investment Agency and Charitable Management Services. A more complete listing of all the services and products available to our customers can be found on Columbia Trust's website: www.columbiatrustcompany.com. Information contained on Columbia Trust's website is not incorporated by reference into this report.

Competition

Our industry is highly competitive. Several other financial institutions with greater resources compete for banking business in our market areas. These competitors have the ability to make larger loans, finance extensive advertising and promotional campaigns, access international financial markets and allocate their investment assets to regions of highest yield and demand. In addition to competition from other banking institutions, we continue to compete with non-banking companies such as credit unions, brokerage houses, financial technology companies and other financial services companies. We compete for deposits, loans, and other financial services by offering our customers similar breadth of products as our larger competitors while delivering a more personalized service level.

Employees

As of December 31, 2019, the Company employed 2,162 full-time equivalent employees. We value our employees and pride ourselves on providing a professional work environment accompanied by comprehensive pay and benefit programs. We are committed to providing flexible and value-added benefits to our employees through a "Total Compensation Philosophy" which incorporates all compensation and benefits. Our continued commitment to employees was demonstrated by Columbia Bank being honored as one of the *Puget Sound Business Journal's* "Washington's Best Workplaces" for the 13th consecutive year. Additionally, Columbia Bank was again ranked as one of the best banks in America by Forbes.

Available Information

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, periodic reports on Form 8-K, proxy statements and other information with the United States SEC. The public may obtain copies of these reports and any amendments at the SEC's website: www.sec.gov.

Additionally, reports filed with the SEC can be obtained free of charge through our website at www.columbiabank.com. These reports are made available through our website as soon as reasonably practicable after they are filed electronically with the SEC. Information contained on our website is not incorporated by reference into this report.

Supervision and Regulation

The following discussion provides an overview of certain elements of the extensive regulatory framework applicable to the Company and Columbia State Bank, which operates under the name Columbia Bank in Washington, Oregon and Idaho. This regulatory framework is primarily designed for the protection of depositors, customers, federal deposit insurance funds and the banking system as a whole, rather than specifically for the protection of shareholders or non-depository creditors. Due to the breadth and growth of this regulatory framework, our costs of compliance continue to increase in order to monitor and satisfy these requirements.

To the extent that this section describes statutory and regulatory provisions, it is qualified by reference to those provisions. These statutes and regulations, as well as related policies, are subject to change by Congress, state legislatures and federal and state regulators. Changes in statutes, regulations or regulatory policies applicable to us, including the interpretation or implementation thereof, cannot be predicted, but may have a material effect on our business, financial condition, or results of operations. Our continued efforts to monitor and comply with new regulatory requirements and developments add to the complexity and cost of our business.

Federal and State Bank Holding Company Regulation

General. The Company is a bank holding company as defined in the BHCA, and is therefore subject to regulation, supervision and examination by the Federal Reserve. In general, the BHCA limits the business of bank holding companies to owning or controlling banks and engaging in other activities closely related to banking. The Company must file reports with and provide the Federal Reserve such additional information as it may require. Under the Financial Services Modernization Act of 1999, a bank holding company may apply to the Federal Reserve to become a financial holding company, and thereby engage (directly or through a subsidiary) in certain expanded activities deemed financial in nature, such as securities and insurance underwriting. As of the date of this report, we have not elected to be treated as a financial holding company.

Holding Company Bank Ownership. The BHCA requires every bank holding company to obtain the prior approval of the Federal Reserve before (i) acquiring, directly or indirectly, ownership or control of any voting shares of another bank or bank holding company if, after such acquisition, it would own or control more than 5% of such shares; (ii) acquiring all or substantially all of the assets of another bank or bank holding company; or (iii) merging or consolidating with another bank holding company. In addition, under the Bank Merger Act of 1960, as amended, the prior approval of the FDIC is required for the Bank to merge with another bank or purchase all or substantially all of the assets or assume any of the deposits of another FDIC-insured depository institution. In reviewing applications seeking approval of merger and acquisition transactions, bank regulators consider, among other things, the competitive effect and public benefits of the transactions, the capital position and managerial resources of the combined organization, the risks to the stability of the U.S. banking or financial system, the applicant's performance record under the CRA, the applicant's compliance with fair housing and other consumer protection laws and the effectiveness of all organizations involved in combating money laundering activities. In addition, failure to implement or maintain adequate compliance programs could cause bank regulators not to approve an acquisition where regulatory approval is required or to prohibit an acquisition even if approval is not required.

Holding Company Control of Nonbanks. With some exceptions, the BHCA also prohibits a bank holding company from acquiring or retaining direct or indirect ownership or control of more than 5% of the voting shares of any company which is not a bank or bank holding company, or from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, or providing services for its subsidiaries. The principal exceptions to these prohibitions involve certain non-bank activities that, by statute or by Federal Reserve regulation or order, have been identified as activities so closely related to the business of banking as to be a proper incident thereto, such as Columbia Trust.

Tying Arrangements. We are prohibited from engaging in certain tie-in arrangements in connection with any extension of credit, sale or lease of property or furnishing of services. For example, with certain exceptions, neither the Company nor its subsidiaries may condition an extension of credit to a customer on either (i) a requirement that the customer obtain additional services provided by us; or (ii) an agreement by the customer to refrain from obtaining other services from a competitor.

Support of Subsidiary Banks. Under Federal Reserve policy and federal law, the Company is required to act as a source of financial and managerial strength to Columbia Bank, including at times when we may not be in a financial position to provide such resources, and it may not be in our, or our shareholders', best interests to do so. This means that the Company is required to commit resources, as necessary, to support Columbia Bank. Any capital loans a bank holding company makes to its subsidiary banks are subordinate to deposits and to certain other indebtedness of those subsidiary banks.

State Law Restrictions. As a Washington corporation, the Company is subject to certain limitations and restrictions under applicable Washington corporate law. For example, state law restrictions in Washington include limitations and restrictions relating to indemnification of directors, distributions to shareholders, transactions involving directors, officers or interested shareholders, maintenance of books, records, and minutes, and observance of certain corporate formalities.

Federal and State Regulation of Columbia Bank

General. The deposits of Columbia Bank, a Washington chartered commercial bank with branches in Washington, Oregon and Idaho, are insured by the FDIC. As a result, Columbia Bank is subject to supervision and regulation by the Washington Department of Financial Institutions' Division of Banks and the FDIC. These agencies have the authority to prohibit banks from engaging in what they believe constitute unsafe or unsound banking practices. Furthermore, under the FDIA, insurance of deposits may be terminated by the FDIC if the FDIC finds that the insured depository institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC. With respect to branches of Columbia Bank in Oregon and Idaho, the Bank is also subject to certain laws and regulations governing its activities in those states.

Consumer Protection. The Bank is subject to a variety of federal and state consumer protection laws and regulations that govern its relationship with consumers, including laws and regulations that impose certain disclosure requirements and regulate the manner in which we take deposits, make and collect loans, and provide other services. Failure to comply with these laws and regulations may subject the Bank to various penalties, including but not limited to, enforcement actions, injunctions, fines, civil monetary penalties, criminal penalties, punitive damages, and the loss of certain contractual rights. As an insured depository institution with assets of \$10 billion or more, the CFPB has primary enforcement and exclusive supervision authority for federal consumer financial laws over the Bank. This includes the right to obtain information about the Bank's activities and compliance systems and procedures and to detect and assess risks to consumers and markets. The CFPB engages in several activities, including (i) investigating consumer complaints about credit cards and mortgages, (ii) launching supervisory programs, (iii) conducting research for and developing mandatory financial product disclosures, and (iv) engaging in consumer financial protection rulemaking. Columbia Bank has established a compliance management system designed to ensure consumer protection.

Community Reinvestment. The CRA requires that, in connection with examinations of financial institutions within their jurisdiction, the Federal Reserve or the FDIC evaluate the record of the financial institution in meeting the credit needs of its local communities, including low and moderate-income neighborhoods, consistent with the safe and sound operation of the institution. A bank's community reinvestment record is also considered by the applicable banking agencies in evaluating mergers, acquisitions and applications to open a branch or facility. The Bank's failure to comply with the CRA could, among other things, result in the denial or delay of such transactions. The Bank received a rating of "satisfactory" in its most recently completed CRA examination. In December 2019, the OCC and FDIC issued a notice of proposed rulemaking intended to (i) clarify which activities qualify for CRA credit; (ii) update where activities count for CRA credit; (iii) create a more transparent and objective method for measuring CRA performance; and (iv) provide for more transparent, consistent, and timely CRA-related data collection, recordkeeping, and reporting. The Federal Reserve has not joined the proposed rulemaking. Management will continue to evaluate any changes to CRA regulations.

Anti-Money Laundering and Anti-Terrorism. The BSA requires all financial institutions, including banks to, among other things, establish a risk-based system of internal controls reasonably designed to prevent money laundering and the financing of terrorism. It includes a variety of recordkeeping and reporting requirements (such as cash and suspicious activity reporting) as well as due diligence/know-your-customer documentation requirements.

The Patriot Act further augments and strengthens the requirements set forth in the BSA. The Patriot Act, in relevant part, (i) prohibits banks from providing correspondent accounts directly to foreign shell banks; (ii) imposes due diligence requirements on banks opening or holding accounts for foreign financial institutions or wealthy foreign individuals; (iii) requires financial institutions to establish an anti-money-laundering compliance program; and (iv) eliminates civil liability for persons who file suspicious activity reports. The Patriot Act also includes provisions providing the government with power to investigate terrorism, including expanded government access to bank account records. An institution that fails to meet these standards may be subject to regulatory sanctions, including limitations on growth. Columbia Bank has established compliance programs designed to comply with the BSA and the Patriot Act.

Transactions with Affiliates; Insider Credit Transactions. Transactions between the Bank and its subsidiaries, on the one hand, and the Company or any other subsidiary, on the other hand, are regulated under federal banking law. The Federal Reserve Act imposes quantitative and qualitative requirements and collateral requirements on covered transactions by the Bank with, or for the benefit of, its affiliates. In addition, subsidiary banks of a bank holding company are subject to restrictions on extensions of credit to the holding company or its subsidiaries, on investments in securities of the holding company or its subsidiaries and on the use of their securities as collateral for loans to any borrower. These regulations and restrictions may limit the Company's ability to obtain funds from Columbia Bank for its cash needs, including funds for payment of dividends, interest and operational expenses.

Banks are also subject to certain restrictions imposed by the Federal Reserve Act on extensions of credit to executive officers, directors, principal shareholders or any related interests of such persons. Extensions of credit (i) must be made on substantially the same terms, including interest rates and collateral, and follow credit underwriting procedures that are at least as stringent as those prevailing at the time for comparable transactions with persons not related to the lending bank; and (ii) must not involve more than the normal risk of repayment or present other unfavorable features. Banks are also subject to certain lending limits and restrictions on overdrafts to insiders. A violation of these restrictions may result in the assessment of substantial civil monetary penalties, regulatory enforcement actions, and other regulatory sanctions. The Columbia Bank board has established controls to ensure compliance with regulatory expectations around affiliated transactions.

Regulation of Management. Federal law (i) sets forth circumstances under which officers or directors of a bank may be removed by the institution's federal supervisory agency; (ii) places constraints on lending by a bank to its executive officers, directors, principal shareholders, and their related interests; and (iii) generally prohibits management personnel of a bank from serving as directors or in other management positions of another financial institution whose assets exceed a specified amount or which has an office within a specified geographic area.

Safety and Soundness Standards. Certain non-capital safety and soundness standards are also imposed upon banks. These standards cover internal controls, information systems and internal audit systems, loan documentation, credit underwriting, interest rate exposure, asset growth, compensation, fees and benefits, such other operational and managerial standards as the agency determines to be appropriate, and standards for asset quality, earnings and stock valuation. An institution that fails to meet these standards may be subject to regulatory sanctions, including limitations on growth. Columbia Bank has established policies and risk management activities designed to ensure the safety and soundness of the Bank.

Interstate Banking and Branching

The Interstate Act together with the Dodd-Frank Act relaxed prior interstate branching restrictions under federal law by permitting, subject to regulatory approval, state and federally chartered commercial banks to establish branches in states where the laws permit banks chartered in such states to establish branches. The Interstate Act requires regulators to consult with community organizations before permitting an interstate institution to close a branch in a low-income area. Federal banking agency regulations prohibit banks from using their interstate branches primarily for deposit production and the federal banking agencies have implemented a loan-to-deposit ratio screen to ensure compliance with this prohibition.

Dividends

Columbia is a legal entity separate and distinct from the Bank and its other subsidiaries. As a bank holding company, Columbia is subject to certain restrictions on its ability to pay dividends under applicable banking laws and regulations. Federal bank regulators are authorized to determine under certain circumstances relating to the financial condition of a bank holding company or a bank that the payment of dividends would be an unsafe or unsound practice and to prohibit payment thereof. In particular, federal bank regulators have stated that paying dividends that deplete a banking organization's capital base to an inadequate level would be an unsafe and unsound banking practice and that banking organizations should generally pay dividends only out of current operating earnings. 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 significant portion of our income comes from dividends from the Bank, which is also the primary source of our liquidity. In addition to the restrictions discussed above, the Bank is subject to limitations under Washington law regarding the level of dividends that it may pay to the Company. Washington law limits a bank's ability to pay dividends that are greater than the bank's retained earnings without approval of the applicable banking agency.

Regulatory Capital Requirements

The Federal Reserve monitors the capital adequacy of the Company on a consolidated basis, and the FDIC and the Washington Department of Financial Institutions' Division of Banks monitor the capital adequacy of the Bank. The Capital Rules are based on the December 2010 final capital framework for strengthening international capital standards, known as Basel III, of the Basel Committee. As of December 31, 2019, we and the Bank met all capital adequacy requirements under the Capital Rules, as described below.

The Capital Rules, among other things (i) include a capital measure called CET1, (ii) specify that Tier 1 capital consists of CET1 and "Additional Tier 1 capital" instruments meeting specified requirements and (iii) define CET1 narrowly by requiring that most deductions/adjustments to regulatory capital measures be made to CET1 and not to the other components of capital.

Under the Capital Rules, the minimum capital ratios are (i) 4.5% CET1 to risk-weighted assets, (ii) 6% Tier 1 capital (that is, CET1 plus Additional Tier 1 capital) to risk-weighted assets and (iii) 8% total capital (that is, Tier 1 capital plus Tier 2 capital) to risk-weighted assets.

The Capital Rules also require an institution to establish a capital conservation buffer of CET1 in an amount above the minimum risk-based capital requirements for "adequately capitalized" institutions equal to 2.5% of total risk-weighted assets. Banking institutions with a ratio of CET1 to risk-weighted assets above the minimum but below the capital conservation buffer will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall and the institution's "eligible retained income" (that is, four quarter trailing net income, net of distributions and tax effects not reflected in net income).

The Capital Rules provide for a number of deductions from and adjustments to CET1. These include, for example, the requirement that mortgage servicing rights, certain deferred tax assets and significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category exceeds 10% of CET1 or all such categories in the aggregate exceed 15% of CET1. The Capital Rules also generally preclude certain hybrid securities, such as trust preferred securities, from being counted as Tier 1 capital for most bank holding companies. However, bank holding companies such as the Company who had less than \$15 billion in assets as of December 31, 2009 (and who continue to have less than \$15 billion in assets) are permitted to include trust preferred securities issued prior to May 19, 2010 as Additional Tier 1 capital under the Capital Rules.

In addition, the Company and the Bank are subject to the final rule adopted by the Federal Reserve, OCC and FDIC in July 2019 relating to simplifications of the capital rules applicable to non-advanced approaches banking organizations. These rules will be effective for the Company on April 1, 2020 and provide for simplified capital requirements relating to the threshold deductions for mortgage servicing assets, deferred tax assets arising from temporary differences that a banking organization could not realize through net operating loss carry backs, and investments in the capital of unconsolidated financial institutions, as well as the inclusion of minority interests in regulatory capital.

In December 2017, the Basel Committee published standards that it described as the finalization of the Basel III post-crisis regulatory reforms. The standards are commonly referred to as “Basel IV.” Among other things, these standards revise the Basel Committee’s standardized approach for credit risk (including by recalibrating risk weights and introducing new capital requirements for certain “unconditionally cancellable commitments,” such as home equity lines of credit) and provides a new standardized approach for operational risk capital. Under the Basel framework, these standards will generally be effective on January 1, 2022, with an aggregate output floor phasing in through January 1, 2027. Under the current U.S. capital rules, operational risk capital requirements and a capital floor apply only to advanced approach institutions. The impact of Basel IV on the Company and the Bank will depend on the manner in which it is implemented by the federal bank regulators.

The Bank is also subject to the prompt corrective action regulations pursuant to Section 38 of the FDIA. See “Prompt Corrective Action Framework.”

Prompt Corrective Action Framework

The FDIA requires the federal bank regulators to take prompt corrective action in respect of depository institutions that fail to meet specified capital requirements. The FDIA establishes five capital categories (“well-capitalized,” “adequately capitalized,” “undercapitalized,” “significantly undercapitalized” and “critically undercapitalized”), and the federal bank regulators are required to take certain mandatory supervisory actions, and are authorized to take other discretionary actions, with respect to institutions that are undercapitalized, significantly undercapitalized or critically undercapitalized. The severity of these mandatory and discretionary supervisory actions depends upon the capital category in which the institution is placed. Generally, subject to a narrow exception, the FDIA requires the regulator to appoint a receiver or conservator for an institution that is critically undercapitalized.

Under the rules currently in effect, the following table presents the requirements for an insured depository institution to be classified as well-capitalized or adequately capitalized:

“Well-capitalized”

Total capital ratio of at least 10%,
Tier 1 capital ratio of at least 8%,
CET1 ratio of at least 6.5%
Tier 1 leverage ratio of at least 5%, and
Not subject to any order or written directive requiring a specific capital level.

“Adequately capitalized”

Total capital ratio of at least 8%,
Tier 1 capital ratio of at least 6%
CET1 ratio of at least 4.5%, and
Tier 1 leverage ratio of at least 4%.

An institution may be downgraded to, or deemed to be in, a capital category that is lower than indicated by its capital ratios if it is determined to be in an unsafe or unsound condition or if it receives an unsatisfactory examination rating with respect to certain matters. A bank’s capital category is determined solely for the purpose of applying prompt corrective action regulations, and the capital category may not constitute an accurate representation of the bank’s overall financial condition or prospects for other purposes.

As of December 31, 2019, we and the Bank met the capital requirements to be well-capitalized with CET1 capital ratios of 12.45% and 12.46%, respectively, Tier 1 capital ratios of 12.45% and 12.46%, respectively, total capital ratios of 13.60% and 13.29%, respectively, and Tier 1 leverage ratios of 10.17% and 10.22%, respectively.

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 bank regulator. Under the FDIA, in order for the capital restoration plan to be accepted by the appropriate federal banking agency, a bank holding company must guarantee that a subsidiary depository institution will comply with its capital restoration plan, subject to certain limitations. The bank holding company must also provide appropriate assurances of performance. The obligation of a controlling bank holding company under the FDIA to fund a capital restoration plan is limited to the lesser of 5% of an undercapitalized subsidiary's assets or the amount required to meet regulatory capital requirements. An undercapitalized institution is also generally prohibited from increasing its average total assets, making acquisitions and capital distributions, establishing any branches or engaging in any new line of business, except in accordance with an accepted capital restoration plan or with the approval of the FDIC. Institutions that are undercapitalized or significantly undercapitalized and either fail to submit an acceptable capital restoration plan or fail to implement an approved capital restoration plan may be subject to a number of requirements and restrictions, including orders to sell sufficient voting stock to become adequately capitalized, requirements to reduce total assets and cessation of receipt of deposits from correspondent banks. Critically undercapitalized depository institutions failing to submit or implement an acceptable capital restoration plan are subject to appointment of a receiver or conservator.

Brokered Deposits

The FDIA prohibits an insured depository institution from accepting brokered deposits or offering interest rates on any deposits significantly higher than the prevailing rate in the bank's normal market area or nationally (depending upon where the deposits are solicited), unless it is well-capitalized or is adequately capitalized and receives a waiver from the FDIC. A depository institution that is adequately capitalized and accepts brokered deposits under a waiver from the FDIC may not pay an interest rate on any deposit in excess of 75 basis points over certain prevailing market rates.

On December 12, 2019, the FDIC issued a notice of proposed rulemaking intended to modernize its brokered deposit regulations in light of modern deposit-taking methods. The impact on the Company and the Bank will depend on the final form of the proposed rule, which the Company is unable to predict.

Regulatory Oversight and Examination

The Federal Reserve conducts periodic inspections of bank holding companies. The supervisory objectives of the inspection program are to ascertain whether the financial strength of the bank holding company is being maintained on an ongoing basis and to determine the effects or consequences of transactions between a holding company or its non-banking subsidiaries and its subsidiary banks.

Banks are subject to periodic examinations by their primary regulators. Bank examinations have evolved from reliance on transaction testing in assessing a bank's condition to a risk-focused approach. These examinations are extensive and cover the entire breadth of operations of the bank. Generally, FDIC safety and soundness examinations for a bank of our size are completed on an annual basis through the execution of a quarterly focal review process. The FDIC and state bank regulatory agencies complete these examinations on a combined schedule.

The CFPB has primary examination and enforcement authority over institutions with assets of \$10 billion or more, including the Bank, with respect to various federal consumer protection laws, and we are subject to continued examination by the FDIC on certain consumer regulations. State authorities are also responsible for monitoring our compliance with all state consumer laws.

The frequency of consumer compliance and CRA examinations is linked to the size of the institution and its compliance and CRA ratings at its most recent examinations. However, the examination authority of the Federal Reserve and the FDIC allows them to examine supervised banks as frequently as deemed necessary based on the condition of the bank or as a result of certain triggering events.

Corporate Governance and Accounting

SOX addresses, among other things, corporate governance, auditing and accounting, enhanced and timely disclosure of corporate information, and penalties for non-compliance. Generally, SOX (i) requires CEOs and CFOs to certify the accuracy of periodic reports filed with the SEC; (ii) imposes specific and enhanced corporate disclosure requirements; (iii) accelerates the time frame for reporting of insider transactions and periodic disclosures by public companies; (iv) requires companies to adopt and disclose information about corporate governance practices, including whether or not they have adopted a code of ethics for senior financial officers and whether the audit committee includes at least one "audit committee financial expert;" and (v) requires the SEC, based on certain enumerated factors, to regularly and systematically review corporate filings.

Deposit Insurance

The Bank's deposits are insured under the FDIA, up to the maximum applicable limits and are subject to deposit insurance assessments designed to tie what banks pay for deposit insurance to the risks they pose. Under the FDIC's assessment system for determining payments to the DIF, large IDIs with more than \$10 billion in assets are assessed under a complex "scorecard" methodology that seeks to capture both the probability that an individual large IDI will fail and the magnitude of the impact on the DIF if such a failure occurs. The assessment base of a large IDI is its total assets less tangible equity.

The Volcker Rule

The Dodd-Frank Act prohibits banks and their affiliates from engaging in proprietary trading and investing in and sponsoring hedge funds and private equity funds. The statutory provision is commonly called the "Volcker Rule." The Volcker Rule does not significantly impact the operations of the Company and the Bank, as we do not have any significant engagement in the businesses prohibited by the Volcker Rule.

Interchange Fees

Under the Durbin Amendment to the Dodd-Frank Act, the Federal Reserve adopted rules establishing standards for assessing whether the interchange fees that may be charged with respect to certain electronic debit transactions are "reasonable and proportional" to the costs incurred by issuers for processing such transactions.

Interchange fees, or "swipe" fees, are charges that merchants pay to us and other card-issuing banks for processing electronic payment transactions. Under the final rules, the maximum permissible interchange fee is equal to no more than 21 cents plus 5 basis points of the transaction value for many types of debit interchange transactions. The Federal Reserve also adopted a rule to allow a debit card issuer to recover one cent per transaction for fraud prevention purposes if the issuer complies with certain fraud-related requirements required by the Federal Reserve. The Federal Reserve also has rules governing routing and exclusivity that require issuers to offer two unaffiliated networks for routing transactions on each debit or prepaid product.

Incentive Compensation

The Dodd-Frank Act requires the federal bank regulators and the SEC to establish joint regulations or guidelines prohibiting incentive-based payment arrangements at specified regulated entities, including us and the Bank, having at least \$1 billion in total assets that encourage inappropriate risks by providing an executive officer, employee, director or principal stockholder with excessive compensation, fees, or benefits or that could lead to material financial loss to the entity. In addition, these regulators must establish regulations or guidelines requiring enhanced disclosure to regulators of incentive-based compensation arrangements.

In June 2010, the Federal Reserve and FDIC issued comprehensive final guidance on incentive compensation policies intended to ensure that the incentive compensation policies of banking organizations do not undermine the safety and soundness of such organizations by encouraging excessive risk-taking. The guidance, which covers all employees that have the ability to materially affect the risk profile of an organization, either individually or as part of a group, is based upon the key principles that a banking organization's incentive compensation arrangements should (i) provide incentives that appropriately balance risk and financial results in a manner that does not encourage employees to expose their organizations to imprudent risk, (ii) be compatible with effective internal controls and risk management and (iii) be supported by strong corporate governance, including active and effective oversight by the organization's board of directors.

During the second quarter of 2016, the U.S. financial regulators, including the Federal Reserve and the SEC, proposed revised rules on incentive-based payment arrangements at specified regulated entities having at least \$1 billion in total assets, but these proposed rules have not been finalized.

The Federal Reserve will review, as part of the regular, risk-focused examination process, the incentive compensation arrangements of banking organizations, such as us, that are not "large, complex banking organizations." These reviews will be tailored to each organization based on the scope and complexity of the organization's activities and the prevalence of incentive compensation arrangements. The findings of the supervisory initiatives will be included in reports of examination. Deficiencies will be incorporated into the organization's supervisory ratings, which can affect the organization's ability to make acquisitions and take other actions. Enforcement actions may be taken against a banking organization if its incentive compensation arrangements, or related risk management control or governance processes, pose a risk to the organization's safety and soundness and the organization is not taking prompt and effective measures to correct the deficiencies.

Proposed Legislation

Proposed legislation relating to the banking industry is introduced in almost every legislative session. Certain of such legislation could dramatically affect the regulation of the banking industry. We cannot predict if any such legislation will be adopted or if it is adopted how it would affect the business of Columbia Bank or the Company. Recent history has demonstrated that new legislation or changes to existing laws or regulations usually results in a greater compliance burden and therefore generally increases the cost of doing business.

Effects of Government Monetary Policy

Our earnings and growth are affected not only by general economic conditions, but also by the fiscal and monetary policies of the federal government, particularly the Federal Reserve. The Federal Reserve implements national monetary policy for such purposes as curbing inflation and combating recession, but its open market operations in U.S. government securities, control of the discount rate applicable to borrowings from the Federal Reserve, and establishment of reserve requirements against certain deposits, influence the growth of bank loans, investments and deposits, and also affect interest rates charged on loans or paid on deposits. The nature and impact of future changes in monetary policies and their impact on us cannot be predicted with certainty.

ITEM 1A. RISK FACTORS

The following is a discussion of what we currently believe are the most significant risks and uncertainties that may affect our business, financial condition and future results.

National and global economic and other conditions could adversely affect our future results of operations or market price of our stock.

Our business is directly impacted by factors such as economic, political and market conditions, broad trends in industry and finance, changes in government monetary and fiscal policies and inflation, foreign policy, and financial market volatility, all of which are beyond our control. Global economies continue to face significant challenges to achieving normalized economic growth rates and there are continuing concerns related to the level of U.S. government debt and fiscal actions that may be taken to address that debt. There can be no assurance that economic conditions will continue to improve, and these conditions could worsen. Any renewed deterioration in the economies of the nation as a whole or in our markets would have an adverse effect, which could be material, on our business, financial condition, results of operations and prospects, and could also cause the market price of our stock to decline.

Economic conditions in the market areas we serve may adversely impact our earnings and could increase our credit risk associated with our loan portfolio, the value of our investment portfolio and the availability of deposits.

Substantially all of our loan and deposit customers are businesses and individuals in Washington, Oregon and Idaho, and soft economies in these market areas could have a material adverse effect on our business, financial condition, results of operations and prospects. A deterioration in the market areas we serve could result in the following consequences, any of which would have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects:

- loan delinquencies may increase;
- problem assets and foreclosures may increase;
- collateral for loans made may decline in value, in turn reducing customers' borrowing power, reducing the value of assets and collateral associated with existing loans;
- certain securities within our investment portfolio could become other-than-temporarily impaired, requiring a write-down through earnings to fair value, thereby reducing equity;
- low cost or non-interest bearing deposits may decrease; and
- demand for our loan and other products and services may decrease.

Concentrations within our loan portfolio could result in increased credit risk in a challenging economy.

While our loan portfolio is diversified across business sectors, it is concentrated in commercial real estate and commercial business loans. These types of loans generally are viewed as having more risk of default than residential real estate loans or certain other types of loans or investments. In fact, the FDIC has issued pronouncements alerting banks of its concern about heavy loan concentrations. Because our loan portfolio contains commercial real estate and commercial business loans with relatively large balances, the deterioration of one or a few of these loans may cause a significant increase in our nonperforming loans. An increase in nonperforming loans could result in a loss of earnings from these loans, an increase in the provision for loan losses, or an increase in loan charge-offs, any of which would have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects.

A large percentage of our loan portfolio is secured by real estate, in particular commercial real estate. Deterioration in the real estate market or other segments of our loan portfolio would lead to additional losses.

At December 31, 2019, 60% of our total gross loans were secured by real estate. Any renewed downturn in the economies or real estate values in the markets we serve could have a material adverse effect on both borrowers' ability to repay their loans and the value of the real property securing such loans. Our ability to recover on defaulted loans would then be diminished, and we would be more likely to suffer losses on defaulted loans, any or all of which would have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects.

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

As a financial institution, our operations rely heavily on the secure processing, storage and transmission of confidential and other information on our computer systems and networks. Any failure, interruption or breach in security or operational integrity of these systems could result in failures or disruptions in our online banking system, customer relationship management, general ledger, deposit and loan servicing and other systems. The security and integrity of our systems could be threatened by a variety of interruptions or information security breaches, including those caused by computer hacking, cyber- attacks, electronic fraudulent activity or attempted theft of financial assets. We may not be able to anticipate, detect, or implement effective preventative measures against all threats, particularly because the techniques used by cyber criminals change frequently, often are not recognized until launched and can be initiated from a variety of sources. We cannot assure you that we will be able to adequately address all such failures, interruptions or security breaches that may have a material adverse impact on our business, financial condition, results of operations and prospects. While we have certain protective policies and procedures in place, the nature and sophistication of the threats continue to evolve. We may be required to expend significant additional resources in the future to modify and enhance our protective measures.

Due to the complexity and interconnectedness of information technology systems, the process of enhancing our systems can itself create a risk of systems disruptions and security issues. Additionally, we face the risk of operational disruption, failure, termination or capacity constraints of any of the third parties that facilitate our business activities, including exchanges, clearing agents, clearing houses or other financial intermediaries. Such parties can also be the source of an attack on, or breach of, our operational systems. Any failures, interruptions or security breaches in our information systems could damage our reputation, result in a loss of customer business, result in a violation of privacy or other laws, or expose us to civil litigation, regulatory fines or losses not covered by insurance, all of which could have a material adverse impact on our business, financial condition, results of operations and prospects.

The confidential information of our customers (including user names and passwords) can also be jeopardized from the compromise of customers' personal electronic devices or as a result of a data security breach at an unrelated company. Losses due to unauthorized account activity could harm our reputation and may have a material adverse effect on our business, financial condition, results of operations and prospects.

Our allowance may not be adequate to cover future loan losses, which could adversely affect earnings.

We maintain an allowance for credit losses (for periods prior to January 1, 2020, referred to as the allowance for loan and lease losses) in an amount that we believe is adequate to provide for losses inherent in our loan portfolio. While we strive to carefully monitor credit quality and to identify loans that may become nonperforming, at any time there are loans in the portfolio that could result in losses, but that have not been identified as nonperforming or potential problem loans. We cannot be sure that we will be able to identify deteriorating loans before they become nonperforming assets, or that we will be able to limit losses on those loans that have been identified. Additionally, the process for determining the allowance requires different, subjective and complex judgments about the future impact from current economic conditions that might impair the ability of borrowers to repay their loans. As a result, future significant increases to the allowance may be necessary. Future increases to the allowance may be required based on changes in the composition of the loans comprising the portfolio, deteriorating values in underlying collateral (most of which consists of real estate) and changes in the financial condition of borrowers, such as may result from changes in economic conditions, or as a result of actual future events differing from assumptions used by management in determining the allowance.

We have adopted ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326) Measurement of Credit Losses on Financial Instruments* (“CECL”) effective January 1, 2020. This standard requires financial institutions to determine periodic estimates of lifetime expected credit losses on financial instruments and other commitments to extend credit. This standard changes the prior incurred loss model for recognizing credit losses, and adoption of the new standard requires us to increase our allowance, and may greatly increase the types of data we need to collect and review to determine the appropriate level of the allowance.

Additionally, banking regulators, as an integral part of their supervisory function, periodically review our allowance. These regulatory agencies may require us to increase the allowance. Any increase in the allowance would have an adverse effect, which could be material, on our financial condition and results of operations.

Nonperforming assets take significant time to resolve and could adversely affect our results of operations and financial condition.

Our nonperforming assets adversely affect our net income in various ways. We do not record interest income on nonaccrual loans, thereby adversely affecting our income and increasing loan administration costs. Assets acquired by foreclosure or similar proceedings are recorded at fair value less estimated costs to sell. The valuation of these foreclosed assets is periodically updated and resulting losses, if any, are charged to earnings in the period in which they are identified. An increase in the level of nonperforming assets also increases our risk profile and may impact the capital levels our regulators believe is appropriate in light of such risks. We utilize various techniques such as loan sales, workouts, and restructurings to manage our problem assets. Decreases in the value of these problem assets, the underlying collateral, or in the borrowers' performance or financial condition would have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects. In addition, the resolution of nonperforming assets requires significant commitments of time from management and staff, which can be detrimental to performance of their other responsibilities. We may experience increases in nonperforming loans in the future.

Acquisitions and the integration of acquired businesses subject us to various risks and may not result in all of the benefits anticipated, future acquisitions may be dilutive to current shareholders and future acquisitions may be delayed, impeded or prohibited due to regulatory issues.

We have in the past and expect in the future seek to grow our business by acquiring other businesses. Our acquisitions may not have the anticipated positive results, including results relating to: correctly assessing the asset quality of the assets being acquired; the total cost of integration including management attention and resources; the time required to complete the integration successfully; the amount of longer-term cost savings; being able to profitably deploy funds acquired in an acquisition; or the overall performance of the combined entity.

In addition, unexpected contingent liabilities can arise from the businesses we acquire. Integration of an acquired business can be complex and costly, sometimes including combining relevant accounting and data processing systems, financial reporting and management and internal controls, as well as managing relevant relationships with employees, clients, suppliers and other business partners. Integration efforts could divert management attention and resources, which could adversely affect these systems, processes or controls and our operations or results.

Acquisitions may also result in business disruptions that cause us to lose customers or cause customers to remove their accounts from us and move their business to competing financial institutions. It is possible that the integration process related to acquisitions could result in the disruption of our ongoing businesses or inconsistencies in standards, controls, procedures and policies that could adversely affect our ability to maintain relationships with clients, customers, depositors and employees. The loss of key employees in connection with an acquisition could adversely affect our ability to successfully conduct our business.

We may engage in additional future acquisitions involving the issuance of additional common stock and/or cash. Any such acquisitions and related issuances of stock may have a dilutive effect on EPS, book value per share or the percentage ownership of current shareholders. The use of cash as consideration in any such acquisitions could impact our capital position and may require us to raise additional capital.

Furthermore, notwithstanding our recent acquisitions, we cannot provide any assurance as to the extent to which we can continue to grow through acquisitions as this will depend on the availability of prospective target opportunities at valuations we find attractive and other factors. Among other things, acquisitions by financial institutions are subject to approval by a variety of federal and state regulatory agencies. Regulatory approvals could be delayed, impeded, restrictively conditioned or denied due to existing or new regulatory issues we have, or may have, with regulatory agencies. In addition, the Northwest is experiencing intensified consolidation and we face significant competition from numerous other financial services institutions for attractive acquisition candidates, and many of these competitors have greater financial resources than we do.

Our assumptions regarding the fair value of assets acquired could be inaccurate, which could materially and adversely affect our business, financial condition, results of operations, and future prospects.

Management makes various assumptions and judgments about the collectability of acquired loans, including the creditworthiness of borrowers and the value of the real estate and other assets serving as collateral for the repayment of secured loans. If our assumptions are incorrect, significant earnings volatility can occur and credit loss provisions may be needed to respond to different economic conditions or adverse developments in the acquired loan portfolio. Any increase in future loan losses could have a material adverse impact on our business, financial condition, results of operations and prospects.

Our management of capital could adversely affect profitability measures and the market price of our common stock and could dilute the holders of our outstanding common stock.

Our capital ratios are significantly higher than regulatory minimums. We may lower our capital ratios through selective acquisitions that meet our disciplined criteria, share repurchase plans, organic loan growth, investment in securities, or a combination of all four. We continually evaluate opportunities to expand our business through strategic acquisitions. There can be no assurance that we will be able to negotiate future acquisitions on terms acceptable to us.

Conversely, there may be circumstances under which it would be prudent to consider alternatives for raising capital to take advantage of significant acquisition opportunities or in response to changing economic conditions. In addition, we may need to raise additional capital in the future to have sufficient capital resources and liquidity to meet our commitments and fund our business needs and future growth, particularly if the quality of our assets or earnings were to deteriorate significantly. We may not be able to raise additional capital when needed on terms acceptable to us or at all. Our ability to raise additional capital, if needed, will depend on, among other things, conditions in the capital markets at the time, which are outside our control, and our financial performance. Further, if we need to raise capital in the future, we may have to do so when many other financial institutions are also seeking to raise capital and would then have to compete with those institutions for investors. An inability to raise additional capital on acceptable terms when needed could have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, any capital raising alternatives could dilute the holders of our outstanding common stock and may adversely affect the market price of our common stock.

Conditions in the financial markets may limit access to additional funding to meet liquidity needs.

We may need or want to raise additional capital in the future to provide us with sufficient capital resources and liquidity to meet our commitments and business needs, particularly if our asset quality or earnings were to deteriorate significantly. Our ability to raise additional capital will depend on, among other things, conditions in the capital markets at that time, which are outside of our control, and our financial performance. Economic conditions and any loss of confidence in financial institutions generally may increase our cost of funding and limit access to certain customary sources of capital.

There can be no assurance that capital will be available on acceptable terms or at all. Any occurrence that may limit our access to the capital markets, such as a decline in the confidence of equity or debt purchasers, or counterparties participating in capital markets, may adversely affect our capital costs and our ability to raise capital and, potentially, our liquidity. Also, if we need to raise capital in the future, we may have to do so when many other financial institutions are also seeking to raise capital and would have to compete with those institutions for investors. An inability to raise additional capital on acceptable terms when needed could have a materially adverse effect on our business, financial condition and results of operations.

If the goodwill we have recorded in connection with acquisitions becomes impaired, it could have a material adverse impact on our earnings and shareholders' equity.

Accounting standards require that we account for acquisitions using the acquisition method of accounting. Under acquisition accounting, if the purchase price of an acquired company exceeds the fair value of its net assets, the excess is carried on the acquirer's balance sheet as goodwill. In accordance with GAAP, our goodwill is evaluated for impairment on an annual basis or more frequently if events or circumstances indicate that a potential impairment exists. Such evaluation may be based on a variety of factors, including the quoted price of our common stock, market prices of common stock of other banking organizations, common stock trading multiples, discounted cash flows, and data from comparable acquisitions. Future evaluations of goodwill may result in impairment and ensuing write-downs, which could have a material adverse impact on our earnings and shareholders' equity.

Fluctuating interest rates could adversely affect our business.

Significant increases in market interest rates on loans, or the perception that an increase may occur, could adversely affect both our ability to originate new loans and our ability to grow. Conversely, decreases in interest rates could result in an acceleration of loan prepayments. An increase in market interest rates could also adversely affect the ability of our floating-rate borrowers to meet their higher payment obligations. If this occurred, it could cause an increase in nonperforming assets and charge offs, which could adversely affect our business.

Further, our profitability is dependent to a large extent upon net interest income, which is the difference (or “spread”) between the interest earned on loans, securities and other interest-earning assets and the interest paid on deposits, borrowings, and other interest-bearing liabilities. Because of the differences in maturities and repricing characteristics of our interest-earning assets and interest-bearing liabilities, changes in interest rates do not produce equivalent changes in interest income earned on interest-earning assets and interest paid on interest-bearing liabilities. Accordingly, fluctuations in interest rates could adversely affect our interest rate spread, and, in turn, our profitability.

Interest rates on our outstanding financial instruments might be subject to change based on regulatory developments, which could adversely affect our revenue, expenses, and the value of those financial instruments.

LIBOR and certain other “benchmarks” are the subject of recent national, international, and other regulatory guidance and proposals for reform. These reforms may cause such benchmarks to perform differently than in the past or have other consequences which cannot be predicted. On July 27, 2017, the United Kingdom’s Financial Conduct Authority, which regulates LIBOR, publicly announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. It is unclear whether, at that time, LIBOR will continue to be viewed as an acceptable market benchmark, or what rate or rates may become acceptable alternatives to or replacements for LIBOR. If LIBOR ceases to be recognized as an acceptable benchmark or to exist or if an alternative rate or rates become accepted alternatives or replacements for LIBOR, interest rates on our loans, deposits, derivatives, and other financial instruments tied to LIBOR rates, as well as the revenue and expenses associated with those financial instruments, may be adversely affected. Further, any uncertainty regarding the continued use and reliability of LIBOR as a benchmark interest rate could adversely affect the value of our loans, deposits, derivatives, and other financial instruments tied to LIBOR rates.

Regulators, industry groups and certain committees (e.g., the Alternative Reference Rates Committee) have, among other things, published recommended fallback language for LIBOR-linked financial instruments, identified recommended alternatives for certain LIBOR rates (e.g., the Secured Overnight Financing Rate as the recommended alternative to U.S. Dollar LIBOR), and proposed implementations of the recommended alternatives in floating rate instruments. At this time, it is not possible to predict whether these recommendations and proposals will be broadly accepted, whether they will continue to evolve, and what the effect of their implementation may be on the markets for floating-rate financial instruments

Our business depends on our ability to successfully manage credit risk.

The operation of our business requires us to manage credit risk. As a lender, we are exposed to the risk that our borrowers will be unable to repay their loans according to their terms, and that the collateral securing repayment of their loans, if any, may not be sufficient to ensure repayment. In addition, there are risks inherent in making any loan, including risks with respect to the period of time over which the loan 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 borrowers. In order to successfully manage credit risk, we must, among other things, maintain disciplined and prudent underwriting standards and ensure that our bankers follow those standards. The weakening of these standards for any reason, such as an attempt to attract higher yielding loans, a lack of discipline or diligence by our employees in underwriting and monitoring loans, the inability of our employees to adequately adapt policies and procedures to changes in economic or any other conditions affecting borrowers and the quality of our loan portfolio, may result in loan defaults, foreclosures and additional charge-offs and may necessitate that we increase our ALLL, each of which could adversely affect our net income. As a result, our inability to successfully manage credit risk could have a material adverse effect on our business, financial condition, results of operations and prospects.

We operate in a highly regulated environment and changes to or increases in, or supervisory enforcement of, banking or other laws and regulations or governmental fiscal or monetary policies could adversely affect us.

We are subject to extensive regulation, supervision and examination by federal and state banking authorities. In addition, as a publicly-traded company, we are subject to regulation by the SEC. Any change in applicable regulations or federal, state or local legislation or in policies or interpretations or regulatory approaches to compliance and enforcement, income tax laws and accounting principles could have a substantial impact on us and our operations. Changes in laws and regulations may also increase our expenses by imposing additional fees or taxes or restrictions on our operations. Additional legislation and regulations that could significantly affect our powers, authority and operations may be enacted or adopted in the future, which could have a material adverse effect on our business, financial condition, results of operations and prospects. Failure to appropriately comply with any such laws, regulations or principles could result in sanctions by regulatory agencies or damage to our reputation, all of which could adversely affect our business, financial condition or results of operations. For example, the Dodd-Frank Act was enacted in July 2010. Among other provisions, the legislation (i) created the CFPB with broad powers to regulate consumer financial products such as credit cards and mortgages, (ii) resulted in new capital requirements from federal banking agencies, (iii) placed new limits on electronic debit card interchange fees and (iv) required the SEC and national stock exchanges to adopt significant new corporate governance and executive compensation reforms, some of which have yet to be promulgated. The Dodd-Frank Act and regulations that have been adopted thereunder have increased the overall costs of regulatory compliance, and further regulatory developments whether related to Dodd-Frank or otherwise may lead to additional costs. In addition, the CFPB has broad rulemaking authority and is the principal federal regulatory agency responsible for the supervision and enforcement of a wide range of consumer protection laws for banks with greater than \$10 billion in assets.

If we fail to maintain appropriate levels of capital or liquidity, we could become subject to formal or informal enforcement actions that may impose restrictions on our business, including limiting our lending activities or our ability to expand, requiring us to raise additional capital (which may be dilutive to shareholders) or requiring regulatory approval to pay dividends or otherwise return capital to shareholders.

Further, regulators have significant discretion and authority to prevent or remedy unsafe or unsound practices or violations of laws or regulations by financial institutions and holding companies in the performance of their supervisory and enforcement duties. The exercise of regulatory authority may have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects. Additionally, our business is affected significantly by the fiscal and monetary policies of the U.S. federal government and its agencies, including the Federal Reserve.

We cannot accurately predict the full effects of recent legislation or the various other governmental, regulatory, monetary and fiscal initiatives which have been and may be enacted on the financial markets, on the Company and on the Bank. The terms and costs of these activities, or any worsening of current financial market and economic conditions, could materially and adversely affect our business, financial condition and results of operations, as well as the trading price of our common stock.

We may be required, in the future, to recognize impairment with respect to investment securities.

Our securities portfolio currently includes securities with unrecognized losses. At December 31, 2019, gross unrealized losses in our securities portfolio were \$20.4 million. We may continue to observe declines in the fair market value of these securities. Securities issued by certain states and municipalities have recently come under scrutiny due to concerns about credit quality. Although management believes the credit quality of the Company's state and municipal securities portfolio to be good, there can be no assurance that the credit quality of these securities will not decline in the future. We evaluate the securities portfolio for any other-than-temporary impairment each reporting period, as required by GAAP in the United States. There can be no assurance, however, that future evaluations of the securities portfolio will not require us to recognize impairment charges with respect to these and other holdings. For example, it is possible that government-sponsored programs to allow mortgages to be refinanced to lower rates could materially adversely impact the yield on our portfolio of mortgage-backed securities, since a significant portion of our investment portfolio is composed of such securities.

Substantial competition in our market areas could adversely affect us.

Commercial banking is a highly competitive business. We compete with other commercial banks, savings and loan associations, credit unions and finance, insurance and other non-depository companies operating in our market areas. We also experience competition, especially for deposits, from Internet-based banking institutions, which have grown rapidly in recent years. We are subject to substantial competition for loans and deposits from other financial institutions. Some of our competitors are not subject to the same degree of regulation and restriction as we are and/or have greater financial resources than we do. Some of our competitors may have liquidity issues, which could impact the pricing of deposits, loans and other financial products in our markets. Our inability to effectively compete in our market areas could have a material adverse impact on our business, financial condition, results of operations and prospects.

We may not be able to attract or retain key employees.

Our success depends in significant part on the skills of our management team and our ability to retain, recruit and motivate key officers and employees. We expect our future success to be driven in large part by the relationships maintained with our clients by our executives and other key employees. Leadership changes will occur from time to time, and we cannot predict whether significant resignations or other departures will occur or whether we will be able to recruit additional qualified personnel. Competition for senior executives and skilled personnel in the financial services and banking industry is intense, which means the cost of hiring, incentivizing and retaining skilled personnel may continue to increase. We need to continue to attract and retain key personnel and to recruit qualified individuals to succeed existing key personnel to ensure the continued growth and successful operation of our business. The unexpected loss of any such employees, or the inability to recruit and retain qualified personnel in the future, could have a material adverse impact on our business, financial condition, results of operations and prospects. In addition, the scope and content of U.S. banking regulators' regulations and policies on incentive compensation, as well as changes to these regulations and policies, could adversely affect our ability to hire, retain and motivate our key employees.

Changes in accounting standards could materially impact our financial statements.

From time to time, the FASB and the SEC change the financial accounting and reporting standards that govern the preparation of our financial statements. These changes can materially impact how we record and report our financial condition and results of operations.

FASB's ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326) Measurement of Credit Losses on Financial Instruments*, became effective on January 1, 2020. The amendments in this ASU introduce a new impairment model based on CECL rather than incurred losses. The CECL model applies to most debt instruments, including loan receivables and loan commitments.

Unlike the incurred loss models, the CECL model does not specify a threshold for the recognition of an impairment allowance. Rather, the Company must recognize an impairment allowance equal to its current estimate of expected credit losses for financial instruments as of the end of the reporting period. Measuring expected credit losses will most likely be a significant challenge for all entities, including the Company.

Further, the impairment allowance measured under the CECL model will differ from the impairment allowance measured under the Company's prior incurred loss model. To initially apply the amendments, the Company has recorded a cumulative-effect adjustment to its Consolidated Balance Sheets as of January 1, 2020 (a modified retrospective approach). The adoption of the standard has resulted in an overall increase in the allowance for credit losses. It is also possible that the Company's ongoing reported earnings and lending activity will be negatively impacted in periods following adoption.

There can be no assurance as to the level of dividends we may pay on our common stock.

Holders of our common stock are only entitled to receive such dividends as our board of directors declares out of funds legally available for such payments. Although we have historically declared cash dividends on our common stock, we are not required to do so and there may be circumstances under which we would eliminate our common stock dividend in the future. This could adversely affect the market price of our common stock.

We rely on dividends and other payments from our bank for substantially all of our revenue.

We are a separate and distinct legal entity from the Bank, and we receive substantially all of our operating cash flows from dividends and other payments from the Bank. These dividends and payments are the principal source of funds to pay dividends on our capital stock and interest and principal on any debt we may have. Various federal and state laws and regulations limit the amount of dividends that the Bank may pay to us. Also, our right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to the prior claims of the subsidiary's creditors. In the event the Bank is unable to pay dividends to us, we may not be able to service debt, pay obligations, or pay dividends on our common stock. The inability to receive dividends from the Bank could have a material adverse impact on our business, financial condition, results of operations and prospects.

Our ability to sustain or improve upon existing performance is dependent upon our ability to respond to technological change, and we may have fewer resources than some of our competitors to continue to invest in technological improvements.

The financial services industry is undergoing rapid technological changes 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. Many of our competitors have substantially greater resources to invest in technological improvements than we do. Our future success will depend, in part, upon our ability to address the needs of our clients by using technology to provide products and services that will satisfy client demands for convenience, as well as to create additional efficiencies in our operations. We may not be able to effectively implement new technology-driven products and services or be successful in marketing these products and services to our customers. In addition, the implementation of technological changes and upgrades to maintain current systems and integrate new ones may also cause service interruptions, transaction processing errors and system conversion delays and may cause us to fail to comply with applicable laws. There can be no assurance that we will be able to successfully manage the risks associated with our increased dependency on technology.

We are exposed to the risk of environmental liabilities in connection with real properties acquired.

During the ordinary course of business, we foreclose on and take title to properties securing certain loans. In doing so, there is a risk that hazardous or toxic substances could be found on these properties. If previously unknown or undisclosed hazardous or toxic substances are discovered, we may be liable for remediation costs, as well as for personal injury and property damage. Environmental laws may require us to incur substantial expenses which may materially reduce the affected property's value or limit our ability to use or sell the affected property. In addition, future laws or more stringent interpretations or enforcement policies with respect to existing laws may increase our exposure to environmental liability. Although we have policies and procedures to perform an environmental review at the time of underwriting a loan secured by real property, and also before initiating any foreclosure action on real property, these reviews may not be sufficient to detect all potential environmental hazards. The remediation costs and any other financial liabilities associated with an environmental hazard could have a material adverse effect on our financial condition and results of operations.

Significant legal or regulatory actions could subject us to substantial uninsured liabilities and reputational harm and have a material adverse effect on our business and results of operations.

We are from time to time subject to claims and proceedings related to our operations. Claims and legal actions, including supervisory or enforcement actions by our regulators, or criminal proceedings by prosecutorial authorities, could involve large monetary claims, including civil money penalties or fines imposed by government authorities and significant defense costs. To mitigate the cost of some of these claims, we maintain insurance coverage in amounts and with deductibles that we believe are appropriate for our operations. However, our insurance coverage does not cover any civil money penalties or fines imposed by government authorities and may not cover all other claims that might be brought against us or continue to be available to us at a reasonable cost. As a result, we may be exposed to substantial uninsured liabilities, which could adversely affect our business, prospects, results of operations and financial condition. Substantial legal liability or significant regulatory action against us could cause significant reputational harm to us and/or could have a material adverse impact on our business, financial condition, results of operations and prospects. Because we primarily serve individuals and businesses located in the Northwest, any negative impact resulting from reputational harm, including any impact on our ability to attract and retain customers and employees, likely would be greater than if our business were more geographically diverse.

We are subject to a variety of operational risks, including reputational risk, legal risk and compliance risk, and the risk of fraud or theft by employees or outsiders, which may adversely affect our business and results of operations.

We are exposed to many types of operational risks, including reputational risk, legal and compliance risk, the risk of fraud or theft by employees or outsiders, and unauthorized transactions by employees or operational errors, including clerical or record-keeping errors or those resulting from faulty or disabled computer or telecommunications systems.

The public perception of financial institutions remains negative. Our reputation and businesses may be adversely affected by negative publicity or information regarding our businesses and personnel, whether or not accurate or true, that may be posted on social media or other Internet forums or published by news organizations. The speed and pervasiveness with which information can be disseminated through these channels, in particular social media, may magnify risks relating to negative publicity.

If personal, non-public, confidential or proprietary information of customers in our possession were to be mishandled or misused, we could suffer significant regulatory consequences, reputational damage and financial loss. Such mishandling or misuse could include, for example, if such information were erroneously provided to parties who are not permitted to have the information, either by fault of our systems, employees, or counterparties, or where such information is intercepted or otherwise inappropriately taken by third parties.

Because the nature of the financial services business involves a high volume of transactions, certain errors may be repeated or compounded before they are discovered and successfully rectified. Our necessary dependence upon automated systems to record and process transactions and our large transaction volume may further increase the risk that technical flaws or employee tampering or manipulation of those systems will result in losses that are difficult to detect. We are also subject to disruptions of our operating systems arising from events that are wholly or partially beyond our control (for example, computer viruses or electrical or telecommunications outages, natural disasters, disease pandemics or other damage to property or physical assets) that can give rise to disruption of service to customers and to financial loss or liability. We are further exposed to the risk that our external vendors may be unable to fulfill their contractual obligations (or will be subject to the same risk of fraud or operational errors by their respective employees as we are) and to the risk that we (or our vendors') business continuity and data security systems prove to be inadequate. The occurrence of any of these risks could result in a diminished ability of us to operate our business (for example, by requiring us to expend significant resources to correct the defect), as well as potential liability to clients, reputational damage and regulatory intervention, which could have a material adverse impact on our business, financial condition, results of operations and prospects.

Failure to maintain effective internal control over financial reporting or disclosure controls and procedures may adversely affect our business and results of operations.

Management regularly reviews and updates our internal control over financial reporting, disclosure controls and procedures, and corporate governance policies and procedures. We maintain controls and procedures to mitigate risks such as processing system failures or errors and customer or employee fraud, and we maintain insurance coverage for certain of these risks. Any system of controls and procedures, however well designed and operated, is based in part on certain assumptions and provides only reasonable, not absolute, assurances that the objectives of the system are met. Events could occur which are not prevented or detected by our internal controls, are not insured against, or are in excess of our insurance limits. Any failure or circumvention of our controls and procedures, or failure to comply with regulations related to controls and procedures, could have an adverse effect on our business, financial condition, results of operations and prospects.

Our business is subject to the risks of earthquakes, tsunamis, floods, fires and other natural catastrophic events.

A major catastrophe, such as an earthquake, tsunami, flood, fire or other natural disaster, could result in a prolonged interruption of our business. For example, our headquarters are located in Tacoma, Washington and we have operations throughout the Northwest, a geographical region that has been or may be affected by earthquake, tsunami and flooding activity. Because we primarily serve individuals and businesses in the Northwest, a natural disaster likely would have a greater impact on our business, operations and financial condition than if our business were more geographically diverse. The occurrence of any of these natural disasters could negatively impact our performance by disrupting our operations or the operations of our customers, which could have a material adverse effect on our financial condition, results of operations and cash flows.

We have various anti-takeover measures that could impede a takeover.

Our articles of incorporation include certain provisions that could make it more difficult to acquire us by means of a tender offer, a proxy contest, merger or otherwise. These provisions include certain non-monetary factors that our board of directors may consider when evaluating a takeover offer, and a requirement that any "Business Combination" be approved by the affirmative vote of no less than 66 2/3% of the total shares attributable to persons other than a "Control Person." These provisions may have the effect of lengthening the time required for a person to acquire control of us through a tender offer, proxy contest or otherwise, and may deter any potentially hostile offers or other efforts to obtain control of us. This could deprive our shareholders of opportunities to realize a premium for their Columbia common stock, even in circumstances where such action is favored by a majority of our shareholders.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The Company's principal properties include our corporate headquarters which is located at 13th & A Street, Tacoma, Washington, two operations facilities in Pierce County, Washington, one operations facility in Vancouver, Washington, and one operations facility in Wilsonville, Oregon.

The Company's branch network as of December 31, 2019 is made up of 146 branches located throughout several Washington, Oregon and Idaho counties compared to 150 branches at December 31, 2018. The number of branches per state, as well as whether they are owned or operated under a lease agreement is detailed in the following table:

	Number of Branches	Occupancy Type	
		Owned	Leased
Washington branches	71	52	19
Oregon branches	61	34	27
Idaho branches	14	10	4
Total Columbia Bank branches	146	96	50

For additional information concerning our premises and equipment and lease obligations, see Notes [8](#) and [10](#) respectively, to the Consolidated Financial Statements in "Item 8. Financial Statements and Supplementary Data" of this report.

ITEM 3. LEGAL PROCEEDINGS

The Company and its subsidiaries are party to routine litigation arising in the ordinary course of business. Management believes that, based on information currently known to it, any liabilities arising from such litigation will not have a material adverse impact on the Company's financial conditions, results of operations or cash flows.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Common Stock

The Company’s common stock is traded on The Nasdaq Stock Market LLC under the symbol “COLB.” At January 31, 2020, the number of shareholders of record was 3,208. This figure does not represent the actual number of beneficial owners of common stock because shares are frequently held in “street name” by securities dealers and others for the benefit of individual owners who may vote the shares.

At December 31, 2019, there were no stock options outstanding. Additional information about stock options and other equity compensation plans is included in [Note 23 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report.

Equity Compensation Plan Information

The following table provides information as of December 31, 2019, regarding securities issued and to be issued under our equity compensation plans that were in effect during 2019:

	Year Ended December 31, 2019		
	Number of Shares to be Issued Upon Exercise of Outstanding Options and Rights	Weighted Average Exercise Price of Outstanding Options and Rights	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans (1)
Equity compensation plans approved by security holders	—	\$ —	2,930,242
Equity compensation plans not approved by security holders	—	—	—

(1) Includes 2,627,086 shares available for future issuance under the current stock option and equity compensation plan and 303,156 shares available for purchase under the Employee Stock Purchase Plan as of December 31, 2019.

The following table provides information about repurchases of common stock by the Company during the quarter ended December 31, 2019:

Period	Total Number of Common Shares Purchased (1)	Average Price Paid per Common Share	Total Number of Shares Purchased as Part of Publicly Announced Plan (2)	Maximum Number of Remaining Shares That May Yet Be Purchased Under the Plan (2)
10/1/2019 - 10/31/2019	152,059	\$ 35.95	151,716	1,447,745
11/1/2019 - 11/30/2019	66	38.65	—	1,447,745
12/1/2019 - 12/31/2019	293	39.96	—	1,447,745
	<u>152,418</u>	<u>35.96</u>	<u>151,716</u>	

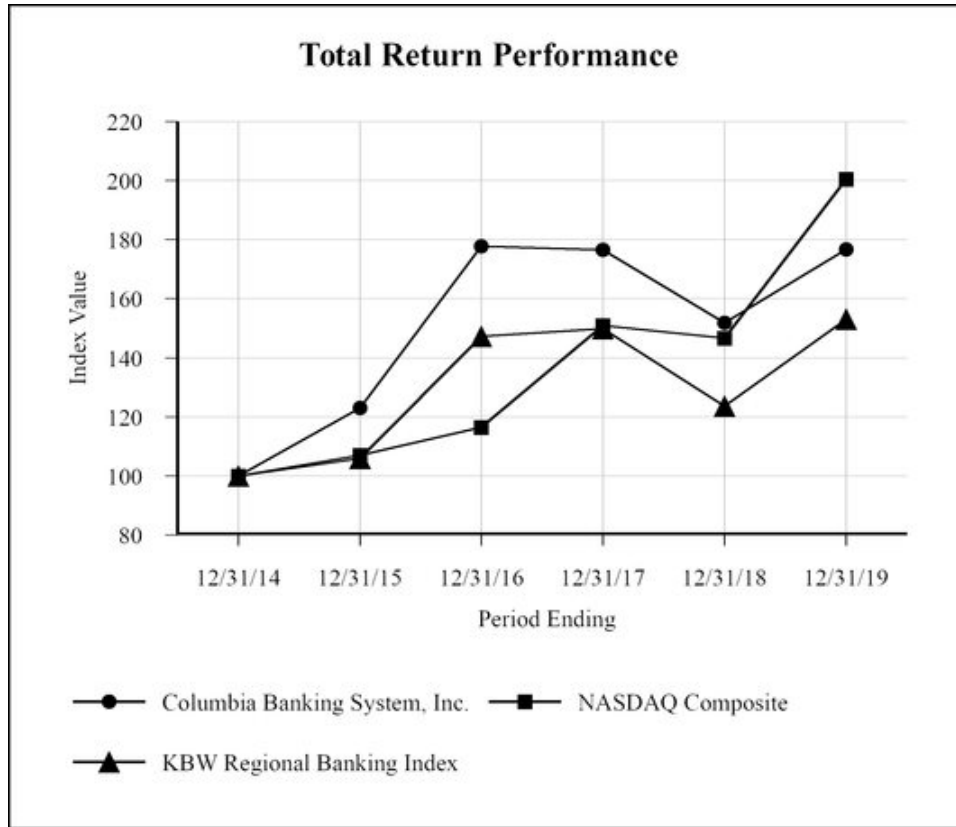
(1) Common shares repurchased by the Company during the quarter consisted of cancellation of 702 shares of common stock to pay the shareholders’ withholding taxes and 151,716 shares of common stock purchased under the Company’s stock repurchase program.

(2) On November 14, 2018, the board of directors approved a stock repurchase program. The program, as extended by the board of directors on October 23, 2019, authorizes the Company to repurchase up to 2.9 million shares of its outstanding stock, up to a maximum aggregate purchase price of \$100.0 million through May 2020.

Five-Year Stock Performance Graph

The following graph shows a five-year comparison of the total return to shareholders of Columbia’s common stock, the NASDAQ Composite Index (which is a broad nationally recognized index of stock performance by companies listed on the Nasdaq Stock Market) and the KBW Regional Banking Index (comprised of 50 banks and bank holding companies headquartered throughout the country, including Columbia).

The definition of total return includes appreciation in market value of the stock as well as the actual cash and stock dividends paid to shareholders. The graph assumes that the value of the investment in Columbia’s common stock, the NASDAQ Composite and the KBW Regional Banking Index was \$100 on December 31, 2014, and that all dividends were reinvested.



Index	Period Ending					
	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019
Columbia Banking System, Inc.	100.00	122.92	177.71	176.58	151.76	176.65
NASDAQ Composite	100.00	106.96	116.45	150.96	146.67	200.49
KBW Regional Banking Index	100.00	105.91	147.24	149.82	123.60	153.03

Source: Bloomberg LP, New York City, NY

ITEM 6. SELECTED FINANCIAL DATA

Five-Year Summary of Selected Consolidated Financial Data (1)

	2019	2018	2017 (2)	2016	2015
<i>(dollars in thousands except per share amounts)</i>					
For the Year					
Interest income	\$ 529,952	\$ 497,069	\$ 374,746	\$ 337,969	\$ 328,891
Interest expense	\$ 36,547	\$ 18,230	\$ 6,757	\$ 4,350	\$ 4,004
Net interest income	\$ 493,405	\$ 478,839	\$ 367,989	\$ 333,619	\$ 324,887
Provision for loan and lease losses	\$ 3,493	\$ 14,769	\$ 8,631	\$ 10,778	\$ 8,591
Noninterest income	\$ 97,181	\$ 88,256	\$ 109,642	\$ 88,082	\$ 91,473
Noninterest expense	\$ 345,482	\$ 340,490	\$ 291,017	\$ 261,142	\$ 266,149
Net income	\$ 194,451	\$ 172,882	\$ 112,828	\$ 104,866	\$ 98,827
Net income applicable to common shareholders	\$ 194,451	\$ 172,882	\$ 112,828	\$ 104,709	\$ 98,690
Per Common Share					
Earnings (Basic)	\$ 2.68	\$ 2.36	\$ 1.86	\$ 1.81	\$ 1.71
Earnings (Diluted)	\$ 2.68	\$ 2.36	\$ 1.86	\$ 1.81	\$ 1.71
Book Value	\$ 29.95	\$ 27.76	\$ 26.70	\$ 21.52	\$ 21.48
Averages					
Total assets	\$ 13,341,024	\$ 12,725,086	\$ 10,134,306	\$ 9,311,621	\$ 8,655,243
Interest-earning assets	\$ 11,837,633	\$ 11,241,321	\$ 9,098,276	\$ 8,363,309	\$ 7,685,734
Loans	\$ 8,612,478	\$ 8,409,373	\$ 6,682,259	\$ 6,052,389	\$ 5,609,261
Securities, including FHLB stock	\$ 3,167,112	\$ 2,790,700	\$ 2,350,844	\$ 2,269,121	\$ 2,031,859
Deposits	\$ 10,523,687	\$ 10,410,404	\$ 8,482,350	\$ 7,774,309	\$ 7,146,828
Shareholders' equity	\$ 2,116,642	\$ 1,969,179	\$ 1,410,056	\$ 1,269,801	\$ 1,246,952
Financial Ratios					
Net interest margin (tax equivalent)	4.24%	4.33%	4.18%	4.12%	4.35%
Return on average assets	1.46%	1.36%	1.11%	1.13%	1.14%
Return on average common equity	9.19%	8.78%	8.00%	8.26%	7.93%
Average equity to average assets	15.87%	15.47%	13.91%	13.64%	14.41%
At Year End					
Total assets	\$ 14,079,524	\$ 13,095,145	\$ 12,716,886	\$ 9,509,607	\$ 8,951,697
Loans	\$ 8,743,465	\$ 8,391,511	\$ 8,358,657	\$ 6,213,423	\$ 5,815,027
ALLL	\$ 83,968	\$ 83,369	\$ 75,646	\$ 70,043	\$ 68,172
Securities, including FHLB stock	\$ 3,794,262	\$ 3,193,408	\$ 2,753,271	\$ 2,288,817	\$ 2,170,416
Deposits	\$ 10,684,708	\$ 10,458,126	\$ 10,532,085	\$ 8,059,415	\$ 7,438,829
Shareholders' equity	\$ 2,159,962	\$ 2,033,649	\$ 1,949,922	\$ 1,251,012	\$ 1,242,128
Nonperforming Assets					
Nonaccrual loans	\$ 33,060	\$ 54,842	\$ 66,189	\$ 27,756	\$ 21,464
OREO and OPPO	552	6,049	13,298	5,998	13,738
Total nonperforming assets	\$ 33,612	\$ 60,891	\$ 79,487	\$ 33,754	\$ 35,202
Nonperforming loans to year end loans	0.38%	0.65%	0.79%	0.45%	0.37%
Nonperforming assets to year end assets	0.24%	0.46%	0.63%	0.35%	0.39%
ALLL to year end loans	0.96%	0.99%	0.91%	1.13%	1.17%
Net loan charge-offs	\$ 2,894	\$ 7,046	\$ 3,028	\$ 8,907	\$ 9,988
Other nonfinancial data					
Full-time equivalent employees	2,162	2,137	2,120	1,819	1,868
Banking branches	146	150	155	143	149

- (1) These unaudited schedules were derived from our audited financial statements and provide selected financial information concerning the Company that should be read in conjunction with [“Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations”](#) of this report.
- (2) During 2017, Columbia acquired Pacific Continental. See [Note 2 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding this acquisition.

Consolidated Five-Year Financial Data (1)

	Years ended December 31,				
	2019	2018	2017 (2)	2016	2015
	<i>(in thousands, except per share amounts)</i>				
Interest Income:					
Loans	\$ 448,041	\$ 428,197	\$ 324,229	\$ 291,465	\$ 286,166
Taxable securities	69,864	55,969	38,659	35,167	30,774
Tax-exempt securities	10,735	12,201	11,045	11,121	11,842
Deposits in banks	1,312	702	813	216	109
Total interest income	529,952	497,069	374,746	337,969	328,891
Interest Expense:					
Deposits	22,146	12,105	4,800	3,134	2,977
FHLB advances	11,861	3,750	1,078	671	474
Subordinated debentures	1,871	1,871	304	—	—
Other borrowings	669	504	575	545	553
Total interest expense	36,547	18,230	6,757	4,350	4,004
Net Interest Income	493,405	478,839	367,989	333,619	324,887
Provision for loan and lease losses	3,493	14,769	8,631	10,778	8,591
Net interest income after provision for loan and lease losses	489,912	464,070	359,358	322,841	316,296
Noninterest income	97,181	88,256	109,642	88,082	91,473
Noninterest expense	345,482	340,490	291,017	261,142	266,149
Income before income taxes	241,611	211,836	177,983	149,781	141,620
Provision for income taxes	47,160	38,954	65,155	44,915	42,793
Net Income	\$ 194,451	\$ 172,882	\$ 112,828	\$ 104,866	\$ 98,827
Less: Dividends on preferred stock	—	—	—	157	137
Net Income Applicable to Common Shareholders	\$ 194,451	\$ 172,882	\$ 112,828	\$ 104,709	\$ 98,690
Per Common Share					
Earnings basic	\$ 2.68	\$ 2.36	\$ 1.86	\$ 1.81	\$ 1.71
Earnings diluted	\$ 2.68	\$ 2.36	\$ 1.86	\$ 1.81	\$ 1.71
Average number of common shares outstanding (basic)	71,999	72,385	59,882	57,184	57,019
Average number of common shares outstanding (diluted)	72,032	72,390	59,888	57,193	57,032
Total assets at year end	\$ 14,079,524	\$ 13,095,145	\$ 12,716,886	\$ 9,509,607	\$ 8,951,697
Long-term obligations	\$ 35,277	\$ 35,462	\$ 35,647	\$ —	\$ —
Cash dividends declared per common share	\$ 1.40	\$ 1.14	\$ 0.88	\$ 1.53	\$ 1.34

(1) These unaudited schedules were derived from our audited financial statements and provide selected financial information concerning the Company that should be read in conjunction with “[Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations](#)” of this report.

(2) During 2017, Columbia acquired Pacific Continental. See [Note 2 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding this acquisition.

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

This discussion should be read in conjunction with our Consolidated Financial Statements and related notes in "Item 8. Financial Statements and Supplementary Data" of this report. In the following discussion, unless otherwise noted, references to increases or decreases in average balances in items of income and expense for a particular period and balances at a particular date refer to the comparison with corresponding amounts for the period or date for the previous year.

Critical Accounting Policies

We have established certain accounting policies in preparing our Consolidated Financial Statements that are in accordance with accounting principles generally accepted in the United States. Our significant accounting policies are presented in [Note 1 to the Consolidated Financial Statements in "Item 8. Financial Statements and Supplementary Data"](#) of this report. Certain of these policies require the use of judgments, estimates and economic assumptions which may prove inaccurate or are subject to variation that may significantly affect our reported results of operations and financial position for the periods presented or in future periods. Management believes that the judgments, estimates and economic assumptions used in the preparation of the Consolidated Financial Statements are appropriate given the factual circumstances at the time. We consider the following policies to be most critical in understanding the judgments that are involved in preparing our Consolidated Financial Statements.

Allowance for Loan and Lease Losses

The ALLL is an accounting estimate of incurred credit losses in our loan portfolio at the balance sheet date. The primary components of the allowance are 1) loans collectively evaluated for impairment in accordance with the FASB ASC Topic 450, Contingencies ("ASC 450"), 2) loans individually determined to be impaired in accordance with the FASB ASC Subtopic 310-10, Receivables: Overall ("ASC 310-10") and 3) loans acquired with deteriorated credit quality in accordance with FASB ASC Subtopic 310-30, Receivables: Loans and Debt Securities Acquired with Deteriorated Credit Quality ("ASC 310-30").

The measure of estimated credit losses for the ASC 450 component is based upon the loss experience over a historical base period adjusted for a loss emergence period. The loss emergence period is an estimate of the period that it takes, on average, for us to identify the amount of loss incurred for a loan that has suffered a loss-causing event. Management then considers the effects of the following qualitative factors to ensure our allowance reflects the inherent losses in the loan portfolio:

- Economic and business conditions;
- Concentration of credit;
- Lending management and staff;
- Lending policies and procedures;
- Loss and recovery trends;
- Nature and volume of the portfolio;
- Trends in problem loans, loan delinquencies and nonaccrual loans;
- Quality of internal loan review; and
- External factors.

These qualitative factors have a high degree of subjectivity and changes in any of the factors could have a significant impact on our calculation of the allowance. The qualitative adjustment by loan segment is based upon management's assessment of inherent losses within a range between the weighted historical loss factor by segment and the maximum consecutive quarterly losses in the relevant loss emergence period by segment over the historical base period.

The measure of estimated credit losses for the ASC 310-10 component begins if, based upon current information and events, we believe it is probable that we will be unable to collect all amounts due according to the contractual terms of the loan agreement or when a loan has been modified in a TDR. When a loan has been identified as impaired, the amount of impairment will be measured using discounted cash flows, except when it is determined that the remaining source of repayment for the loan is the operation or liquidation of the underlying collateral. In these cases, the current fair value of the collateral, reduced by costs to sell, will be used in place of discounted cash flows. As a final alternative, the observable market price of the debt may be used to assess impairment. The Company predominantly uses the fair value of collateral approach based upon a reliable valuation.

Our allowance policy and the judgments, estimates and economic assumptions involved are described in greater detail in the "Allowance for Loan and Lease Losses and Unfunded Commitments and Letters of Credit" section of this discussion and in [Note 1 to the Consolidated Financial Statements in "Item 8. Financial Statements and Supplementary Data"](#) of this report.

Adoption of Allowance for Credit Losses - ASC 326

In accordance with ASU 2016-13, the Company was required to adopt ASC 326 as of January 1, 2020. The allowance for credit losses under ASC 326 is an accounting estimate of expected losses over the contractual life of assets carried at amortized cost within the Company's loan portfolio at the balance sheet date. The ASU requires a financial asset (or group of financial assets) measured at amortized cost to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset to present the net carrying value at the amount expected to be collected on the financial asset.

The quantitative allowance is calculated using a discounted cash flow approach with a probability of default methodology. The probability of default is an assumption derived from regression models which determine the relationship between historical defaults and certain economic variables. The Company determines a reasonable and supportable forecast and applies that forecast to the model to determine defaults over the forecast period. Following the forecast period, the economic variables used to calculate the probability of default revert to a historical average. Other assumptions relevant to the discounted cash flow model to derive the quantitative allowance include the loss given default, which is the estimate of loss for a defaulted loan, and the discount rate applied to future cash flows. The model calculates the net present value of each loan using both the contractual and expected cash flows, respectively.

In addition to the quantitative portion of the allowance for credit losses, the Company also considers the effects of the following qualitative factors in its calculation of expected losses in the loan portfolio:

- Economic and business conditions;
- Concentration of credit;
- Lending management and staff;
- Lending policies and procedures;
- Loss and recovery trends;
- Nature and volume of the portfolio;
- Trends in problem loans, loan delinquencies and nonaccrual loans;
- Quality of internal loan review; and
- External factors.

These qualitative factors are based in quantitative factors but also include a high degree of subjectivity and changes in any of the factors could have a significant impact on our calculation of the allowance.

Loans for which repayment is expected to be provided substantially through the operation or sale of collateral are considered collateral-dependent. The allowance for credit losses for collateral-dependent loans is measured on the basis of the fair value of the collateral when foreclosure is probable.

Business Combinations

The Company applies the acquisition method of accounting for business combinations. Under the acquisition method, the acquiring entity in a business combination recognizes the assets acquired and liabilities assumed at their acquisition date fair values. Management utilizes prevailing valuation techniques appropriate for the asset or liability being measured in determining these fair values. Any excess of the purchase price over amounts allocated to assets acquired, including identifiable intangible assets, and liabilities assumed is recorded as goodwill. Where amounts allocated to assets acquired and liabilities assumed is greater than the purchase price, a bargain purchase gain is recognized. Acquisition-related costs are expensed as incurred.

Valuation and Recoverability of Goodwill

Goodwill represented \$765.8 million of our \$14.08 billion in total assets as of December 31, 2019. The Company has a single reporting unit. We review goodwill for impairment annually, during the third quarter, and also test for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of our reporting unit below its carrying amount. Such events and circumstances may include among others: a significant adverse change in legal factors or in the general business climate; significant decline in our stock price and market capitalization; unanticipated competition; the testing for recoverability of a significant asset group within the reporting unit; and an adverse action or assessment by a regulator. Any adverse change in these factors could have a significant impact on the recoverability of goodwill and could have a material impact on our Consolidated Financial Statements.

Under the Intangibles – Goodwill and Other topic of the FASB ASC, the testing for impairment may begin with an assessment of qualitative factors to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. When required, the goodwill impairment test involves a two-step process. In step one, we would test goodwill for impairment by comparing the fair value of the reporting unit with its carrying amount. If the fair value of the reporting unit exceeds the carrying amount of the reporting unit, goodwill is not deemed to be impaired, and no further testing is necessary. If the carrying amount of the reporting unit were to exceed the fair value of the reporting unit, we would perform a second test to measure the amount of impairment loss, if any. To measure the amount of any impairment loss, we would determine the implied fair value of goodwill in the same manner as if the reporting unit were being acquired in a business combination. Specifically, we would allocate the fair value of the reporting unit to all of the assets and liabilities of the reporting unit in a hypothetical calculation that would determine the implied fair value of goodwill. If the implied fair value of goodwill is less than the recorded goodwill, we would record an impairment charge for the difference.

The accounting estimates related to our goodwill require us to make considerable assumptions about fair values. Our assumptions regarding fair values require significant judgment about economic and industry factors and the growth and earnings prospects of the Bank. Changes in these judgments, either individually or collectively, may have a significant effect on the estimated fair values.

Based on the results of the annual goodwill impairment test, we determined that no goodwill impairment charges were required as our single reporting unit's fair value significantly exceeded its carrying amount. As of December 31, 2019, we determined there were no events or circumstances which would more likely than not reduce the fair value of our reporting unit below its carrying amount.

Please refer to [Note 9 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further discussion.

2019 Financial Summary

Income Statement

- Consolidated net income for 2019 was \$194.5 million, or \$2.68 per diluted common share, compared with net income of \$172.9 million, or \$2.36 per diluted common share, in 2018.
 - Net interest income for 2019 increased 3% to \$493.4 million compared to \$478.8 million for 2018. Interest income was \$530.0 million in 2019, compared to \$497.1 million in 2018. The increase was primarily due to income from higher average loan and securities balances and higher rates on loans. Interest expense increased \$18.3 million from \$18.2 million in 2018, due to higher rates on interest-bearing deposits and higher average FHLB balances.
 - Provision for loan and lease losses was \$3.5 million in 2019, compared to \$14.8 million in 2018. The decline in provision expense for 2019 reflects a decrease in both nonaccrual loans and net loan charge-offs.
 - Noninterest income was \$97.2 million for 2019, an increase from \$88.3 million for 2018. The increase in 2019 was primarily due to gains on the sales of owned real estate and BOLI benefits.
 - Noninterest expense increased \$5.0 million to \$345.5 million for 2019 due primarily to higher compensation and employee benefits and legal and professional fees partially offset by decreases in other noninterest, net cost (benefit) of OREO, regulatory premiums and amortization of intangibles.

Balance Sheet

- Total assets at December 31, 2019 were \$14.08 billion, up 8%, or \$984.4 million from \$13.10 billion at the end of 2018.
- The Company is well-capitalized with a total risk-based capital ratio of 13.60% at December 31, 2019.
 - Investment securities at December 31, 2019 were \$3.75 billion, up 18% from \$3.17 billion at December 31, 2018.
 - Loans were \$8.74 billion, an increase of \$352.0 million from \$8.39 billion at the end of 2018.
 - The ALLL increased to \$84.0 million at December 31, 2019 compared to \$83.4 million at December 31, 2018 due to management's on-going assessment of the credit quality of the loan portfolio. The Company's allowance was 0.96% of total loans, compared with 0.99% at the end of 2018.
 - Nonperforming assets totaled \$33.6 million at December 31, 2019, down from \$60.9 million at December 31, 2018. The decrease in nonperforming assets was due to a decrease of \$21.8 million in nonaccrual loans and a \$5.5 million decrease in OREO compared to December 31, 2018. Nonperforming assets to year end assets decreased to 0.24% at December 31, 2019 compared to 0.46% at December 31, 2018.
 - Deposits totaled \$10.68 billion at December 31, 2019 compared to \$10.46 billion at December 31, 2018.
 - FHLB advances were \$953.5 million at December 31, 2019, an increase of \$553.9 million compared to December 31, 2018.

Business Combinations

On November 1, 2017, the Company completed its acquisition of Pacific Continental. The Company acquired approximately \$2.94 billion in assets, including \$1.87 billion in loans measured at fair value and \$2.12 billion in deposits. See [Note 2 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding this acquisition.

RESULTS OF OPERATIONS

Summary

A summary of the Company’s results of operations for each of the last three years ended December 31 follows:

	Year ended		Increase (Decrease)		Year ended		Increase (Decrease)		Year ended	
	2019	Amount	%	2018	Amount	%	2017			
<i>(dollars in thousands, except per share amounts)</i>										
Interest income	\$ 529,952	\$ 32,883	7	\$ 497,069	\$ 122,323	33	\$ 374,746			
Interest expense	36,547	18,317	100	18,230	11,473	170	6,757			
Net interest income	493,405	14,566	3	478,839	110,850	30	367,989			
Provision for loan and lease losses	3,493	(11,276)	(76)	14,769	6,138	71	8,631			
Noninterest income	97,181	8,925	10	88,256	(21,386)	(20)	109,642			
Noninterest expense:										
Compensation and employee benefits	212,867	12,668	6	200,199	30,525	18	169,674			
Other expense	132,615	(7,676)	(5)	140,291	18,948	16	121,343			
Total	345,482	4,992	1	340,490	49,473	17	291,017			
Income before income taxes	241,611	29,775	14	211,836	33,853	19	177,983			
Provision for income taxes	47,160	8,206	21	38,954	(26,201)	(40)	65,155			
Net income	\$ 194,451	\$ 21,569	12	\$ 172,882	\$ 60,054	53	\$ 112,828			
Less: earnings allocated to participating securities	1,530	(362)	(19)	1,892	388	26	1,504			
Earnings allocated to common shareholders	\$ 192,921	\$ 21,931	13	\$ 170,990	\$ 59,666	54	\$ 111,324			
Earnings per common share, diluted	\$ 2.68	\$ 0.32	14	\$ 2.36	\$ 0.50	27	\$ 1.86			

Net Interest Income

Net interest income is the difference between interest income and interest expense. Net interest income on a fully taxable-equivalent basis expressed as a percentage of average total interest-earning assets is referred to as the net interest margin, which represents the average net effective yield on interest-earning assets.

The following table sets forth the average balances of all major categories of interest-earning assets and interest-bearing liabilities, the total dollar amounts of interest income on interest-earning assets and interest expense on interest-bearing liabilities, the average yield earned on interest-earning assets and average cost of interest-bearing liabilities by category and in total, net interest income, net interest spread, net interest margin and the ratio of average interest-earning assets to interest-bearing liabilities:

Net Interest Income Summary

	2019			2018			2017		
	Average Balances	Interest Earned/ Paid	Average Rate	Average Balances	Interest Earned/ Paid	Average Rate	Average Balances	Interest Earned/ Paid	Average Rate
<i>(dollars in thousands)</i>									
ASSETS									
Loans, net (1)(2)(3)	\$ 8,612,478	\$ 453,552	5.27%	\$ 8,409,373	\$ 432,781	5.15%	\$ 6,682,259	\$ 330,400	4.94%
Taxable securities (4)	2,703,423	69,864	2.58%	2,275,892	55,969	2.46%	1,886,128	38,659	2.05%
Tax exempt securities (3)	463,689	13,589	2.93%	514,808	15,445	3.00%	464,716	16,992	3.66%
Interest-earning deposits with banks	58,043	1,312	2.26%	41,248	702	1.70%	65,173	813	1.25%
Total interest-earning assets	11,837,633	538,317	4.55%	11,241,321	504,897	4.49%	9,098,276	386,864	4.25%
Other earning assets	231,731			224,595			181,792		
Noninterest-earning assets	1,271,660			1,259,170			854,238		
Total assets	\$ 13,341,024			\$ 12,725,086			\$ 10,134,306		
LIABILITIES AND SHAREHOLDERS' EQUITY									
Money market accounts (5)	\$ 2,591,303	\$ 10,598	0.41%	\$ 2,695,585	\$ 6,216	0.23%	\$ 2,070,183	\$ 2,560	0.12%
Interest-bearing demand (5)	1,064,145	1,676	0.16%	1,089,548	1,543	0.14%	864,250	458	0.05%
Savings accounts (5)	892,518	183	0.02%	884,770	138	0.02%	773,753	96	0.01%
Interest-bearing public funds, other than certificates of deposit (5)	440,359	7,244	1.65%	244,943	2,002	0.82%	256,529	1,030	0.40%
Certificates of deposit	395,421	2,445	0.62%	452,756	2,206	0.49%	406,406	656	0.16%
Total interest-bearing deposits	5,383,746	22,146	0.41%	5,367,602	12,105	0.23%	4,371,121	4,800	0.11%
FHLB and FRB advances	470,082	11,861	2.52%	166,577	3,750	2.25%	79,788	1,078	1.35%
Subordinated debentures	35,368	1,871	5.29%	35,553	1,871	5.26%	5,905	304	5.15%
Other borrowings and interest-bearing liabilities	34,622	669	1.93%	45,095	504	1.12%	55,913	575	1.03%
Total interest-bearing liabilities	5,923,818	36,547	0.62%	5,614,827	18,230	0.32%	4,512,727	6,757	0.15%
Noninterest-bearing deposits	5,139,941			5,042,802			4,111,229		
Other noninterest-bearing liabilities	160,623			98,278			100,294		
Shareholders' equity	2,116,642			1,969,179			1,410,056		
Total liabilities & shareholders' equity	\$ 13,341,024			\$ 12,725,086			\$ 10,134,306		
Net interest income (tax equivalent)		\$ 501,770			\$ 486,667			\$ 380,107	
Net interest spread (tax equivalent)			3.93%			4.17%			4.10%
Net interest margin (tax equivalent)			4.24%			4.33%			4.18%
Average interest-earning assets to average interest-bearing liabilities			199.83%			200.21%			201.61%

(1) Nonaccrual loans have been included in the table as loans carrying a zero yield. Amortized net deferred loan fees and unearned net discounts on acquired loans were included in the interest income calculations. The amortization of net deferred loan fees was \$8.4 million in 2019, \$9.3 million in 2018 and \$7.1 million in 2017. The accretion of net unearned discounts on certain acquired loans was \$7.8 million in 2019, \$10.9 million in 2018, and \$8.7 million in 2017.

(2) Incremental accretion on PCI loans is also included in loan interest earned. The incremental accretion income on PCI loans was \$1.3 million in 2019, \$1.6 million in 2018 and \$4.1 million in 2017.

(3) Yields are shown on a fully taxable equivalent basis. The tax equivalent yield adjustment to interest earned on loans was \$5.5 million, \$4.6 million and \$6.2 million for the years ended December 31, 2019, 2018, and 2017, respectively. The tax equivalent yield adjustment to interest earned on tax exempt securities was \$2.9 million, \$3.2 million and \$5.9 million for the years ended December 31, 2019, 2018, and 2017, respectively.

(4) During the twelve months ended December 31, 2017, the Company recorded a \$1.8 million adjustment to premium amortization, which decreased interest income on taxable securities.

(5) Beginning in 2019, interest-bearing public funds, other than certificates of deposit, are presented separately in this table. Prior period amounts have been reclassified to conform to current period presentation.

Net interest income is impacted by the volume (changes in volume multiplied by prior rate), interest rate (changes in rate multiplied by prior volume) and the mix of interest-earning assets and interest-bearing liabilities. The following table shows changes in net interest income on a fully taxable-equivalent basis between 2019 and 2018, as well as between 2018 and 2017 broken down between volume and rate. Changes attributable to the combined effect of volume and interest rates have been allocated proportionately to the changes due to volume and the changes due to interest rates:

Changes in Net Interest Income

	2019 Compared to 2018 Increase (Decrease) Due to			2018 Compared to 2017 Increase (Decrease) Due to		
	Volume	Rate	Total	Volume	Rate	Total
<i>(in thousands)</i>						
Interest Income						
Loans, net (1)	\$ 10,577	\$ 10,194	\$ 20,771	\$ 88,408	\$ 13,973	\$ 102,381
Taxable securities	10,934	2,961	13,895	8,800	8,510	17,310
Tax-exempt securities (1)	(1,505)	(351)	(1,856)	1,709	(3,256)	(1,547)
Interest earning deposits with banks	334	276	610	(353)	242	(111)
Interest income	<u>\$ 20,340</u>	<u>\$ 13,080</u>	<u>\$ 33,420</u>	<u>\$ 98,564</u>	<u>\$ 19,469</u>	<u>\$ 118,033</u>
Interest Expense						
Deposits:						
Money market accounts (2)	\$ (249)	\$ 4,631	\$ 4,382	\$ 947	\$ 2,709	\$ 3,656
Interest-bearing demand (2)	(37)	170	133	146	939	1,085
Savings accounts (2)	1	44	45	15	27	42
Interest-bearing public funds, other than certificates of deposit (2)	2,309	2,933	5,242	(48)	1,020	972
Certificates of deposit	(303)	542	239	83	1,467	1,550
Total interest on deposits	<u>1,721</u>	<u>8,320</u>	<u>10,041</u>	<u>1,143</u>	<u>6,162</u>	<u>7,305</u>
FHLB and FRB advances	7,606	505	8,111	1,657	1,015	2,672
Subordinated debentures	—	—	—	1,560	7	1,567
Other borrowings and interest-bearing liabilities	(77)	242	165	(130)	59	(71)
Interest expense	<u>\$ 9,250</u>	<u>\$ 9,067</u>	<u>\$ 18,317</u>	<u>\$ 4,230</u>	<u>\$ 7,243</u>	<u>\$ 11,473</u>
	<u>\$ 11,090</u>	<u>\$ 4,013</u>	<u>\$ 15,103</u>	<u>\$ 94,334</u>	<u>\$ 12,226</u>	<u>\$ 106,560</u>

(1) For tax exempt loans and tax exempt securities, the amount of our tax equivalent adjustment for 2018 was impacted by the lower federal corporate tax rate. As a result, our tax equivalent adjustments for tax exempt loans and tax exempt securities were \$4.7 million and \$3.3 million lower, respectively, than they would have been utilizing the prior federal corporate tax rate. This change in federal corporate tax rate negatively impacted our 2018 net interest margin (tax equivalent) by 7 basis points.

(2) Beginning in 2019, interest-bearing public funds, other than certificates of deposit, are presented separately in this table. Prior period amounts have been reclassified to conform to current period presentation.

Incremental accretion income represents the amount of interest income recorded on acquired loans above the contractual rate stated in the individual loan notes. The additional interest income stems from the net discount established at the time these loan portfolios were acquired. The following table shows the impact to interest income of incremental accretion income as well as the net interest margin and operating net interest margin for the periods presented:

	Years Ended December 31,		
	2019	2018	2017
	<i>(dollars in thousands)</i>		
Incremental accretion income due to:			
PCI loans	\$ 1,284	\$ 1,635	\$ 4,107
Other acquired loans	7,802	10,921	8,689
Total incremental accretion income	\$ 9,086	\$ 12,556	\$ 12,796
Net interest margin (tax equivalent)	4.24%	4.33%	4.18%
Operating net interest margin (tax equivalent) (1)	4.23%	4.30%	4.15%

(1) Operating net interest margin (tax equivalent) is a Non-GAAP financial measure. See [Non-GAAP financial measures section of “Item 7. Management’s Discussion and Analysis of Financial Conditions and Results of Operations.”](#)

Comparison of 2019 with 2018

Taxable-equivalent net interest income totaled \$501.8 million in 2019, compared with \$486.7 million for 2018. The increase in net interest income during 2019 resulted from the increase in the size of the loan and securities portfolios as well as the increase in yield on the loan portfolio. The increase in net interest income was partially offset by higher interest rates paid on interest-bearing deposits combined with higher balances of interest-bearing liabilities.

The Company’s net interest margin (tax equivalent) decreased from 4.33% for the year ended December 31, 2018 to 4.24% for the current year due primarily to higher rates paid on interest-bearing deposits and FHLB advances and \$3.5 million less accretion income. The Company’s operating net interest margin (tax equivalent) decreased from 4.30% for the year ended December 31, 2018 to 4.23% for the current year due to higher volumes and higher rates paid on deposits and FHLB advances.

For a discussion of the methodologies used by management in recording interest income on loans, please see [Note 1 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report.

Comparison of 2018 with 2017

Taxable-equivalent net interest income totaled \$486.7 million in 2018, compared with \$380.1 million for 2017. The increase in net interest income during 2018 resulted from the increase in the size of the loan and securities portfolios, primarily due to the Pacific Continental acquisition. The increase in net interest income was partially offset by higher interest rates paid on interest-bearing liabilities combined with higher balances of interest-bearing liabilities due to the acquisition.

The Company’s net interest margin (tax equivalent) increased from 4.18% for the year ended December 31, 2017 to 4.33% for the year ended December 31, 2018 due primarily to higher yields on loans as well as higher loan volumes, partially offset by both the rise in rates paid on deposits and other interest-bearing liabilities as well as the balance in these liabilities. The Company’s operating net interest margin (tax equivalent) increased from 4.15% for the year ended December 31, 2017 to 4.30% for 2018 due to higher volumes and rates on loans.

Provision for Loan and Lease Losses

The Company accounts for the credit risk associated with lending activities through its “ALLL” and “Provision for loan and lease losses.” The provision is the expense recognized in the Consolidated Statements of Income to adjust the allowance to the levels deemed appropriate by management, as determined through its application of the Company’s allowance methodology procedures. For discussion of the methodology used by management in determining the adequacy of the ALLL, see the [“Allowance for Loan and Lease Losses and Unfunded Commitments and Letters of Credit”](#) and [“Critical Accounting Policies”](#) sections of this discussion.

The Company recorded provision expense of \$3.5 million, \$14.8 million and \$8.6 million in 2019, 2018 and 2017, respectively. The provision recorded in 2019 included management's ongoing assessment of the credit quality of the Company's loan portfolio. Factors affecting the provision include net charge-offs, credit quality migration, and size and composition of the loan portfolio and changes in the economic environment during the period. See "[Allowance for Loan and Lease Losses and Unfunded Commitments and Letters of Credit](#)" section of this discussion for further information on factors considered by the Company in assessing the credit quality of the loan portfolio and establishing the ALLL.

For the years ended December 31, 2019, 2018 and 2017, net loan charge-offs amounted to \$2.9 million, \$7.0 million, and \$3.0 million, respectively.

Noninterest Income

The following table presents the significant components of noninterest income and the related dollar and percentage change from period to period:

	Years ended December 31,						2017
	2019	\$ Change	% Change (1)	2018	\$ Change	% Change (1)	
<i>(dollars in thousands)</i>							
Deposit account and treasury management fees	\$ 35,695	\$ (377)	(1)%	\$ 36,072	\$ 5,691	19 %	\$ 30,381
Card revenue	15,198	(4,521)	(23)%	19,719	(5,908)	(23)%	25,627
Financial services and trust revenue	12,799	664	5 %	12,135	657	6 %	11,478
Loan revenue	13,465	1,599	13 %	11,866	(533)	(4)%	12,399
Merchant processing revenue	—	—	—%	—	(4,283)	(100)%	4,283
Bank owned life insurance	6,294	287	5 %	6,007	627	12 %	5,380
Investment securities gains (losses), net	2,132	2,221	N/M	(89)	(78)	(709)%	(11)
Change in FDIC loss-sharing asset	—	—	—%	—	447	100 %	(447)
Gain on sale of merchant card services portfolio	—	—	—%	—	(14,000)	(100)%	14,000
Other	11,598	9,052	356 %	2,546	(4,006)	(61)%	6,552
Total noninterest income	\$ 97,181	\$ 8,925	10 %	\$ 88,256	\$ (21,386)	(20)%	\$ 109,642

(1) Percentage changes greater than +/- 1000% are considered not meaningful and are presented as "N/M."

Comparison of 2019 with 2018

The \$8.9 million increase in noninterest income was due to increased other noninterest income and higher investment securities gains, partially offset by a decline in card revenue. The increase in other noninterest income was due to current year gains of \$6.6 million as a result of the sale of three real estate parcels as well as \$3.1 million in BOLI benefits. There were no similar benefits realized in 2018. The decrease in card revenue was due to the Company being subject to the interchange fee cap imposed under the Dodd-Frank Act beginning on July 1, 2018.

Comparison of 2018 with 2017

The \$21.4 million decrease in noninterest income was principally from the \$14.0 million gain on sale of the merchant card services portfolio on July 1, 2017. As a result of the merchant card services portfolio sale, we now share with the buyer in merchant services revenue and include such amounts in "Card revenue." The decrease was also attributable to lower card revenue as we became subject to the interchange fee cap imposed under the Dodd-Frank Act on July 1, 2018, and the change to net presentation of interchange revenue pursuant to the adoption of new revenue recognition accounting guidance, which became effective on January 1, 2018. Specifically, \$5.0 million of payment card network expenses for 2018 that would have historically been presented in "other noninterest expense" are now presented in "card revenue." Partially offsetting these decreases to noninterest income was an increase in deposit account and treasury management fees of \$5.7 million, or 19%.

Noninterest Expense

The following table presents the significant components of noninterest expense and the related dollar and percentage change from period to period:

	Years ended December 31,						
	2019	\$ Change	% Change	2018	\$ Change	% Change	2017
<i>(dollars in thousands)</i>							
Compensation and employee benefits	\$ 212,867	\$ 12,668	6 %	\$ 200,199	\$ 30,525	18 %	\$ 169,674
Occupancy	35,176	(1,400)	(4)%	36,576	4,169	13 %	32,407
Data processing	19,164	(1,071)	(5)%	20,235	2,030	11 %	18,205
Legal and professional services	21,645	3,601	20 %	18,044	2,893	19 %	15,151
Amortization of intangibles	10,479	(1,757)	(14)%	12,236	5,903	93 %	6,333
B&O taxes (1)	5,846	182	3 %	5,664	1,338	31 %	4,326
Advertising and promotion	4,925	(659)	(12)%	5,584	1,118	25 %	4,466
Regulatory premiums	1,920	(1,790)	(48)%	3,710	527	17 %	3,183
Merchant processing expense	—	—	—%	—	(2,196)	(100)%	2,196
Net cost (benefit) of operation of OREO	(692)	(1,910)	(157)%	1,218	750	160 %	468
Other (1)(2)	34,152	(2,872)	(8)%	37,024	2,416	7 %	34,608
Total noninterest expense	<u>\$ 345,482</u>	<u>\$ 4,992</u>	1 %	<u>\$ 340,490</u>	<u>\$ 49,473</u>	17 %	<u>\$ 291,017</u>

(1) Beginning the first quarter of 2019, B&O taxes were reported separately from other taxes, licenses and fees, which are now reported under “other noninterest expense.” Prior periods have been reclassified to conform to current period presentation.

(2) In the first quarter of 2018, there was a change to net presentation of interchange revenue pursuant to the adoption of new revenue recognition accounting guidance on January 1, 2018. As a result, card revenue for the twelve months ended December 31, 2019 and 2018 includes card network expenses of \$4.5 million and \$5.0 million, respectively, that would have historically been presented in other noninterest expense.

The following table shows the impact of the acquisition-related expenses for the periods indicated to the various components of noninterest expense:

	Years ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Acquisition-related expenses:			
Compensation and employee benefits	\$ —	\$ 3,620	\$ 8,014
Occupancy	—	1,619	1,912
Advertising and promotion	—	537	467
Data processing	—	963	1,555
Legal and professional fees	—	1,028	4,618
Other	—	894	630
Total impact of acquisition-related costs to noninterest expense	\$ —	\$ 8,661	\$ 17,196
Acquisition-related expenses by transaction:			
Pacific Continental (1)	—	8,661	17,196
Total impact of acquisition-related costs to noninterest expense	\$ —	\$ 8,661	\$ 17,196

(1) The Company completed the acquisition of Pacific Continental on November 1, 2017. See [Note 2 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding this acquisition.

Comparison of 2019 with 2018

Noninterest expense was \$345.5 million in 2019, an increase of \$5.0 million over 2018. Included in noninterest expense were \$8.7 million of acquisition-related expenses in 2018. After removing the effect of acquisition-related expenses, noninterest expense increased \$13.7 million due to higher compensation and employee benefits and legal and professional fees. These increases were partially offset by decreases in other noninterest and OREO expenses as well as decreases in regulatory premiums and amortization of intangibles. The increases in compensation and employee benefits were driven by increases in salaries, group insurance and other compensation and incentive expenses. The increase in legal and professional fees was due to an increase in professional fees related to our digital initiative strategy. These increases were partially offset by a decrease in OREO expenses which was driven by a gain on the sale of OREO in 2019 compared to a loss on the sale of OREO in 2018. Other noninterest expenses decreased due to a recapture of the provision for off-balance sheet reserves recognized in 2019 compared to a provision for off-balance sheet reserves reported in 2018. The reduction in regulatory premiums was due to the utilization of a portion of our FDIC Small Bank Assessment Credit during the last half of 2019 and the decrease in the amortization of intangibles was a result of the amortization of our CDI asset.

Comparison of 2018 with 2017

Noninterest expense was \$340.5 million in 2018, an increase of \$49.5 million, or 17%, over 2017. Included in noninterest expense were \$8.7 million of acquisition-related expenses compared to \$17.2 million in 2017. After removing the effect of acquisition-related expenses, noninterest expense increased \$58.0 million due to higher compensation and employee benefits, amortization of intangibles, legal and professional fees, and other expenses. The increases in compensation and employee benefits and amortization of intangibles were driven by increases in salaries, benefits, and payroll taxes and amortization of core deposit intangibles. These increases were primarily due to the Pacific Continental acquisition, as 2018 included the full year of the acquired bank expenses compared to the inclusion of only two months of expenses in 2017. The increase in legal and professional fees was driven mainly by an increase in treasury management and legal fees related to nonperforming loans. Other noninterest expense increased due to increases in software expense and sponsorships and other charitable contributions. These increases were partially offset by a decrease in merchant processing expense. As a result of the 2017 sale of our merchant card services portfolio, we no longer directly incur merchant processing costs.

Income Tax

For the years ended December 31, 2019, 2018 and 2017, we recorded income tax provisions of \$47.2 million, \$39.0 million and \$65.2 million, respectively. The effective tax rate was 20% in 2019, 18% in 2018 and 37% in 2017. Our effective tax rate for 2019 and 2018 were positively impacted by the Tax Cuts and Jobs Act which was enacted on December 22, 2017. On January 1, 2018, the Tax Cuts and Jobs Act reduced the federal tax rate for corporations from 35% to 21% and changed or limited certain deductions. Our effective tax rate for 2017 was impacted by the re-measurement of our deferred tax assets pursuant to the enactment of the Tax Cuts and Jobs Act. As a result of the lower corporate tax rate, during 2017, we recorded a re-measurement charge of \$12.2 million to reduce our deferred tax assets. For 2019 and 2018, our effective tax rates were less than the 21% federal statutory rates, respectively, primarily due to tax-exempt municipal investment securities income, tax-exempt earnings from bank owned life insurance, and income from loans with favorable tax attributes. For additional information, see [Note 24 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report.

Financial Condition

Our total assets increased 8% to \$14.08 billion at December 31, 2019 from \$13.10 billion at December 31, 2018. Increases in debt securities available for sale, loans, FHLB stock and other assets were partially offset by decreases in cash and cash equivalents and other intangible assets. Our available-for-sale debt securities portfolio increased \$578.7 million as a result of purchases of securities throughout the year. The loan portfolio, net of the allowance for loan losses, increased \$351.4 million as new loan production outpaced loan payoffs and our FHLB stock increased \$22.2 million as a result of the required purchase of FHLB stock related to the increase in our FHLB advances. Other assets increased due to the addition of the right of use asset resulting from the adoption of ASU 2016-02, *Leases*. See [Note 1 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding ASU 2016-02, *Leases*. Partially offsetting these increases were decreases in cash and cash equivalents and other intangible assets. Cash and cash equivalents decreased \$29.9 million while other intangible assets decreased \$10.5 million due to the amortization of the CDI resulting from the acquisition of Pacific Continental Bank.

Liabilities increased \$858.1 million, or 8% to \$11.92 billion due to increases in FHLB advances, deposits, the adoption of ASU 2016-02, *Leases* and increases in interest rate swap derivatives during the year. FHLB advances increased \$553.9 million to \$953.5 million and deposit balances increased \$226.6 million to \$10.68 billion to supplement the growth in our loan and securities portfolios. Other liabilities increased \$74.4 million, or 69% to \$181.7 million. The increase in other liabilities was primarily due to the addition of a lease liability resulting from the adoption of ASU 2016-02, *Leases* and the increase in our interest rate swap derivative contracts. Total shareholders' equity increased \$126.3 million to \$2.16 billion. This increase was a combination of increases in net income less cash dividends paid to common shareholders, unrealized gains on debt securities available for sale and the addition of the interest rate collar partially offset by treasury shares purchased during the year. See [Note 16 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding the interest rate collar.

Investment Portfolio

We invest in securities to generate revenue for the Company, to manage liquidity while minimizing interest rate risk and to provide collateral for certain public deposits and short-term borrowings. The amortized cost amounts represent the Company's original cost for the investments, adjusted for accumulated amortization or accretion of any yield adjustments related to the security. The estimated fair values are the amounts we believe the securities could be sold for as of the dates indicated. At December 31, 2019, gross unrealized losses in our securities portfolio were \$20.4 million related to 288 separate available for sale securities. Based on past experience with these types of securities and our own financial performance, we do not currently intend to sell any securities in a loss position nor does available evidence suggest it is more likely than not that management will be required to sell any securities currently in a loss position before the recovery of the amortized cost basis. We review these investments for other-than-temporary impairment on an ongoing basis.

Our investment portfolio increased \$578.7 million from the prior year due to purchases of \$1.20 billion and \$86.2 million in net unrealized gain offset by maturities, repayments and sales of \$685.4 million and premium amortization of \$19.0 million.

At December 31, 2019, U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations comprised 77% of our investment portfolio, other asset-backed securities were 5%, state and municipal securities were 13% and government agency and government-sponsored enterprise securities were 5%. Our entire investment portfolio is categorized as available for sale and carried on our balance sheet at fair value. The average duration of our investment portfolio was approximately 4 years and 8 months at December 31, 2019. This duration takes into account calls, where appropriate, and consensus prepayment speeds.

The following table presents the contractual maturities and weighted average yield of our investment portfolio:

	December 31, 2019		
	Amortized Cost	Fair Value	Yield
<i>(dollars in thousands)</i>			
U.S. government agency and government-sponsored enterprise mortgage-backed securities & collateralized mortgage obligations (1)			
Due through 1 year	\$ 8,670	\$ 8,629	1.92%
Over 1 through 5 years	145,109	145,840	2.25%
Over 5 through 10 years	1,648,064	1,675,108	2.70%
Over 10 years	1,063,106	1,063,373	2.62%
Total	\$ 2,864,949	\$ 2,892,950	2.65%
Other asset-backed securities (1)			
Over 1 through 5 years	1,731	1,715	2.28%
Over 5 through 10 years	168,471	170,306	2.70%
Over 10 years	24,361	24,029	2.30%
Total	\$ 194,563	\$ 196,050	2.65%
State and municipal securities (2)			
Due through 1 year	\$ 42,788	\$ 42,937	2.72%
Over 1 through 5 years	150,409	152,777	2.67%
Over 5 through 10 years	170,684	175,000	2.88%
Over 10 years	114,485	118,088	3.33%
Total	\$ 478,366	\$ 488,802	2.91%
U.S. government agency and government-sponsored enterprise securities (1)			
Due through 1 year	\$ 25,905	\$ 25,972	2.09%
Over 1 through 5 years	119,307	121,031	2.19%
Over 5 through 10 years	20,006	21,337	3.16%
Total	\$ 165,218	\$ 168,340	2.30%

(1) The maturities reported for mortgage-backed securities, collateralized mortgage obligations, other asset-backed securities and government agency and government-sponsored enterprise securities are based on contractual maturities and principal amortization.

(2) Yields on fully taxable equivalent basis.

For further information on our investment portfolio, see [Note 4 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report.

FHLB Stock

The FHLB stock is composed of two sub-classes: membership stock and activity based stock. Membership stock is stock we are required to purchase and hold as a condition of membership in the FHLB. The Company’s membership stock purchase requirement is measured as a percentage of our year end assets, subject to a \$10 million cap. Activity based stock is stock we are required to purchase and hold in order to obtain an advance or participate in FHLB mortgage programs. The Company’s activity based stock purchase requirement is measured as a percentage of our advance proceeds. At December 31, 2019, the Company held \$48.1 million of FHLB Class B stock, \$10.0 million of which was membership stock and the remaining \$38.1 million was activity based. The FHLB stock is issued, transferred, redeemed, and repurchased at a par value of \$100.

Loan Portfolio

The Bank is a full service commercial bank, which originates a wide variety of loans, and focuses its lending efforts on originating commercial business and commercial real estate loans. The following table sets forth our loan portfolio by type of loan for the dates indicated:

	December 31,									
	2019	% of Total	2018	% of Total	2017	% of Total	2016	% of Total	2015	% of Total
	<i>(dollars in thousands)</i>									
Commercial business	\$ 3,602,597	41.2 %	\$ 3,438,422	41.0 %	\$ 3,377,324	40.4 %	\$ 2,551,054	41.1 %	\$ 2,362,575	40.6 %
Real estate:										
One-to-four family residential	265,144	3.0 %	238,367	2.8 %	188,396	2.3 %	170,331	2.7 %	176,295	3.0 %
Commercial and multifamily residential	4,183,961	47.9 %	3,846,027	45.8 %	3,825,739	45.8 %	2,719,830	43.7 %	2,491,736	42.9 %
Total real estate	4,449,105	50.9 %	4,084,394	48.6 %	4,014,135	48.1 %	2,890,161	46.4 %	2,668,031	45.9 %
Real estate construction:										
One-to-four family residential	192,762	2.2 %	217,790	2.6 %	200,518	2.4 %	121,887	2.0 %	135,874	2.3 %
Commercial and multifamily residential	163,103	1.9 %	284,394	3.4 %	371,931	4.4 %	209,118	3.4 %	167,413	2.9 %
Total real estate construction	355,865	4.1 %	502,184	6.0 %	572,449	6.8 %	331,005	5.4 %	303,287	5.2 %
Consumer	292,697	3.3 %	318,945	3.8 %	334,190	4.0 %	329,261	5.3 %	342,601	5.9 %
PCI	77,516	0.9 %	89,760	1.1 %	112,670	1.3 %	145,660	2.3 %	180,906	3.1 %
Subtotal	8,777,780	100.4 %	8,433,705	100.5 %	8,410,768	100.6 %	6,247,141	100.5 %	5,857,400	100.7 %
Less: Net unearned income	(34,315)	(0.4)%	(42,194)	(0.5)%	(52,111)	(0.6)%	(33,718)	(0.5)%	(42,373)	(0.7)%
Loans, net of unearned income (before ALLL)	\$ 8,743,465	100.0 %	\$ 8,391,511	100.0 %	\$ 8,358,657	100.0 %	\$ 6,213,423	100.0 %	\$ 5,815,027	100.0 %
Loans held for sale	\$ 17,718		\$ 3,849		\$ 5,766		\$ 5,846		\$ 4,509	

At December 31, 2019, total loans, gross of the ALLL were \$8.74 billion compared with \$8.39 billion in the prior year, an increase of \$352.0 million, or 4.2% from the previous year. The increase in the loan portfolio was the result of organic loan production, partially offset by contractual payments and prepayments. Total loans, net of the ALLL, represented 62% and 63% of total assets at December 31, 2019 and 2018, respectively.

Commercial Business Loans: We are committed to providing competitive commercial lending in our primary market areas. Management expects a continued focus within its commercial lending products and to emphasize, in particular, relationship banking with businesses and business owners.

Real Estate Loans: One-to-four family residential loans are secured by properties located within our primary market areas and, typically, have loan-to-value ratios of 80% or lower at origination. Our underwriting standards for commercial and multifamily residential loans generally require that the loan-to-value ratio for these loans not exceed 75% of appraised value, cost, or discounted cash flow value, as appropriate, and that commercial properties maintain debt coverage ratios (net operating income divided by annual debt servicing) of 1.2 or better. However, underwriting standards can be influenced by competition and other factors. We endeavor to maintain the highest practical underwriting standards while balancing the need to remain competitive in our lending practices.

Real Estate Construction Loans: We originate a variety of real estate construction loans. Underwriting guidelines for these loans vary by loan type but include loan-to-value limits, term limits and loan advance limits, as applicable.

Our underwriting guidelines for commercial and multifamily residential real estate construction loans generally require that the loan-to-value ratio not exceed 75% and stabilized debt coverage ratios (net operating income divided by annual debt servicing) of 1.2 or better. As noted above, underwriting standards can be influenced by competition and other factors. However, we endeavor to maintain the highest practical underwriting standards while balancing the need to remain competitive in our lending practices.

Consumer Loans: Consumer loans include automobile loans, boat and recreational vehicle financing, home equity and home improvement loans and miscellaneous personal loans.

Foreign Loans: The Company has no material foreign activities. Substantially all of the Company's loans and unfunded commitments are geographically concentrated in its service areas within the states of Washington, Oregon and Idaho.

Purchased Credit Impaired Loans: PCI loans are comprised of loans and loan commitments acquired in connection with the 2011 FDIC-assisted acquisitions of First Heritage Bank and Summit Bank, as well as the 2010 FDIC-assisted acquisitions of Columbia River Bank and American Marine Bank. PCI loans are generally accounted for under ASC Topic 310-30, *Loans and Debt Securities Acquired with Deteriorated Credit Quality* (“ASC 310-30”). The Company did not acquire any loans accounted for under ASC 310-30 during 2019 or 2018.

Net unearned income: The following table provides additional details related to the net discount of acquired and purchased loans, excluding PCI loans, by acquisition for the periods indicated:

Acquisition:	(in thousands)		
	2019	2018	2017
Pacific Continental	\$ 13,314	\$ 18,526	\$ 24,556
Intermountain	1,614	2,303	3,892
West Coast	2,675	4,578	7,995
Other	(1,378)	725	(134)
Total net discount at period end	<u>\$ 16,225</u>	<u>\$ 26,132</u>	<u>\$ 36,309</u>

For additional information on our loan portfolio, including amounts pledged as collateral on borrowings, see [Note 5 to the Consolidated Financial Statements](#) in “[Item 8. Financial Statements and Supplementary Data](#)” of this report.

Maturities and Sensitivities of Loans to Changes in Interest Rates

The following table presents the maturity distribution of our commercial and real estate construction loan portfolios and the sensitivity of these loans due after one year to changes in interest rates as of December 31, 2019:

	Maturing			Total
	Due Through 1 Year	Over 1 Through 5 Years	Over 5 Years	
	(in thousands)			
Commercial business	\$ 1,182,715	\$ 947,289	\$ 1,480,456	\$ 3,610,460
Real estate construction	186,630	74,745	94,490	355,865
Total	<u>\$ 1,369,345</u>	<u>\$ 1,022,034</u>	<u>\$ 1,574,946</u>	<u>\$ 3,966,325</u>
Fixed rate loans due after 1 year		\$ 593,169	\$ 1,118,406	\$ 1,711,575
Variable rate loans due after 1 year		428,865	456,540	885,405
Total		<u>\$ 1,022,034</u>	<u>\$ 1,574,946</u>	<u>\$ 2,596,980</u>

Risk Elements

The extension of credit in the form of loans or other credit substitutes to individuals and businesses is one of our principal commerce activities. Our policies, applicable laws, and regulations require risk analysis as well as ongoing portfolio and credit management. We manage our credit risk through lending limit constraints, credit review, approval policies, and extensive, ongoing internal monitoring. We also manage credit risk through diversification of the loan portfolio by type of loan, type of industry, type of borrower, and by limiting the aggregation of debt to a single borrower.

In analyzing our existing portfolio, we review our consumer and residential loan portfolios by their performance as a pool of loans, since no single loan is individually significant or judged by its risk rating, size or potential risk of loss. In contrast, the monitoring process for the commercial business, real estate construction, and commercial real estate portfolios includes periodic reviews of individual loans with risk ratings assigned to each loan and performance judged on a loan by loan basis.

We review these loans to assess the ability of our borrowers to service all interest and principal obligations and, as a result, the risk rating may be adjusted accordingly. In the event that full collection of principal and interest is not reasonably assured, the loan is appropriately downgraded and, if warranted, placed on nonaccrual status even though the loan may be current as to principal and interest payments. Additionally, we assess whether an impairment of a loan warrants specific reserves or a write-down of the loan. For additional discussion on our methodology in managing credit risk within our loan portfolio, see “[Allowance for Loan and Lease Losses and Unfunded Commitments and Letters of Credit](#)” section and [Note 1 to the Consolidated Financial Statements](#) in “[Item 8. Financial Statements and Supplementary Data](#)” of this report.

Loan policies, credit quality criteria, portfolio guidelines and other controls are established under the guidance of our Chief Credit Officer and approved, as appropriate, by the board of directors. Credit Administration, together with the management loan committee, has the responsibility for administering the credit approval process. As another part of its control process, we use an internal credit review and examination function to provide reasonable assurance that loans and commitments are made and maintained as prescribed by our credit policies. This includes a review of documentation when the loan is initially extended and subsequent examination to ensure continued performance and proper risk assessment.

Nonperforming Assets

Nonperforming assets consist of: (i) nonaccrual loans, which generally are loans placed on a nonaccrual basis when the loan becomes past due 90 days or when there are otherwise serious doubts about the collectability of principal or interest within the existing terms of the loan, (ii) OREO, and (iii) OPPO, if applicable. Nonperforming assets totaled \$33.6 million, or 0.24% of year end assets at December 31, 2019, compared to \$60.9 million, or 0.46% of year end assets at December 31, 2018.

The following table sets forth information with respect to our nonaccrual loans, total nonperforming assets, accruing loans past-due 90 days or more and potential problem loans:

	December 31,				
	2019	2018	2017	2016	2015
<i>(dollars in thousands)</i>					
Nonaccrual:					
Commercial business	\$ 26,974	\$ 35,513	\$ 45,460	\$ 11,555	\$ 9,437
Real estate:					
One-to-four family residential	591	1,158	785	568	820
Commercial and multifamily residential	3,477	14,904	13,941	11,187	9,513
Real estate construction:					
One-to-four family residential	—	318	1,854	563	928
Consumer	2,018	2,949	4,149	3,883	766
Total nonaccrual loans:	33,060	54,842	66,189	27,756	21,464
OREO and OPPO	552	6,049	13,298	5,998	13,738
Total nonperforming assets	\$ 33,612	\$ 60,891	\$ 79,487	\$ 33,754	\$ 35,202
Accruing loans past due 90 days or more	\$ —	\$ —	\$ 581	\$ —	\$ —
Forgone interest on nonperforming loans	\$ 1,996	\$ 3,615	\$ 2,400	\$ 1,919	\$ 1,287
Interest recognized on nonperforming loans	\$ 452	\$ 1,138	\$ 971	\$ 237	\$ 202
Potential problem loans	\$ 72,469	\$ 26,613	\$ 41,642	\$ 31,744	\$ 23,654
ALLL	\$ 83,968	\$ 83,369	\$ 75,646	\$ 70,043	\$ 68,172
Nonperforming loans to year end loans	0.38%	0.65%	0.79%	0.45%	0.37%
Nonperforming assets to year end assets	0.24%	0.46%	0.63%	0.35%	0.39%

At December 31, 2019, nonperforming loans decreased to 0.38% of year end loans, down from 0.65% of year end loans at December 31, 2018. The largest decreases in nonperforming loans was in commercial business loans and commercial real estate loans, which decreased from \$35.5 million and \$14.9 million, or 65% and 27%, respectively of nonperforming loans at December 31, 2018 to \$27.0 million and \$3.5 million, or 82% and 11%, respectively of nonperforming loans at year end 2019.

The following table summarizes activity in nonperforming loans for the period indicated:

	Years Ended December 31,	
	2019	2018
	<i>(in thousands)</i>	
Balance, beginning of period	\$ 54,842	\$ 66,189
Loans placed on nonaccrual or restructured	45,047	55,384
Advances	2,576	1,285
Charge-offs	(8,010)	(9,025)
Loans returned to accrual status	(13,348)	(11,483)
Repayments (including interest applied to principal)	(47,736)	(47,036)
Transfers to OREO/OPPO	(311)	(472)
Balance, end of period	<u>\$ 33,060</u>	<u>\$ 54,842</u>

Loans are considered impaired when based on current information and events, it is probable that the Company will be unable to collect all amounts due according to the contractual terms of the loan agreement or when a loan has been modified in a TDR. A loan is classified as a TDR when a borrower is experiencing financial difficulties that lead to a restructuring of the loan, and the Company grants concessions to the borrower in the restructuring that it would not otherwise consider. These concessions may include interest rate reductions, principal forgiveness, extension of maturity date and other actions intended to minimize potential losses. Generally, a nonaccrual loan that is restructured remains on nonaccrual status for a period of six months to demonstrate that the borrower can meet the restructured terms. If the borrower's performance under the new terms is not reasonably assured, the loan remains classified as a nonaccrual loan.

The assessment for impairment occurs when and while such loans are designated as classified per the Company's internal risk rating system or when and while such loans are on nonaccrual. All nonaccrual loans greater than \$500,000 and all TDR loans are considered impaired and analyzed individually on a quarterly basis. Classified loans with an outstanding balance greater than \$500,000 are evaluated for potential impairment on a quarterly basis. The Company's policy is to record cash receipts on impaired loans first as reductions in principal and then as interest income.

The following table summarizes impaired loan financial data at December 31, 2019 and 2018:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Impaired loans	\$ 31,994	\$ 49,104
Impaired loans with specific allocations	\$ 9,335	\$ 13,351
Amount of the specific allocations	\$ 461	\$ 2,132

Impaired loans with a carrying amount of \$32.0 million at December 31, 2019 were subject to specific allocations of ALLL of \$461 thousand and charge-offs of \$7.2 million during the year. Collateral dependent impaired loans without specific allocations at December 31, 2019 and 2018 either had collateral which exceeded the carrying value of the loans or reflected a partial charge-off to the market value of collateral (less costs to sell), as of the most recent appraisal date. Restructured loans accruing interest totaled \$9.7 million and \$15.3 million at December 31, 2019 and 2018, respectively.

When a loan with unique risk characteristics has been identified as being impaired, the amount of impairment will be measured by the Company using discounted cash flows, except when it is determined that the remaining source of repayment for the loan is the operation or liquidation of the underlying collateral. In these cases, the current fair value of the collateral, reduced by costs to sell, will be used in place of discounted cash flows. As a final alternative, the observable market price of the debt may be used to assess impairment. Predominately, the Company uses the fair value of collateral approach based upon a reliable valuation.

When a loan secured by real estate migrates to nonperforming and impaired status and it does not have a market valuation less than one year old, the Company secures an updated market valuation by a third-party appraiser that is reviewed by the Company's on-staff appraiser. Subsequently, the asset will be appraised annually by a third-party appraiser or the Company's on-staff appraiser. The evaluation may occur more frequently if management determines that there has been increased market deterioration within a specific geographical location. Upon receipt and verification of the market valuation, the Company will record the loan at the lower of cost or market (less costs to sell) by recording a charge-off to the ALLL or by designating a specific reserve in accordance with accounting principles generally accepted in the United States.

For additional information on our nonperforming loans, see [Note 5 to the Consolidated Financial Statements in "Item 8. Financial Statements and Supplementary Data"](#) of this report.

Other Real Estate and Other Personal Property Owned: As of December 31, 2019, there was \$552 thousand in OREO and OPPO, which was primarily comprised of property from foreclosed real estate loans which decreased \$5.5 million from \$6.0 million at December 31, 2018. The decrease was primarily driven by \$5.7 million in OREO sales. Properties acquired by foreclosure or deed in lieu of foreclosure are transferred to OREO and are recorded at fair value less estimated costs to sell, at the date of transfer of the property. If the carrying value exceeds the fair value at the time of the transfer, the difference is charged to the ALLL. The fair value of the OREO property is based upon current appraisal. Subsequent losses that result from the ongoing periodic valuation of these properties are charged to the net cost of operation of OREO expense in the period in which they are identified. In general, improvements to the OREO are capitalized and holding costs are charged to the net cost of operation of OREO as incurred.

Potential Problem Loans: Potential problem loans are loans which are currently performing and are not on nonaccrual status, restructured or impaired, but about which there are significant doubts as to the borrower's future ability to comply with repayment terms and which may later be included in nonaccrual, past due, restructured or impaired loans. Potential problem loans totaled \$72.5 million at year end 2019, compared to \$26.6 million at year end 2018. The increase in potential problem loans in 2019 was driven by a large commercial business loan and a large income property multifamily loan.

Allowance for Loan and Lease Losses and Unfunded Commitments and Letters of Credit

The ALLL is an accounting estimate of incurred credit losses in our loan portfolio at the balance sheet date. The provision for loan and lease losses is the expense recognized in the Consolidated Statements of Income to adjust the allowance to the levels deemed appropriate by management, as measured by the Company's credit loss estimation methodologies. The ALLL for unfunded commitments and letters of credit is maintained at a level believed by management to be sufficient to absorb estimated probable losses related to these unfunded credit facilities at the balance sheet date.

Analysis of the ALLL

The following table provides an analysis of our loan loss experience by loan type for the last five years:

**Changes in Allowance for Loan and Lease Losses and
Unfunded Commitments and Letters of Credit**

	December 31,				
	2019	2018	2017	2016	2015
	<i>(dollars in thousands)</i>				
Beginning balance, loans excluding PCI loans	\$ 79,758	\$ 68,739	\$ 59,528	\$ 54,446	\$ 53,233
Beginning balance, PCI loans	3,611	6,907	10,515	13,726	16,336
Beginning balance	83,369	75,646	70,043	68,172	69,569
Charge-offs:					
Commercial business	(10,324)	(11,719)	(7,613)	(10,068)	(8,266)
Real estate:					
One-to-four family residential	(2)	—	(460)	(35)	(376)
Commercial and multifamily residential	—	(780)	(287)	(89)	(505)
Real estate construction:					
One-to-four family residential	(170)	—	(14)	(88)	—
Consumer	(1,400)	(1,194)	(1,474)	(1,238)	(2,066)
PCI loans	(3,319)	(4,862)	(6,812)	(9,944)	(13,854)
Total charge-offs	(15,215)	(18,555)	(16,660)	(21,462)	(25,067)
Recoveries:					
Commercial business	3,105	3,427	4,836	2,645	2,336
Real estate:					
One-to-four family residential	242	408	568	171	307
Commercial and multifamily residential	610	1,031	675	1,402	3,975
Real estate construction:					
One-to-four family residential	3,454	1,616	178	291	193
Commercial and multifamily residential	1	—	1	109	8
Consumer	930	1,180	1,187	933	931
PCI loans	3,979	3,847	6,187	7,004	7,329
Total recoveries	12,321	11,509	13,632	12,555	15,079
Net charge-offs	(2,894)	(7,046)	(3,028)	(8,907)	(9,988)
Provision for loan and lease losses, loans excluding PCI loans	4,920	17,050	11,614	11,049	4,676
Provision (recapture) for loan and lease losses, PCI loans	(1,427)	(2,281)	(2,983)	(271)	\$ 3,915
Provision for loan and lease losses	3,493	14,769	8,631	10,778	8,591
Ending balance, loans excluding PCI loans	81,124	79,758	68,739	59,528	54,446
Ending balance, PCI loans	2,844	3,611	6,907	10,515	13,726
Ending balance	\$ 83,968	\$ 83,369	\$ 75,646	\$ 70,043	\$ 68,172
Loans outstanding at end of period (1)	\$ 8,743,465	\$ 8,391,511	\$ 8,358,657	\$ 6,213,423	\$ 5,815,027
Average amount of loans outstanding (1)	\$ 8,612,478	\$ 8,409,373	\$ 6,682,259	\$ 6,052,389	\$ 5,609,261
ALLL to period-end loans	0.96%	0.99%	0.91%	1.13%	1.17%
Net charge-offs to average loans outstanding	0.03%	0.08%	0.05%	0.15%	0.18%
ALLL for unfunded commitments and letters of credit					
Beginning balance	\$ 4,330	\$ 3,130	\$ 2,705	\$ 2,930	\$ 2,655
Net changes in the ALLL for unfunded commitments and letters of credit	(900)	1,200	425	(225)	275
Ending balance	\$ 3,430	\$ 4,330	\$ 3,130	\$ 2,705	\$ 2,930

(1) Excludes loans held for sale.

At December 31, 2019, our ALLL was \$84.0 million, or 0.96% of total loans (excluding loans held for sale). This compares with an allowance of \$83.4 million, or 0.99% of total loans (excluding loans held for sale) at December 31, 2018.

We have used the same methodology for ALLL calculations during 2019, 2018 and 2017. Adjustments to the percentages of the ALLL allocated to loan categories are made based on trends with respect to delinquencies and problem loans within each loan class. The Company reviews the ALLL quantitative and qualitative methodology on a quarterly basis and makes adjustments when appropriate. We continue to make revisions to our ALLL as necessary to maintain adequate reserves. The Company carefully monitors the loan portfolio and continues to emphasize the importance of credit quality while continuously strengthening loan monitoring systems and controls.

Allocation of the ALLL

The table below sets forth the allocation of the ALLL by loan category:

Balance at End of Period Applicable to:	December 31,									
	2019		2018		2017		2016		2015	
	Amount	% of Total Loans*	Amount	% of Total Loans*	Amount	% of Total Loans*	Amount	% of Total Loans*	Amount	% of Total Loans*
	<i>(dollars in thousands)</i>									
Commercial business	\$ 46,160	41.1%	\$ 45,814	40.8%	\$ 31,341	40.2%	\$ 37,010	41.0%	\$ 33,620	40.5%
Real estate and construction:										
One-to-four family residential	5,195	5.2%	6,678	5.4%	5,373	4.6%	1,584	4.7%	1,988	5.3%
Commercial and multifamily residential	24,714	49.5%	20,912	48.9%	26,862	49.9%	17,174	46.8%	14,738	45.4%
Consumer	4,455	3.3%	5,301	3.8%	5,163	4.0%	3,534	5.2%	3,531	5.7%
PCI	2,844	0.9%	3,611	1.1%	6,907	1.3%	10,515	2.3%	13,726	3.1%
Unallocated	600	—%	1,053	—%	—	—%	226	—%	569	—%
Total	<u>\$ 83,968</u>	<u>100.0%</u>	<u>\$ 83,369</u>	<u>100.0%</u>	<u>\$ 75,646</u>	<u>100.0%</u>	<u>\$ 70,043</u>	<u>100.0%</u>	<u>\$ 68,172</u>	<u>100.0%</u>

* Represents the total of all outstanding loans in each category as a percent of total loans outstanding.

Deposits

The following table sets forth the composition of the Company's deposits by significant category:

	December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Demand and other noninterest-bearing	\$ 5,328,146	\$ 5,227,216	\$ 5,081,901
Money market (2)	2,322,644	2,294,125	2,452,391
Interest-bearing demand (2)	1,150,437	1,084,863	1,085,173
Savings (2)	882,050	889,849	861,487
Interest-bearing public funds, other than certificates of deposit (2)	301,203	233,938	271,814
Certificates of deposit, less than \$250,000	218,764	243,849	286,791
Certificates of deposit, \$250,000 or more	151,995	89,473	100,399
Certificates of deposit insured by CDARS [®] (1)	17,065	23,580	25,374
Brokered certificates of deposit	12,259	57,930	78,481
Reciprocal money market accounts (1)	300,158	313,692	289,031
Subtotal	10,684,721	10,458,515	10,532,842
Valuation adjustment resulting from acquisition accounting	(13)	(389)	(757)
Total deposits	<u>\$ 10,684,708</u>	<u>\$ 10,458,126</u>	<u>\$ 10,532,085</u>

(1) For periods prior to June 30, 2018, CDARS and reciprocal money market accounts were considered to be brokered deposits by regulatory authorities and were reported as such on quarterly Call Reports. With the passage of the EGRRCPA in May 2018, these items are no longer considered brokered deposits.

(2) Beginning 2019, interest-bearing public funds, other than certificates of deposit, are presented separately in this table. Prior period amounts have been reclassified to conform to current period presentation.

Deposits totaled \$10.68 billion at December 31, 2019 compared to \$10.46 billion at December 31, 2018. Noninterest-bearing deposits, interest-bearing deposits, brokered deposits and reciprocal money market accounts provide a stable source of low cost funding.

At December 31, 2019, brokered deposits, other wholesale deposits and reciprocal money market accounts (excluding public funds) totaled \$329.5 million or 3.1% of total deposits compared to \$395.2 million or 3.8% of total deposits, at year end 2018. The reciprocal money market account program is similar to the CDARS[®] program. CDARS[®] is a network that allows participating banks to offer extended FDIC deposit insurance coverage on time deposits. These extended deposit insurance programs are generally available only to existing customers and are not used as a means of generating additional liquidity.

At December 31, 2019, public funds held by the Company totaled \$529.4 million compared to \$456.6 million at December 31, 2018. Uninsured public funds balances increased from \$394.8 million at December 31, 2018 to \$468.3 million at December 31, 2019. The Company is required to collateralize 50% of Washington state and 40% of Oregon state uninsured public funds. For additional information regarding the collateral for these deposits, see [Note 4 to the Consolidated Financial Statements in "Item 8. Financial Statements and Supplementary Data"](#) of this report.

The following table sets forth the amount outstanding of time certificates of deposit and other time deposits in amounts of \$100,000 or more (which represent CDARS® accounts and brokered time deposits) by time remaining until maturity and percentage of total deposits:

Amounts maturing in:	December 31, 2019			
	Time Certificates of Deposit of \$100,000 or More		Other Time Deposits of \$100,000 or More	
	Amount	Percent of Total Deposits	Amount	Percent of Total Deposits
	<i>(dollars in thousands)</i>			
Three months or less	\$ 125,035	1.2%	\$ 9,825	0.1%
Over 3 through 6 months	22,208	0.2%	11,426	0.1%
Over 6 through 12 months	28,922	0.3%	6,919	0.1%
Over 12 months	38,984	0.3%	—	—%
Total	\$ 215,149	2.0%	\$ 28,170	0.3%

The following table sets forth the average amount of and the average rate paid on each significant deposit category:

	Years ended December 31,					
	2019		2018		2017	
	Average Deposits	Average Rate	Average Deposits	Average Rate	Average Deposits	Average Rate
	<i>(dollars in thousands)</i>					
Money market (1)	\$ 2,591,303	0.41%	\$ 2,695,585	0.23%	\$ 2,070,183	0.12%
Interest bearing demand (1)	1,064,145	0.16%	1,089,548	0.14%	864,250	0.05%
Savings (1)	892,518	0.02%	884,770	0.02%	773,753	0.01%
Interest-bearing public funds, other than certificates of deposit (1)	440,359	1.65%	244,943	0.82%	256,529	0.40%
Certificates of deposit	395,421	0.62%	452,756	0.49%	406,406	0.16%
Total interest-bearing deposits	5,383,746	0.41%	5,367,602	0.23%	4,371,121	0.11%
Demand and other non-interest bearing	5,139,941		5,042,802		4,111,229	
Total average deposits	\$ 10,523,687		\$ 10,410,404		\$ 8,482,350	

(1) Beginning in 2019, interest-bearing public funds, other than certificates of deposit, are presented separately in this table. Prior period amounts have been reclassified to conform to current period presentation.

Borrowings

Borrowed funds provide an additional source of funding for loan growth. Our borrowed funds consist primarily of borrowings from the FHLB and FRB, securities sold under agreements to repurchase, subordinated debentures and a revolving line of credit. FHLB and FRB borrowings are secured by our loan portfolio and investment securities. Securities sold under agreements to repurchase are secured by investment securities. Subordinated debentures are unsecured and the revolving line of credit is available, if necessary, and requires the Company to comply with certain covenants including those related to asset quality and capital levels. For additional information on our borrowings, see Notes [12](#), [13](#), [14](#), and [15](#), to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data” of this report.

Off-Balance Sheet Arrangements

In the normal course of business, the Company is a party to financial instruments with off-balance sheet risk. These financial instruments include commitments to extend credit and standby letters of credit. These instruments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount reflected in the Consolidated Balance Sheets.

Exposure to credit loss in the event of nonperformance by the other party to the financial instrument for commitments to extend credit and standby letters of credit is represented by the contractual notional amount of those instruments. The Company uses the same credit policies in making commitments and conditional obligations as it does for on-balance sheet instruments. The Company evaluates each client’s creditworthiness on a case-by-case basis.

Commitments to extend credit are agreements to lend to a client as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since a portion of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements.

The Company had off-balance sheet loan commitments aggregating \$2.67 billion and \$2.62 billion at December 31, 2019 and 2018, respectively. Standby letters of credit were \$25.7 million at December 31, 2019, a decrease from \$28.3 million at December 31, 2018. In addition, there were no commitments under commercial letters of credit used to facilitate customers' trade transactions and other off-balance sheet liabilities at December 31, 2019 and 2018.

Contractual Obligations

We are party to many contractual financial obligations, including repayments of deposits and borrowings and payments for operating leases. The table below presents certain future financial obligations of the Company:

	Payments due within time period at December 31, 2019				Total
	0-12 Months	1-3 Years	4-5 Years	Due after Five Years	
	<i>(in thousands)</i>				
Total deposits (1)	\$ 10,597,880	\$ 73,025	\$ 13,653	\$ 150	\$ 10,684,708
FHLB advances (1)	946,000	2,073	—	5,396	953,469
Operating leases	11,105	21,815	16,456	21,866	71,242
Other borrowings (1)	64,437	—	—	—	64,437
Subordinated debentures (1)	—	—	—	35,277	35,277
Total	<u>\$ 11,619,422</u>	<u>\$ 96,913</u>	<u>\$ 30,109</u>	<u>\$ 62,689</u>	<u>\$ 11,809,133</u>

(1) In the banking industry, interest-bearing obligations are principally used to fund interest-earning assets. As such, interest charges on contractual obligations were excluded from reported amounts, as the potential cash outflows would have corresponding cash inflows from interest-earning assets.

For additional information regarding our contractual obligations, see Notes [10](#), [11](#), [12](#), [13](#) and [14](#) to the Consolidated Financial Statements in "Item 8. Financial Statements and Supplementary Data" of this report.

Liquidity and Sources of Funds

In general, our primary sources of funds are net income, loan repayments, maturities and principal payments on investment securities, customer deposits, advances from the FHLB and the FRB, securities repurchase agreements, subordinated debentures and a revolving line of credit available, if necessary. These funds are used to make loans, purchase investments, meet deposit withdrawals and maturing liabilities and cover operational expenses. Scheduled loan repayments and client deposits have proven to be a relatively stable source of funds while other deposit inflows and unscheduled loan prepayments are influenced by interest rate levels, competition and general economic conditions. We manage liquidity through monitoring sources and uses of funds on a daily basis and had unused credit lines with the FHLB and the FRB of \$1.96 billion and \$209.1 million, respectively, at December 31, 2019, that are available to us as a supplemental funding source. The holding company's sources of funds are dividends from its banking subsidiary which are used to fund dividends to shareholders, purchase treasury shares and cover operating expenses.

In addition, we have a shelf registration statement on file with the SEC registering an unspecified amount of any combination of debt or equity securities, depositary shares, purchase contracts, units and warrants in one or more offerings. Specific information regarding the terms of and the securities being offered will be provided at the time of any offering. Proceeds from any future offerings are expected to be used for general corporate purposes, including, but not limited to, the repayment of debt, repurchasing or redeeming outstanding securities, working capital, funding future acquisitions or other purposes identified at the time of any offering.

Capital

Our shareholders' equity increased to \$2.16 billion at December 31, 2019, from \$2.03 billion at December 31, 2018. Shareholders' equity was 15.34% and 15.53% of total assets at December 31, 2019 and 2018, respectively. Dividends per common share were \$1.40 and \$1.14, for the years ended December 31, 2019 and 2018, respectively.

Regulatory Capital. In July 2013, the federal bank regulators approved the Capital Rules (as discussed in "Item 1. Business—Supervision and Regulation—Regulatory Capital Requirements"), which implement the Basel III capital framework and various provisions of the Dodd-Frank Act, which were fully phased in as of January 1, 2019.

Basel III also introduced a new capital conservation buffer, composed entirely of CET1, on top of the minimum risk-weighted asset ratios. The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions with a ratio of CET1 to risk-weighted assets, Tier 1 to risk-weighted assets or total capital to risk-weighted assets above the minimum but below the capital conservation buffer will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall. The Company and the Bank are required to maintain such additional capital conservation buffer of 2.5% of CET1, effectively resulting in minimum ratios of (i) CET1 to risk-weighted assets of at least 7%, (ii) Tier 1 capital to risk-weighted assets of at least 8.5%, and (iii) total capital to risk-weighted assets of at least 10.5%. The Company and the Bank met all such capital requirements as of December 31, 2019.

In addition, FDIC regulations set forth the qualifications necessary for a bank to be classified as "well-capitalized" (as discussed in "Item 1. Business—Supervision and Regulation—Prompt Corrective Action Framework"), primarily for assignment of FDIC insurance premium rates. Failure to qualify as "well-capitalized" can negatively impact a bank's ability to expand and to engage in certain activities. The Company and the Bank qualified as "well-capitalized" at December 31, 2019 and 2018.

The following table sets forth the Company's and the Bank's capital ratios at December 31, 2019 and 2018:

	Company		Columbia Bank	
	2019	2018	2019	2018
CET1 risk-based capital ratio	12.45%	12.74%	12.46%	12.96%
Tier 1 risk-based capital ratio	12.45%	12.74%	12.46%	12.96%
Total risk-based capital ratio	13.60%	13.99%	13.29%	13.85%
Leverage ratio	10.17%	10.24%	10.22%	10.42%

Stock Repurchase Program

On November 14, 2018, the board of directors approved a stock repurchase program to repurchase up to 2.9 million shares, up to a maximum aggregate purchase price of \$100.0 million. On October 23, 2019, the board of directors extended the duration of the stock repurchase program through early May 2020. The Company intends to purchase the shares from time to time in the open market, in private transactions, by direct or derivative purchases or other transactions under conditions which allow such repurchases to be accretive to EPS while maintaining capital ratios that exceed the guidelines for a well-capitalized financial institution. The Company repurchased 1.5 million shares of common stock totaling \$50.8 million for the year ended December 31, 2019.

Dividends

The following table sets forth the dividends paid per common share and the dividend payout ratio (dividends paid per common share divided by diluted EPS):

	Years ended December 31,		
	2019	2018	2017
Dividends paid per common share - regular	\$ 1.12	\$ 1.00	\$ 0.88
Dividends paid per common share - special	0.28	0.14	—
Dividends paid per common share	\$ 1.40	\$ 1.14	\$ 0.88
Dividend payout ratio (1)	52%	48%	47%

(1) Dividends paid per common share as a percentage of earnings per diluted common share

Subsequent to year end, on January 23, 2020, the Company declared a quarterly cash dividend of \$0.28 per share and a special cash dividend of \$0.22 per share payable on February 19, 2020, to shareholders of record at the close of business on February 5, 2020.

Applicable federal and Washington state regulations restrict capital distributions, including dividends, by the Company's banking subsidiary. Such restrictions are tied to the institution's capital levels after giving effect to distributions. Our ability to pay cash dividends is substantially dependent upon receipt of dividends from the Bank. In addition, the payment of cash dividends is subject to Federal regulatory requirements for capital levels and other restrictions. In this regard, current guidance from the Federal Reserve provides, among other things, that dividends per share on the Company's common stock generally should not exceed EPS, measured over the previous four fiscal quarters.

Reference "Item 6. Selected Financial Data" of this report for our return on average assets, return on average equity and average common equity to average assets ratios for all reported periods.

Non-GAAP Financial Measures

In addition to capital ratios defined by banking regulators, the Company considers various measures when evaluating capital utilization and adequacy, including:

- Tangible common equity to tangible assets, and
- Tangible common equity to risk-weighted assets.

The Company believes these measures are useful because they reflect the level of capital available to withstand unexpected market conditions. Additionally, presentation of these measures allows readers to compare certain aspects of the Company's capitalization to other organizations. These ratios differ from capital measures defined by banking regulators principally in that the numerator excludes shareholders' equity associated with preferred securities, the nature and extent of which varies across organizations. Additionally, these measures present capital adequacy inclusive and exclusive of accumulated other comprehensive income. These calculations are intended to complement the capital ratios defined by banking regulators for both absolute and comparative purposes.

Because GAAP in the United States of America do not include capital ratio measures, the Company believes there are no comparable GAAP financial measures to these tangible common equity ratios. The following table reconciles the Company's calculation of these measures to amounts reported under GAAP.

Despite the importance of these measures to the Company, there are no standardized definitions for them and, as a result, the Company's calculations may not be comparable with other organizations. The Company encourages readers to consider its Consolidated Financial Statements in their entirety and not to rely on any single financial measure.

	December 31,	
	2019	2018
	<i>(dollars in thousands)</i>	
Shareholders' equity	\$ 2,159,962	\$ 2,033,649
Goodwill	(765,842)	(765,842)
Other intangible assets, net	(35,458)	(45,937)
Tangible common equity (a)	1,358,662	1,221,870
Total assets	14,079,524	13,095,145
Goodwill	(765,842)	(765,842)
Other intangible assets, net	(35,458)	(45,937)
Tangible assets (b)	\$ 13,278,224	\$ 12,283,366
Risk-weighted assets, determined in accordance with prescribed regulatory requirements (c)	\$ 10,583,559	\$ 9,838,148

Ratios

Tangible common equity to tangible assets (a)/(b)	10.23%	9.95%
Tangible common equity to risk-weighted assets (a)/(c)	12.84%	12.42%

The Company also considers operating net interest margin (tax equivalent) to be a useful measurement as it closely reflects the ongoing operating performance of the Company. Additionally, presentation of the operating net interest margin allows readers to compare certain aspects of the Company's net interest margin to other organizations that may not have had significant acquisitions. Despite the usefulness of the operating net interest margin to the Company, there is no standardized definition for it and, as a result, the Company's calculations may not be comparable with other organizations. The Company encourages readers to consider its Consolidated Financial Statements in their entirety and not to rely on any single financial measure.

The following table reconciles the Company's calculation of the operating net interest margin (tax equivalent) to the net interest margin (tax equivalent) for the periods indicated:

	Years ended December 31,		
	2019	2018	2017
	<i>(dollars in thousands)</i>		
Operating net interest margin non-GAAP reconciliation:			
Net interest income (tax equivalent) (1)	\$ 501,770	\$ 486,667	\$ 380,107
Adjustments to arrive at operating net interest income (tax equivalent):			
Incremental accretion income on PCI loans	(1,284)	(1,635)	(4,107)
Incremental accretion income on other acquired loans	(7,802)	(10,921)	(8,689)
Premium amortization on acquired securities	6,020	7,736	6,636
Correction of immaterial error - securities premium amortization	—	—	1,771
Interest reversals on nonaccrual loans	1,671	1,564	1,766
Operating net interest income (tax equivalent) (1)	\$ 500,375	\$ 483,411	\$ 377,484
Average interest earning assets	\$ 11,837,633	\$ 11,241,321	\$ 9,098,276
Net interest margin (tax equivalent) (1)	4.24%	4.33%	4.18%
Operating net interest margin (tax equivalent) (1)	4.23%	4.30%	4.15%

(1) Tax-exempt interest income has been adjusted to a tax equivalent basis. The amount of such adjustment was an addition to net interest income of \$8.4 million, \$7.8 million and \$12.1 million for the years ended December 31, 2019, 2018 and 2017, respectively. The amount of our tax equivalent adjustment for 2017 was impacted by the higher federal corporate tax rate, which was lowered in 2018 as a result of the Tax Cuts and Jobs Act.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Sensitivity

We are exposed to interest rate risk, which is the risk that changes in prevailing interest rates will adversely affect assets, liabilities, capital, income and expenses at different times or in different amounts. Generally, there are four sources of interest rate risk as described below:

Repricing risk—Repricing risk is the risk of adverse consequences from a change in interest rates that arises because of differences in the timing of when those interest rate changes affect an institution's assets and liabilities.

Basis risk—Basis risk is the risk of adverse consequence resulting from unequal changes in the spread between two or more rates for different instruments with the same maturity.

Yield curve risk—Yield curve risk is the risk of adverse consequence resulting from unequal changes in the spread between two or more rates for different maturities for the same instrument.

Option risk—In banking, option risks are known as borrower options to prepay loans and depositor options to make deposits, withdrawals, and early redemptions. Option risk arises whenever bank products give customers the right, but not the obligation, to alter the quantity or the timing of cash flows.

An Asset/Liability Management Committee is responsible for developing, monitoring and reviewing asset/liability processes, interest rate risk exposures, strategies and tactics and reporting to the board of directors. It is the responsibility of the board of directors to establish policies and interest rate limits and approve these policies and interest rate limits annually. It is the responsibility of management to execute the approved policies, develop and implement risk management strategies and to report to the board of directors on a regular basis. We maintain an asset/liability management policy that provides guidelines for controlling exposure to interest rate risk. The policy guidelines direct management to assess the impact of changes in interest rates upon both earnings and capital. The guidelines establish limits for interest rate risk sensitivity.

Interest Rate Risk Sensitivity

A number of measures are used to monitor and manage interest rate risk, including income simulations and interest sensitivity (gap) analysis. An income simulation model is the primary tool used to assess the direction and magnitude of changes in net interest income resulting from changes in interest rates. Basic assumptions in the model include prepayment speeds on mortgage-related assets, cash flows and maturities of other investment securities, loan and deposit volumes and pricing. These assumptions are inherently subjective and may not be realized and, as a result, actual results will differ from our projections. In addition, variances in the timing, magnitude and frequency of interest rate changes, overall market conditions including volumes and pricing, changes in management strategies, among other factors will also result in variances between the projected and actual results.

Based on the results of the simulation model as of December 31, 2019, we would expect decreases in net interest income of \$2.9 million and \$22.4 million in year one and year two, respectively, if interest rates gradually decrease from current rates by 100 basis points. We would expect an increase in net interest income of \$517 thousand and \$21.4 million in year one and year two, respectively, if interest rates gradually increase from current rates by 200 basis points.

On January 23, 2019, the Company entered into an interest rate collar derivative transaction with a \$500.0 million notional based on one month LIBOR. The Company has designated this as a cash flow hedge. This transaction was entered into to minimize the decrease in net interest income if interest rates decline over the next five years.

The analysis of an institution's interest rate gap (the difference between the repricing of interest-earning assets and interest-bearing liabilities during a given period of time) is one standard tool for the measurement of the exposure to interest rate risk. We believe that because interest rate gap analysis does not address all factors that can affect earnings performance, it should be used in conjunction with other methods of evaluating interest rate risk.

The table on the following page sets forth the estimated maturity or repricing, and the resulting interest rate gap of our interest-earning assets and interest-bearing liabilities at December 31, 2019. The amounts in the table are derived from our internal data and are based upon regulatory reporting formats. Therefore, they may not be consistent with financial information appearing elsewhere herein that has been prepared in accordance with accounting principles generally accepted in the United States.

The estimates for net interest income sensitivity and interest rate gap could be significantly affected by external factors such as changes in prepayment assumptions, early withdrawal of deposits and competition. For example, although certain assets and liabilities may have similar maturities or periods to repricing, they may react in different degrees to changes in market interest rates. Also, the interest rates on certain types of assets and liabilities may fluctuate in advance of changes in market interest rates, while other types may lag changes in market interest rates.

Additionally, certain assets, such as adjustable-rate mortgages, have features that restrict changes in the interest rates of such assets both on a short-term basis and over the lives of such assets. Further, in the event of a change in market interest rates, prepayment and early withdrawal levels could deviate significantly from those assumed in calculating the tables. Finally, the ability of many borrowers to service their adjustable-rate debt may decrease in the event of a substantial increase in market interest rates.

December 31, 2019	Estimated Maturity or Repricing				Total
	0-3 months	4-12 months	Over 1 year through 5 years	Due after 5 years	
<i>(dollars in thousands)</i>					
Interest-Earning Assets					
Interest-earning deposits	\$ 24,132	\$ —	\$ —	\$ —	\$ 24,132
Loans, net of deferred fees	3,176,275	959,992	3,328,537	1,278,661	8,743,465
Loans held for sale	17,718	—	—	—	17,718
Investments	225,244	298,906	1,314,784	1,955,328	3,794,262
Total interest-earning assets	<u>\$ 3,443,369</u>	<u>\$ 1,258,898</u>	<u>\$ 4,643,321</u>	<u>\$ 3,233,989</u>	<u>12,579,577</u>
ALLL					(83,968)
Cash and due from banks					223,541
Premises and equipment, net					165,408
Other assets					1,194,966
Total assets					<u>\$ 14,079,524</u>
Interest-Bearing Liabilities					
Interest-bearing non-maturity deposits	\$ 4,956,492	\$ —	\$ —	\$ —	\$ 4,956,492
Time deposits	168,979	144,262	86,678	151	400,070
Subordinated debentures	—	—	35,277	—	35,277
Borrowings	810,906	202,000	—	5,000	1,017,906
Total interest-bearing liabilities	<u>\$ 5,936,377</u>	<u>\$ 346,262</u>	<u>\$ 121,955</u>	<u>\$ 5,151</u>	<u>6,409,745</u>
Other liabilities					5,509,817
Total liabilities					<u>11,919,562</u>
Shareholders' equity					2,159,962
Total liabilities and shareholders' equity					<u>\$ 14,079,524</u>
Interest-bearing liabilities as a percent of total interest-earning assets	47.19 %	2.75 %	0.97%	0.04%	
Rate sensitivity gap	\$ (2,493,008)	\$ 912,636	\$ 4,521,366	\$ 3,228,838	
Cumulative rate sensitivity gap	\$ (2,493,008)	\$ (1,580,372)	\$ 2,940,994	\$ 6,169,832	
Rate sensitivity gap as a percentage of interest-earning assets	(19.82)%	7.25 %	35.94%	25.67%	
Cumulative rate sensitivity gap as a percentage of interest-earning assets	(19.82)%	(12.56)%	23.38%	49.05%	

Impact of Inflation and Changing Prices

The impact of inflation on our operations is increased operating costs. Unlike most industrial companies, virtually all the assets and liabilities of a financial institution are monetary in nature. As a result, interest rates generally have a more significant impact on a financial institution's performance than the effect of general levels of inflation. Although interest rates do not necessarily move in the same direction or to the same extent as the prices of goods and services, increases in inflation generally have resulted in increased interest rates.

LIBOR Transition

In anticipation of the discontinuance of LIBOR, management has assessed the use of LIBOR in its loan portfolio, investment securities and interest rate derivatives and is evaluating the impact that the discontinuance of LIBOR may have on the Company. Current actions include the implementation of loan substitute language for new and renewed LIBOR based loans. We are considering the use of other indexes for some of our consumer loans. We are in discussions with our counterparties and tracking industry developments to follow the form and likely timing of the LIBOR transition. We are working on a plan for fulfilling our loan collateral needs with an alternative rate index as the transition date becomes known. This is likely to require some additional costs and litigation risk may rise with contract renewals, if needed.

Please refer to [Note 16 to the Consolidated Financial Statements in “Item 8. Financial Statements and Supplementary Data”](#) of this report for further information regarding the interest rate derivatives. As FASB and the IRS have proposed hedge accounting and taxation relief with regards to the transition, the Company does not anticipate any material impact to our Consolidated Financial Statements as a result of the transition away from LIBOR.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Columbia Banking System, Inc.

Opinion on the Financial Statements

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

We have also 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 27, 2020, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matters

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

Allowance for Loan and Lease Losses - Refer to Notes 1, 5, and 6 to the financial statements

Critical Audit Matter Description

The allowance for loan and lease losses (the “allowance”) is an accounting estimate of incurred credit losses in the Company’s loan portfolio at the balance sheet date. For loans collectively evaluated for impairment, management estimates the allowance with a formula-based model using loss experience over a historical time period that is segmented by loan pools with similar risk characteristics. Management also considers qualitative factors to ensure that the allowance reflects inherent losses in the loan portfolio. The magnitude of the qualitative allowance is limited to the maximum loss experience over the historical time period.

The qualitative factors capture inherent losses which are not derived from the formula- based model. The most significant qualitative factors relate to changes in economic and business conditions, concentration of credit, loss and recovery trends, nature and volume of the portfolio and trends in problem, delinquent and non-accrual loans. These qualitative factors have a high degree of subjectivity and changes in any of these factors may have a significant impact on the allowance.

Given the subjective nature and judgment applied by management in determining the most significant qualitative factors, auditing the allowance for loan and lease losses attributable to such qualitative factors required a high degree of auditor judgment and an increased extent of effort, which included the need to use credit specialists to appropriately evaluate the account.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the allowance attributable to the significant qualitative loss factors included the following, among others:

- We tested the design and operating effectiveness of controls over the Company’s determination of the qualitative factors, including the classification and segmentation of the loan balances and management’s review of the relevant factors considered.
- We tested the mathematical accuracy of the model and the data used as inputs in the determination of qualitative factors.
- With the assistance of credit specialists, we evaluated the appropriateness of the qualitative framework.
- We performed statistical analysis to determine if the primary factors considered by management in the determination of the qualitative factors are appropriate indicators of credit losses.
- We evaluated the change and magnitude of the qualitative factors compared to the prior year, as well as the total amount of the allowance attributable to the qualitative factors as of year-end.
- We compared previous years’ allowance with subsequent charge offs; compared credit ratios to peer banks; and performed a credit trend analysis.

Adoption of Allowance for Credit Losses (ASC 326) - Refer to Note 1 to the financial statements

Critical Audit Matter Description

In accordance with Accounting Standards Update (the “ASU”) 2016-13, the Company is required to adopt Accounting Standards Codification (“ASC”) 326 as of January 1, 2020. The Company disclosed the estimated financial statement impact of adoption within Note 1. The allowance for credit losses (the “ACL”) is an accounting estimate of expected credit losses over the contractual life of assets carried at amortized cost within the Company’s loan portfolio at the balance sheet date. The ASU requires a financial asset (or a group of financial assets) measured at amortized cost to be presented at the net amount expected to be collected. The ACL is a valuation account that is deducted from the amortized cost basis of the financial asset(s) to present the net carrying value at the amount expected to be collected on the financial asset.

The quantitative allowance is calculated using a discounted cash flow approach with a probability of default methodology. The probability of default is an assumption derived from a regression model which determines the relationship between historical losses and certain economic variables. The Company determines a reasonable and supportable forecast and applies such forecast to the model to determine losses over the forecast period. Following the forecast period, the economic variables used to calculate the probability of default reverts to a historical average. Other assumptions relevant to the discounted cash flow model to derive the quantitative allowance include the loss given default, which is the estimate of loss for a defaulted loan, and the discount rate applied to future cash flows. The model calculates the net present value of each loan using both the contractual and expected cash flows, respectively.

We identified the disclosure of the impact of adoption of ASC 326 as a critical audit matter as the model methodology and probability of default assumption are complex and the procedures performed involved a high degree of auditor judgment and required significant effort, including the need to involve credit specialists.

How the Critical Audit Matter Was Addressed in the Audit

- We tested the design and operating effectiveness of controls over the ACL model, including the reconciliation of loan level inputs to the core loan system and to the general ledger.
- With the assistance of specialists, we evaluated the appropriateness of the loan segmentation.
- We tested the mathematical accuracy of the regression models and the historical loss information, charge-offs and events of default used to calculate the regression models.
- With the assistance of specialists, we evaluated the methodology and tested the mathematical accuracy of the model utilizing significant inputs and the reasonable and supportable forecasts of economic variables.
- We evaluated management's reasonable and supportable forecast of economic variables by comparing forecasts to relevant external market data and other forecasts used by management.
- We tested the mathematical accuracy and the historical data used to calculate the economic variable reversion to the mean and historical average.
- We tested the mathematical accuracy of the discounted cash flow model at a loan level.

/s/ Deloitte & Touche LLP

February 27, 2020

Seattle, Washington

We have served as the Company's auditor since 1997.

**COLUMBIA BANKING SYSTEM, INC.
CONSOLIDATED BALANCE SHEETS**

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
ASSETS		
Cash and due from banks	\$ 223,541	\$ 260,180
Interest-earning deposits with banks	24,132	17,407
Total cash and cash equivalents	247,673	277,587
Debt securities available for sale at fair value	3,746,142	3,167,448
FHLB stock at cost	48,120	25,960
Loans held for sale	17,718	3,849
Loans, net of unearned income	8,743,465	8,391,511
Less: ALLL	83,968	83,369
Loans, net	8,659,497	8,308,142
Interest receivable	46,839	45,323
Premises and equipment, net	165,408	168,788
OREO	552	6,019
Goodwill	765,842	765,842
Other intangible assets, net	35,458	45,937
Other assets	346,275	280,250
Total assets	\$ 14,079,524	\$ 13,095,145
LIABILITIES AND SHAREHOLDERS' EQUITY		
Deposits:		
Noninterest-bearing	\$ 5,328,146	\$ 5,227,216
Interest-bearing	5,356,562	5,230,910
Total deposits	10,684,708	10,458,126
FHLB advances	953,469	399,523
Securities sold under agreements to repurchase	64,437	61,094
Subordinated debentures	35,277	35,462
Other liabilities	181,671	107,291
Total liabilities	11,919,562	11,061,496
Commitments and contingent liabilities (Note 18)		
Shareholders' equity:		
	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Preferred stock (no par value)		
Authorized shares	2,000	2,000
Common stock (no par value)		
Authorized shares	115,000	115,000
Issued	73,577	73,249
Outstanding	72,124	73,249
Retained earnings	519,676	426,708
Accumulated other comprehensive income (loss)	40,367	(35,305)
Treasury stock at cost	1,453	—
Total shareholders' equity	2,159,962	2,033,649
Total liabilities and shareholders' equity	\$ 14,079,524	\$ 13,095,145

See accompanying Notes to Consolidated Financial Statements.

**COLUMBIA BANKING SYSTEM, INC.
CONSOLIDATED STATEMENTS OF INCOME**

	Years ended December 31,		
	2019	2018	2017
	<i>(in thousands except per share amounts)</i>		
Interest Income			
Loans	\$ 448,041	\$ 428,197	\$ 324,229
Taxable securities	69,864	55,969	38,659
Tax-exempt securities	10,735	12,201	11,045
Deposits in banks	1,312	702	813
Total interest income	529,952	497,069	374,746
Interest Expense			
Deposits	22,146	12,105	4,800
FHLB advances	11,861	3,750	1,078
Subordinated debentures	1,871	1,871	304
Other borrowings	669	504	575
Total interest expense	36,547	18,230	6,757
Net Interest Income	493,405	478,839	367,989
Provision for loan and lease losses	3,493	14,769	8,631
Net interest income after provision for loan and lease losses	489,912	464,070	359,358
Noninterest Income			
Deposit account and treasury management fees	35,695	36,072	30,381
Card revenue	15,198	19,719	25,627
Financial services and trust revenue	12,799	12,135	11,478
Loan revenue	13,465	11,866	12,399
Merchant processing revenue	—	—	4,283
Bank owned life insurance	6,294	6,007	5,380
Investment securities gains (losses), net	2,132	(89)	(11)
Gain on sale of merchant card services portfolio	—	—	14,000
Change in FDIC loss-sharing asset	—	—	(447)
Other	11,598	2,546	6,552
Total noninterest income	97,181	88,256	109,642
Noninterest Expense			
Compensation and employee benefits	212,867	200,199	169,674
Occupancy	35,176	36,576	32,407
Data processing	19,164	20,235	18,205
Legal and professional fees	21,645	18,044	15,151
Amortization of intangibles	10,479	12,236	6,333
B&O taxes (1)	5,846	5,664	4,326
Advertising and promotion	4,925	5,584	4,466
Regulatory premiums	1,920	3,710	3,183
Merchant processing expense	—	—	2,196
Net cost (benefit) of operation of OREO	(692)	1,218	468
Other (1)	34,152	37,024	34,608
Total noninterest expense	345,482	340,490	291,017
Income before income taxes	241,611	211,836	177,983
Income tax provision	47,160	38,954	65,155
Net Income	\$ 194,451	\$ 172,882	\$ 112,828
Earnings Per Common Share			
Basic	\$ 2.68	\$ 2.36	\$ 1.86
Diluted	\$ 2.68	\$ 2.36	\$ 1.86
Weighted average number of common shares outstanding	71,999	72,385	59,882
Weighted average number of diluted common shares outstanding	72,032	72,390	59,888

(1) Beginning January 1, 2019, B&O taxes are reported separately from other taxes, licenses and fees, which are now reported under “other noninterest expense.” Prior periods have been reclassified to conform to current period presentation.

See accompanying Notes to Consolidated Financial Statements.

COLUMBIA BANKING SYSTEM, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Years ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Net income	\$ 194,451	\$ 172,882	\$ 112,828
Other comprehensive income (loss), net of tax:			
Unrealized gain (loss) from securities:			
Net unrealized holding gain (loss) from available for sale debt securities arising during the period, net of tax of (\$20,540), \$4,067 and \$1,932	67,802	(13,425)	(3,391)
Reclassification adjustment of net gain (loss) from available for sale debt securities arising during the period, net of tax of \$496, \$25 and (\$4)	(1,636)	(81)	7
Net unrealized gain (loss) from available for sale debt securities, net of reclassification adjustment	66,166	(13,506)	(3,384)
Pension plan liability adjustment:			
Unrecognized net actuarial gain (loss) and plan amendments during the period, net of tax of \$619, (\$7) and (\$2,287)	(2,042)	24	4,017
Less: amortization of unrecognized net actuarial losses included in net periodic pension cost, net of tax of (\$74), (\$74) and (\$127)	245	245	223
Pension plan liability adjustment, net	(1,797)	269	4,240
Unrealized gain from cash flow hedging instruments:			
Net unrealized gain in cash flow hedging instruments arising during the period, net of tax of (\$3,562), \$0 and \$0	11,760	—	—
Reclassification adjustment for net gain (loss) in cash flow hedging instruments included in income, net of tax of \$138, \$0 and \$0	(457)	—	—
Net unrealized gain from cash flow hedging instruments, net of reclassification adjustment	11,303	—	—
Other comprehensive income (loss)	75,672	(13,237)	856
Total comprehensive income	\$ 270,123	\$ 159,645	\$ 113,684

See accompanying Notes to Consolidated Financial Statements.

COLUMBIA BANKING SYSTEM, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

	Preferred Stock		Common Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Shareholders' Equity
	Number of Shares	Amount	Number of Shares	Amount				
<i>(in thousands, except per share amounts)</i>								
Balance at January 1, 2017	9	\$ 2,217	58,042	\$ 995,837	\$ 271,957	\$ (18,999)	\$ —	\$ 1,251,012
Adjustment to opening retained earnings pursuant to adoption of ASU 2016-09	—	—	—	184	(117)	—	—	67
Adjustment pursuant to adoption of ASU 2018-02	—	—	—	—	4,082	(4,082)	—	—
Net income	—	—	—	—	112,828	—	—	112,828
Other comprehensive income	—	—	—	—	—	856	—	856
Issuance of common stock - acquisition related	—	—	14,642	636,385	—	—	—	636,385
Issuance of common stock - stock option and other plans	—	—	49	1,980	—	—	—	1,980
Issuance of common stock - restricted stock awards, net of canceled awards	—	—	241	7,745	—	—	—	7,745
Preferred stock conversion to common stock	(9)	(2,217)	102	2,217	—	—	—	—
Activity in deferred compensation plan	—	—	—	1	—	—	—	1
Purchase and retirement of common stock	—	—	(56)	(2,299)	—	—	—	(2,299)
Cash settlement of acquired equity awards	—	—	—	(7,345)	—	—	—	(7,345)
Cash dividends declared on common stock (\$0.88 per share)	—	—	—	—	(51,308)	—	—	(51,308)
Balance at December 31, 2017	—	\$ —	73,020	\$ 1,634,705	\$ 337,442	\$ (22,225)	\$ —	\$ 1,949,922
Adjustment to opening retained earnings pursuant to adoption of ASU 2016-01	—	—	—	—	(157)	157	—	—
Net income	—	—	—	—	172,882	—	—	172,882
Other comprehensive loss	—	—	—	—	—	(13,237)	—	(13,237)
Issuance of common stock - stock option and other plans	—	—	46	1,857	—	—	—	1,857
Issuance of common stock - restricted stock awards, net of canceled awards	—	—	246	8,354	—	—	—	8,354
Activity in deferred compensation plan	—	—	—	7	—	—	—	7
Purchase and retirement of common stock	—	—	(63)	(2,677)	—	—	—	(2,677)
Cash dividends declared on common stock (\$1.14 per share)	—	—	—	—	(83,459)	—	—	(83,459)
Balance at December 31, 2018	—	\$ —	73,249	\$ 1,642,246	\$ 426,708	\$ (35,305)	\$ —	\$ 2,033,649
Adjustment to opening retained earnings pursuant to adoption of ASU 2016-02	—	—	—	—	782	—	—	782
Net income	—	—	—	—	194,451	—	—	194,451
Other comprehensive income	—	—	—	—	—	75,672	—	75,672
Issuance of common stock - stock option and other plans	—	—	59	2,025	—	—	—	2,025
Issuance of common stock - restricted stock awards, net of canceled awards	—	—	343	9,271	—	—	—	9,271
Activity in deferred compensation plan	—	—	—	3	—	—	—	3
Purchase and retirement of common stock	—	—	(74)	(2,792)	—	—	—	(2,792)
Cash dividends declared on common stock (\$1.40 per share)	—	—	—	—	(102,265)	—	—	(102,265)
Purchase of treasury stock	—	—	(1,453)	—	—	—	(50,834)	(50,834)
Balance at December 31, 2019	—	\$ —	72,124	\$ 1,650,753	\$ 519,676	\$ 40,367	\$ (50,834)	\$ 2,159,962

See accompanying Notes to Consolidated Financial Statements.

COLUMBIA BANKING SYSTEM, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Cash Flows From Operating Activities			
Net income	\$ 194,451	\$ 172,882	\$ 112,828
Adjustments to reconcile net income to net cash provided by operating activities			
Provision for loan and lease losses	3,493	14,769	8,631
Stock-based compensation expense	9,271	8,354	7,745
Depreciation, amortization and accretion	34,213	32,971	31,101
Investment securities loss (gain), net	(2,132)	89	11
Net realized loss (gain) on sale of premises and equipment and loans held for investment	(7,317)	316	(139)
Net realized loss (gain) on sale and valuation adjustments of OREO	(602)	1,218	495
Gain on sale of merchant card services portfolio	—	—	(14,000)
Gain on bank owned life insurance death benefit	(3,051)	—	(4,193)
Termination of FDIC loss share agreements charge	—	—	2,409
Originations of loans held for sale	(210,484)	(133,945)	(133,460)
Proceeds from sales of loans held for sale	196,615	135,862	133,540
Deferred income tax expense	330	108	22,431
Net change in:			
Interest receivable	(1,516)	(4,442)	(2,980)
Interest payable	632	164	131
Other assets	(23,464)	2,176	(25,471)
Other liabilities	14,308	6,679	(10,554)
Net cash provided by operating activities	204,747	237,201	128,525
Cash Flows From Investing Activities			
Loans originated, net of principal collected	(291,857)	2,069	(273,927)
Purchases of:			
Debt securities available for sale	(1,196,895)	(965,585)	(355,607)
Loans held for investment	(57,075)	(46,969)	—
Premises and equipment	(8,447)	(11,328)	(6,495)
FHLB stock	(273,800)	(197,440)	(92,040)
Proceeds from:			
FDIC reimbursement on loss-sharing asset	—	—	26
Sales of debt securities available for sale	259,554	32,330	30,403
Sales of equity securities	—	4,808	—
Principal repayments and maturities of securities available for sale	428,025	465,747	283,874
Sales of premises and equipment and loans held for investment	8,634	16,030	12,422
Sale of merchant card services portfolio	—	—	14,000
Redemption of FHLB stock	251,640	181,920	98,924
Sales of OREO and OPPO	6,506	7,261	2,590
Bank owned life insurance death benefit	8,265	5,074	10,745
Payment to FDIC to terminate loss-sharing agreements	—	—	(4,666)
Payments to FDIC related to loss-sharing asset	—	—	(210)
Net cash received in business combinations	—	—	80,472
Net cash used in investing activities	(865,450)	(506,083)	(199,489)

COLUMBIA BANKING SYSTEM, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS, CONTINUED

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Cash Flows From Financing Activities			
Net increase (decrease) in deposits	226,958	(73,591)	353,797
Net increase (decrease) in sweep repurchase agreements	3,343	7,035	(3,380)
Proceeds from:			
Exercise of stock options	2,025	1,857	1,980
FHLB advances	6,845,000	4,936,000	2,301,000
FRB borrowings	36,000	5,010	10
Other borrowings	100	—	—
Payments for:			
FHLB advances	(6,291,000)	(4,548,000)	(2,397,000)
FRB borrowings	(36,000)	(5,010)	(10)
Other borrowings	(100)	—	—
Common stock dividends	(101,911)	(83,440)	(51,308)
Repayment of junior subordinated debentures	—	(8,248)	(6,186)
Repayment of term repurchase agreement	—	(25,000)	—
Cash settlement of acquired equity awards	—	—	(7,345)
Purchase of treasury stock	(50,834)	—	—
Purchase and retirement of common stock	(2,792)	(2,677)	(2,299)
Net cash provided by financing activities	630,789	203,936	189,259
Increase (decrease) in cash and cash equivalents	(29,914)	(64,946)	118,295
Cash and cash equivalents at beginning of period	277,587	342,533	224,238
Cash and cash equivalents at end of period	\$ 247,673	\$ 277,587	\$ 342,533
Supplemental Information:			
Interest paid	\$ 35,916	\$ 18,066	\$ 6,626
Income taxes paid, net of refunds	\$ 47,375	\$ 24,067	\$ 59,071
Non-cash investing and financing activities:			
Loans transferred to OREO	\$ 386	\$ 1,200	\$ 106
Share-based consideration issued in business combinations	\$ —	\$ —	\$ 636,385
Premises and equipment expenditures incurred but not yet paid	\$ 451	\$ 195	\$ —
Change in dividends payable on unvested shares included in other liabilities	\$ 354	\$ 19	\$ —

See accompanying Notes to Consolidated Financial Statements.

COLUMBIA BANKING SYSTEM, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
For the Years Ended December 31, 2019, 2018 and 2017

1. Summary of Significant Accounting Policies and Reclassifications

Organization

Columbia Banking System, Inc. (the “Corporation,” “we,” “our,” “Columbia” or the “Company”) is the holding company for Columbia State Bank (“Columbia Bank” or the “Bank”) and Columbia Trust Company (“Columbia Trust”). The Bank provides a full range of financial services through 146 branch locations, including 71 in the State of Washington, 61 in Oregon and 14 in Idaho. Columbia Trust provides fiduciary, agency, trust and related services, and life insurance products. Because the Bank comprises substantially all of the business of the Corporation, references to the “Company” mean the Corporation, the Bank and Columbia Trust together. The Corporation is approved as a bank holding company pursuant to the Gramm-Leach-Bliley Act of 1999.

The Company’s accounting and reporting policies conform to GAAP and practices in the financial services industry. To prepare the financial statements in conformity with GAAP, management must make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and income and expenses during the reporting period. Circumstances and events that differ significantly from those underlying our estimates and assumptions could cause actual financial results to differ from our estimates. The most significant estimates included in the financial statements relate to the ALLL, business combinations and goodwill impairment.

The Company has applied its accounting policies and estimation methods consistently in all periods presented in these financial statements (to the periods in which they applied), with the exception of our lease accounting under ASC 842, which was adopted prospectively, beginning in 2019.

Consolidation

The Consolidated Financial Statements of the Company include the accounts of the Corporation and its subsidiaries, including the Bank and Columbia Trust. Intercompany balances and transactions have been eliminated in consolidation.

Cash and cash equivalents

Cash and cash equivalents include cash and due from banks, and interest-bearing balances due from correspondent banks and the FRB. Cash equivalents have a maturity of 90 days or less at the time of purchase.

Securities

Securities are classified based on management’s intention on the date of purchase. All securities are classified as available for sale and are presented at fair value. Unrealized gains or losses on securities available for sale are excluded from net income but are included as separate components of other comprehensive income, net of taxes. Purchase premiums or discounts on securities available for sale are amortized or accreted into income using the interest method over the terms of the individual securities. The Company performs a quarterly assessment to determine whether a decline in fair value below amortized cost is other-than-temporary. Amortized cost includes adjustments made to the cost of an investment for accretion, amortization, collection of cash and previous other-than-temporary impairment recognized in earnings. Other-than-temporary impairment exists when it is more likely than not that the Company will be unable to recover the entire amortized cost basis of the security.

In performing the quarterly assessment for debt securities, management considers whether or not the Company expects to recover the entire amortized cost basis of the security. In addition, management also considers whether it is more likely than not that it will not have to sell the security before recovery of its cost basis. If the Company intends to sell a security or it is more likely than not it will be required to sell a security prior to recovery of its cost basis, the entire amount of impairment is recognized in earnings. If the Company does not intend to sell the security or it is not more likely than not it will be required to sell the security prior to recovery of its cost basis, the credit loss component of impairment is recognized in earnings and impairment associated with non-credit factors, such as market liquidity, is recognized in “Other comprehensive income (loss), net of tax.” A credit loss is the difference between the cost basis of the security and the present value of cash flows expected to be collected, discounted at the security’s effective interest rate at the date of acquisition. The cost basis of an other-than-temporarily impaired security is written down by the amount of impairment recognized in earnings. The new cost basis is not adjusted for subsequent recoveries in fair value. However, the difference between the new amortized cost basis and the cash flows expected to be collected is accreted as interest income. The total other-than-temporary impairment, if any, is presented in the Consolidated Statements of Income with a reduction for the amount of other-than-temporary impairment that is recognized in “Other Comprehensive Income,” if any.

Realized gains or losses on sales of securities available for sale are recorded using the specific identification method.

Federal Home Loan Bank Stock

The Company holds shares of Class B stock issued by the FHLB, which has been designated as FHLB membership stock or FHLB activity based stock in accordance with the capital plan of the FHLB. Membership stock is stock we are required to purchase and hold as a condition of membership in the FHLB. The Company's membership stock purchase requirement is measured as a percentage of our year end assets, subject to a \$10 million cap. Class B stock may be redeemed, subject to certain limitations, on five years' written notice to the FHLB. Activity based stock is stock we are required to purchase and hold in order to obtain an advance or participate in FHLB mortgage programs. The Company's activity based stock purchase requirement is measured as a percentage of our advance proceeds. Our FHLB stock is carried at par value because the shares are issued, transferred, redeemed, and repurchased by the FHLB at a par value of \$100. The FHLB stock is subject to recoverability testing per the Financial Services-Depository and Lending topic of the FASB ASC.

Loans held for sale

Mortgage loans held for sale are carried at the lower of amortized cost or fair value. Due to the short period of time between the origination and sale, the carrying amount of loans held for sale approximates the fair values.

Loans

Loans, excluding PCI loans, are generally carried at the unpaid principal balance, net of purchase premiums, purchase discounts and net deferred loan fees. Net deferred loan fees include nonrefundable loan origination fees less direct loan origination costs. Net deferred loan fees, purchase premiums and purchase discounts are amortized into interest income using either the interest method or straight-line method over the terms of the loans, adjusted for actual prepayments. The interest method is used for all loans except revolving loans, for which the straight-line method is used. Interest income is accrued as earned. Fees related to lending activities, other than the origination or purchase of loans, are recognized as noninterest income during the period the related services are performed.

Nonaccrual loans—Loans are placed on nonaccrual status when a loan becomes contractually past due 90 days with respect to interest or principal unless the loan is both well secured and in the process of collection, or if full collection of interest or principal becomes uncertain. When a loan is placed on nonaccrual status, any accrued and unpaid interest receivable is reversed and the amortization of net deferred loan fees, premiums and discounts ceases. The interest payments received on nonaccrual loans are generally accounted for on the cost-recovery method whereby the interest payment is applied to the principal balances. Loans may be returned to accrual status when improvements in credit quality eliminate the doubt as to the full collectability of both interest and principal and a period of sustained performance has occurred.

Impaired loans—Loans are considered impaired when based on current information and events, it is probable that the Company will be unable to collect all amounts due according to the contractual terms of the loan agreement or when a loan has been modified in a TDR. The assessment for impairment occurs when and while such loans are designated as classified per the Company's internal risk rating system or when and while such loans are on nonaccrual. All nonaccrual loans greater than \$500,000 and all TDR loans are considered impaired and analyzed individually on a quarterly basis. Classified loans with an outstanding balance greater than \$500,000 are evaluated for potential impairment on a quarterly basis.

Restructured Loans—A loan is classified as a TDR when a borrower is experiencing financial difficulties that lead to a restructuring of the loan, and the Company grants concessions to the borrower in the restructuring that it would not otherwise consider. These concessions may include interest rate reductions, principal forgiveness, extension of maturity date and other actions intended to minimize potential losses. Generally, a nonaccrual loan that is restructured remains on nonaccrual status for a period of six months to demonstrate that the borrower can meet the restructured terms. If the borrower's performance under the new terms is not reasonably assured, the loan remains classified as a nonaccrual loan.

Purchased Credit Impaired Loans—Loans acquired with evidence of credit deterioration since origination for which it is probable that all contractually required payments will not be collected are accounted for under ASC 310-30, *Loans and Debt Securities Acquired with Deteriorated Credit Quality*. In addition, because of the significant discounts associated with certain of the acquired loan portfolios, the Company elected to account for those certain acquired loans under ASC 310-30.

In situations where such loans have similar risk characteristics, loans are aggregated into pools to estimate cash flows. A pool is accounted for as a single asset with a single interest rate, cumulative loss rate and cash flow expectation. Expected cash flows at the acquisition date in excess of the fair value of loans are considered to be accretable yield, which is recognized as interest income over the life of the loan pool using a level yield method if the timing and amount of the future cash flows of the pool is reasonably estimable. Subsequent to the acquisition date, any increases in cash flow over those expected at purchase date in excess of fair value are recorded as interest income prospectively. Any subsequent decreases in cash flow over those expected at purchase date due to credit deterioration are recognized by recording an ALLL on PCI loans. Any disposals of loans, including sales of loans, payments in full or foreclosures result in the removal of the loan from the loan pool at the carrying amount.

Unfunded loan commitments—Unfunded commitments are generally related to providing credit facilities to clients of the Bank and are not actively traded financial instruments. These unfunded commitments are disclosed as financial instruments with off-balance sheet risk in [Note 18, “Commitments and Contingent Liabilities.”](#)

Allowance for Loan and Lease Losses

The ALLL is an accounting estimate of incurred credit losses in our loan portfolio at the balance sheet date. The provision for loan and lease losses is the expense recognized in the Consolidated Statements of Income to adjust the allowance to the levels deemed appropriate by management, as measured by the Company’s credit loss estimation methodologies.

Loans Collectively Evaluated for Impairment—This measure of estimated credit losses is based upon the loss experience over a historical base period adjusted for a loss emergence period. The loss emergence period is an estimate of the period that it takes, on average, for us to identify the amount of loss incurred for a loan that has suffered a loss-causing event. Management then considers the effects of the following qualitative factors to ensure our allowance reflects the inherent losses in the loan portfolio:

- Economic and business conditions;
- Concentration of credit;
- Lending management and staff;
- Lending policies and procedures;
- Loss and recovery trends;
- Nature and volume of the portfolio;
- Trends in problem loans, loan delinquencies and nonaccrual loans;
- Quality of internal loan review; and
- External factors.

These qualitative factors have a high degree of subjectivity and changes in any of the factors could have a significant impact on our calculation of the allowance. The qualitative adjustment by loan segment is based upon management’s assessment of inherent losses within a range between the weighted historical loss factor by segment and the maximum consecutive quarterly losses in the relevant loss emergence period by segment over the historical base period.

Loan and lease losses are charged against the allowance when management believes the collectability of a loan balance is unlikely. Subsequent recoveries, if any, are credited to the allowance.

Loans Individually Evaluated for Impairment—This measure of estimated credit losses begins if, based upon current information and events, we believe it is probable that we will be unable to collect all amounts due according to the contractual terms of the loan agreement or when a loan has been modified in a TDR. When a loan has been identified as impaired, the amount of impairment will be measured using discounted cash flows, except when it is determined that the remaining source of repayment for the loan is the operation or liquidation of the underlying collateral. In these cases, the current fair value of the collateral, reduced by costs to sell, will be used in place of discounted cash flows. As a final alternative, the observable market price of the loan may be used to assess impairment. The Company predominately uses the fair value of collateral approach based upon a reliable valuation. When the measurement of the impaired loan is less than the recorded amount of the loan, an impairment is recognized by recording a charge-off to the allowance or by designating a specific reserve.

Purchased Credit Impaired Loans—The Company updates its cash flow projections for PCI loans accounted for under ASC 310-30 on a quarterly basis. Assumptions utilized in this process include projections related to probability of default, loss severity, prepayment and recovery lag. Projections related to probability of default and prepayment are calculated utilizing a loan migration analysis. The loan migration analysis is a matrix of probability that is used to estimate the probability of a loan pool transitioning into a particular delinquency state given its delinquency state at the re-measurement date. Loss severity factors are based upon either actual charge-off data within the loan pools or industry averages, and recovery lags are based upon the collateral within the loan pools.

Any decreases in expected cash flows after the acquisition date and subsequent measurement periods are recognized by recording a provision for loan losses. See “Purchased Credit Impaired Loans” under “Loans” for further discussion.

Unfunded Commitments and Letters of Credit—The allowance for unfunded commitments is maintained at a level believed by management to be sufficient to absorb estimated probable losses related to these unfunded credit facilities. The determination of the adequacy of the allowance is based on periodic evaluations of the unfunded credit facilities including an assessment of the probability of commitment usage, credit risk factors for loans outstanding to these same customers, and the terms and expiration dates of the unfunded credit facilities. The allowance for unfunded commitments is included in “Other liabilities” on the Consolidated Balance Sheets, with changes to the balance charged against noninterest expense.

Adoption of Allowance for Credit Losses - ASC 326

In accordance with ASU 2016-13, the Company was required to adopt ASC 326 as of January 1, 2020. The allowance for credit losses under ASC 326 is an accounting estimate of expected losses over the contractual life of assets carried at amortized cost within the Company’s loan portfolio at the balance sheet date. The ASU requires a financial asset (or group of financial assets) measured at amortized cost to be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis of the financial asset to present the net carrying value at the amount expected to be collected on the financial asset.

The quantitative allowance is calculated using a discounted cash flow approach with a probability of default methodology. The probability of default is an assumption derived from regression models which determines the relationship between historical defaults and certain economic variables. The Company determines a reasonable and supportable forecast and applies that forecast to the model to determine defaults over the forecast period. Following the forecast period, the economic variables used to calculate the probability of default revert to a historical average. Other assumptions relevant to the discounted cash flow model to derive the quantitative allowance include the loss given default, which is the estimate of loss for a defaulted loan, and the discount rate applied to future cash flows. The model calculates the net present value of each loan using both the contractual and expected cash flows, respectively.

In addition to the quantitative portion of the allowance for credit losses, the Company also considers the effects of the following qualitative factors in its calculation of expected losses in the loan portfolio:

- Economic and business conditions;
- Concentration of credit;
- Lending management and staff;
- Lending policies and procedures;
- Loss and recovery trends;
- Nature and volume of the portfolio;
- Trends in problem loans, loan delinquencies and nonaccrual loans;
- Quality of internal loan review; and
- External factors.

These qualitative factors are based in quantitative factors but also include a high degree of subjectivity and changes in any of the factors could have a significant impact on our calculation of the allowance.

Loans for which repayment is expected to be provided substantially through the operation or sale of collateral are considered collateral-dependent. The allowance for credit losses for collateral-dependent loans is measured on the basis of the fair value of the collateral when foreclosure is probable.

Premises and Equipment

Land, buildings, leasehold improvements and equipment are stated at cost less accumulated depreciation and amortization. Gains or losses on dispositions are reflected in current operations. Expenditures for improvements and major renewals are capitalized, and ordinary maintenance, repairs and small purchases are charged to “Occupancy” expense in the Consolidated Statements of Income. Depreciation and amortization are computed based on the straight-line method over the estimated useful lives of the various classes of assets. The ranges of useful lives for the principal classes of assets are as follows:

Buildings and building improvements	5 to 39 years
Leasehold improvements	Term of lease or useful life, whichever is shorter
Furniture, fixtures and equipment	3 to 7 years
Vehicles	5 years
Computer software	3 to 5 years

Software

Capitalized software is stated at cost, less accumulated amortization. Amortization is computed on a straight-line basis and charged to expense over the estimated useful life of the software, which is generally three years. Capitalized software is included in “Premises and equipment, net” in the Consolidated Balance Sheets.

Implementation Costs in a Cloud Computing Arrangement

Implementation costs incurred in a hosting arrangement that is a service contract are capitalized based on criteria in ASC 350-40. The capitalized costs are expensed over the term of the hosting arrangement. Capitalized implementation costs in a cloud computing arrangement are included in “Other assets” in the Consolidated Balance Sheets.

Other Real Estate Owned

OREO is composed of real estate acquired by the Company through either foreclosure or deed in lieu of foreclosure in satisfaction of debt. At acquisition, OREO is recorded at fair value less estimated costs to sell. Any fair value adjustments at acquisition are charged to the allowance, or in the event of a write-up without previous losses charged to the allowance, a credit to earnings is recorded. The fair value of the OREO is based upon a current appraisal or a letter of intent to purchase. Losses that result from the ongoing periodic valuation of these properties are charged to the net cost of operation of OREO in the period in which they are identified. Improvements to OREO are capitalized and holding costs are charged to the net cost of operation of OREO as incurred.

Goodwill and Intangibles

Net assets of companies acquired in a business combination are recorded at fair value at the date of acquisition. Any excess of the purchase price over the fair value of net assets acquired, including identified intangible assets, is recognized as goodwill. Goodwill is reviewed for potential impairment annually, during the third quarter, or, more frequently, if events or circumstances indicate a potential impairment, at the reporting unit level. A reporting unit is an operating segment or one level below an operating segment for which discrete financial information is available and regularly reviewed by management. The Company consists of a single reporting unit. If the fair value of the reporting unit, including goodwill, is determined to be less than the carrying amount of the reporting unit, a further test is required to measure the amount of impairment. If an impairment loss exists, the carrying amount of goodwill is adjusted to a new cost basis. Subsequent reversal of a previously recognized goodwill impairment loss is prohibited.

Identified intangible assets are amortized on an accelerated basis over the period benefited. Intangible assets are also evaluated for impairment if events and circumstances indicate a possible impairment. Such evaluation is based on undiscounted cash flow projections. At December 31, 2019, intangible assets included in the Consolidated Balance Sheets principally consisted of CDI with an original estimated life of 10 years.

Leases

The Company determines if a lease is present at the inception of an agreement. Operating leases are capitalized at commencement and are discounted using the Company's FHLB borrowing rate for a similar term borrowing unless the lease defines an implicit rate within the contract. Leases with original terms of less than 12 months are not capitalized. For operating leases existing prior to January 1, 2019, the rate for the remaining lease term as of January 1, 2019 was used. Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Operating lease right-of-use assets and operating lease liabilities are recognized on the lease commencement date based on the present value of lease payments over the lease term. The lease term includes options to extend or terminate the lease if the Company is reasonably certain that an option will be exercised. Operating leases are included within "Other assets" in the Consolidated Balance Sheets. See [Note 10, "Leases"](#) for additional information on leases.

Income Taxes

The provision for income taxes includes current and deferred income tax expense on net income adjusted for temporary and permanent differences such as interest income from state and municipal securities and investments in affordable housing tax credits. Deferred tax assets and liabilities are recognized for the expected future tax consequences of existing temporary differences between the financial reporting and tax reporting basis of assets and liabilities using enacted tax laws and rates. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. On a quarterly basis, management evaluates deferred tax assets to determine if these tax benefits are expected to be realized in future periods. This determination is based on facts and circumstances, including the Company's current and future tax outlook. To the extent a deferred tax asset is no longer considered "more likely than not" to be realized, a valuation allowance is established.

We recognize the tax benefit from uncertain tax positions only if it is more likely than not that the tax positions will be sustained on examination by the tax authorities, based on the technical merits of the position. The tax benefit is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. We recognize interest and penalties related to unrecognized tax benefits in "Provision for income taxes" in the Consolidated Statements of Income.

Advertising

Advertising costs are generally expensed as incurred.

Earnings per Common Share

The Company's capital structure includes common shares, restricted common share awards, common share options, and, during a portion of 2017, convertible preferred shares. Restricted common share awards participate in dividends declared on common shares at the same rate as common shares. Convertible preferred shares participated in dividends declared on common shares on an "as if converted" basis. Restricted common share awards and convertible preferred shares are considered participating securities under the EPS topic of the FASB ASC.

The Company calculates EPS using the two-class method. The two-class method is an earnings allocation formula that treats a participating security as having rights to earnings that otherwise would have been available to common shareholders but does not require the presentation of basic and diluted EPS for securities other than common shares. Under the two-class method, basic EPS is computed by dividing earnings allocated to common shareholders by the weighted average number of common shares outstanding for the period. Earnings allocated to common shareholders represents net income reduced by earnings allocated to participating securities. Diluted EPS is computed in the same manner as basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if certain shares issuable upon exercise of common share options were included unless those additional shares would have been anti-dilutive. For the diluted EPS computation, the treasury stock method is applied and compared to the two-class method and whichever method results in a more dilutive impact is utilized to calculate diluted EPS.

Share-Based Payment

The Company accounts for stock options and stock awards in accordance with the Compensation—Stock Compensation topic of the FASB ASC. Authoritative guidance requires the Company to measure the cost of employee services received in exchange for an award of equity instruments, such as stock options or stock awards, based on the fair value of the award on the grant date. This cost must be recognized in the Consolidated Statements of Income over the vesting period of the award.

The Company issues restricted common share awards which generally vest over a four-year period and have full voting rights. Pursuant to our new equity incentive plan approved in 2018, for any awards issued under the new plan, the holder accrues dividends, which are paid out when the shares vest. For any awards granted prior to the new plan, the holder receives dividends whether or not the shares have vested. Restricted stock is valued at the closing price of the Company's stock on the date of an award.

Derivatives and Hedging Activities

In accordance with the Derivatives and Hedging topic of the FASB ASC, the Company recognizes derivatives as assets or liabilities on the Consolidated Balance Sheets at their fair value. The Company periodically enters into interest rate contracts with customers and offsetting contracts with third parties. As these interest rate contracts are not designated as hedges under the Derivatives and Hedging topic of the FASB ASC, the changes in fair value of these instruments are recognized immediately in earnings.

As part of the Company's overall interest rate risk management, the Company uses an interest rate collar with a notional amount of \$500.0 million to mitigate interest rate risk. This collar is designated and qualifies as a cash flow hedge. Gains and losses are recorded in accumulated other comprehensive income to the extent the hedge is effective. Gains and losses are reclassified from accumulated other comprehensive income to earnings in the period the hedged transaction affects earnings and are included in the same income statement line item that the hedged transaction is recorded.

Accounting Pronouncements Recently Adopted or Issued

Accounting Standards Adopted in 2019

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The amendments included in this ASU create a new accounting model for both lessees and lessors. The new guidance requires lessees to recognize lease liabilities, initially measured at the present value of future lease payments, and corresponding right-of-use assets for all leases with lease terms greater than 12 months. The new lease model differs from the old lease accounting model, as the old model does not require such lease liabilities and corresponding right-of-use assets to be recorded for operating leases. The amendments in ASU 2016-02 must be adopted using the modified retrospective approach and will be effective for the first interim or annual period beginning after December 15, 2018. The FASB subsequently issued ASU 2018-11, which allows for an additional (optional) transition method. The Company adopted the new standard effective January 1, 2019 utilizing the transition method allowed under ASU 2018-11 and did not restate comparative periods. The Company elected the package of practical expedients permitted under the transition guidance, which allowed us to carryforward our historical lease classifications and our assessment on whether a contract is or contains a lease. We also elected to keep leases with an initial term of 12 months or less off the balance sheet. The adoption of the new standard resulted in an increase in other assets and an increase in other liabilities of \$49.2 million and \$48.2 million, respectively. The Company recognized a cumulative effect adjustment of \$782 thousand to increase the beginning balance of retained earnings related to previous deferred gains on sale-leaseback transactions.

In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40) - Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract*. The amendments in this ASU align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The amendments also require the entity to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement, including reasonably certain renewal periods. The amendments in ASU 2018-15 are effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. Early adoption is permitted, including adoption in any interim period. The amendments can be adopted on a prospective or retrospective basis. The Company adopted the new standard effective July 1, 2019 on a prospective basis. The adoption of the new standard resulted in an increase in other assets of \$1.5 million.

Recently Issued Accounting Standards, Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740) - Simplifying the Accounting for Income Taxes*. The guidance issued in this update simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in ASC 740 related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period and the recognition for deferred tax liabilities for outside basis differences. This ASU also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The ASU is effective for interim and annual reporting periods beginning after December 15, 2020; early adoption is permitted. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In April 2019, the FASB issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments - Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments*. The amendments in this ASU clarify certain aspects of accounting for credit losses, hedging activities, and financial instruments (addressed by ASUs 2016-01, 2016-13, and 2017-12). Many of the amendments reflect decisions reached at FASB meetings or meetings of the Board's credit losses transition resource group. Topics covered in this ASU include: accrued interest, transfers between classifications or categories for loans and debt securities, recoveries, reinsurance recoverables, projections of interest rate environments for variable-rate financial instruments, costs to sell when foreclosure is probable, consideration of expected prepayments when determining the effective interest rate, vintage disclosures, extension and renewal options, etc.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326) - Measurement of Credit Losses on Financial Instruments*. The amendments included in this ASU require an entity to reflect its current estimate of all expected credit losses for assets held at an amortized cost basis. For available-for-sale debt securities, credit losses will be measured in a manner similar to current GAAP, however, this ASU requires that credit losses be presented as an allowance rather than as a write-down. In November 2019, the FASB subsequently issued ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments - Credit Losses*. The amendments in the Update require entities to include expected recoveries of the amortized cost basis previously written-off or expected to be written-off in the valuation account for purchased financial assets with credit deterioration. In addition, the amendments in this Update clarify and improve various aspects of the guidance for ASU 2016-13.

Unlike the incurred loss models, the CECL model in ASU 2016-13 does not specify a threshold for the recognition of an impairment allowance. Rather, the Company recognizes an impairment allowance equal to its estimate of lifetime expected credit losses, adjusted for prepayments, for in-scope financial instruments. Accordingly, the impairment allowance measured under the CECL model may change significantly from the impairment allowance measured under the Company's incurred loss model. The Company engaged a third-party vendor to assist in the CECL calculation and has developed and implemented an internal governance framework. The amendments in ASU 2016-13 and the above ASUs related to Credit Losses are effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption was permitted, including adoption in any interim period. The Company adopted the new standards, using a modified retrospective approach, effective January 1, 2020, which resulted in an increase of \$1.6 million to its allowance for credit losses, an increase of \$1.6 million to its allowance for unfunded commitments and letters of credit and a net-of-tax cumulative-effect adjustment of \$2.5 million to decrease the beginning balance of retained earnings.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820) - Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU adds, eliminates and modifies certain disclosure requirements for fair value measurements. Among the changes, entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, but will be required to disclose the range and weighted average used to develop significant unobservable inputs for Level 3 fair value measurements. The ASU is effective for interim and annual reporting periods beginning after December 15, 2019; early adoption is permitted. Entities are also allowed to elect early adoption of the eliminated or modified disclosure requirements and delay adoption of the added disclosure requirements until their effective date. The Company adopted the new standard effective January 1, 2020. As the ASU only revised disclosure requirements, adoption of this ASU did not have a material impact on the Company's consolidated financial statements.

Certain amounts reported in prior periods have been reclassified in the Consolidated Financial Statements to conform to the current presentation. The reclassifications have no effect on net income or stockholders' equity as previously reported.

2. Business Combinations

Pacific Continental

On November 1, 2017, the Company completed its acquisition of Pacific Continental and its wholly-owned banking subsidiary Pacific Continental Bank. The Company acquired 100% of the equity interests of Pacific Continental. The primary reasons for the acquisition were to expand in the Eugene, Oregon market and improve branch network efficiencies in the Seattle and Portland markets.

The assets acquired and liabilities assumed have been accounted for under the acquisition method of accounting. The assets and liabilities, both tangible and intangible, were recorded at their fair values as of the November 1, 2017 acquisition date. The application of the acquisition method of accounting resulted in the recognition of goodwill of \$383.1 million and a CDI of \$46.9 million. The goodwill represents the excess of the purchase price over the fair value of the net assets acquired. The goodwill is not deductible for income tax purposes.

The table below summarizes the amounts recognized as of the acquisition date for each major class of assets acquired and liabilities assumed:

	<u>November 1, 2017</u>	
	<i>(in thousands)</i>	
Merger consideration	\$	637,103
Identifiable net assets acquired, at fair value		
Assets acquired		
Cash and cash equivalents	\$	81,190
Investment securities		449,291
FHLB stock		7,084
Loans		1,873,987
Interest receivable		7,827
Premises and equipment		27,343
OREO		10,279
CDI		46,875
Other assets		50,638
Total assets acquired		<u>2,554,514</u>
Liabilities assumed		
Deposits		(2,118,982)
FHLB advances		(101,127)
Subordinated debentures		(35,678)
Junior subordinated debentures		(14,434)
Securities sold under agreements to repurchase		(1,617)
Other liabilities		(28,653)
Total liabilities assumed		<u>(2,300,491)</u>
Total fair value of identifiable net assets		<u>254,023</u>
Goodwill	\$	<u>383,080</u>

See [Note 9, "Goodwill and Other Intangible Assets,"](#) for further discussion of the accounting for goodwill and other intangible assets.

The operating results of the Company reported herein include the operating results produced by the acquired assets and assumed liabilities for the period November 1, 2017 to December 31, 2019. Disclosure of the amount of Pacific Continental's revenue and net income (excluding integration costs) included in Columbia's Consolidated Statements of Income is impracticable due to the integration of the operations and accounting for this acquisition.

For illustrative purposes only, the following table presents certain unaudited pro forma information for the year ended December 31, 2017. This unaudited, estimated pro forma financial information was calculated as if Pacific Continental had been acquired as of the beginning of the year prior to the date of acquisition. This unaudited pro forma information combines the historical results of Pacific Continental with the Company's consolidated historical results and includes certain adjustments reflecting the estimated impact of certain fair value adjustments for the respective periods. The pro forma information is not indicative of what would have occurred had the acquisition occurred as of the beginning of the year prior to the acquisition. In particular, no adjustments have been made to eliminate the impact of other-than-temporary impairment losses and losses recognized on the sale of securities that may not have been necessary had the investment securities been recorded at fair value as of the beginning of the year prior to the date of acquisition. The unaudited pro forma information does not consider any changes to the provision for credit losses resulting from recording loan assets at fair value. Additionally, Columbia expects to achieve further operating cost savings and other business synergies, including revenue growth as a result of the acquisition, which are not reflected in the pro forma amounts that follow. As a result, actual amounts would have differed from the unaudited pro forma information presented.

	Unaudited Pro Forma for the	
	Year Ended December 31,	
	2017	
	<i>(in thousands, except per share amounts)</i>	
Total revenues (net interest income plus noninterest income)	\$	571,944
Net income	\$	149,859
EPS - basic	\$	2.23
EPS - diluted	\$	2.23

The following table shows the impact of the acquisition-related expenses related to the acquisition of Pacific Continental for the periods indicated to the various components of noninterest expense:

	Years ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
<i>Noninterest Expense</i>			
Compensation and employee benefits	\$ —	\$ 3,620	\$ 8,014
Occupancy	—	1,619	1,912
Data processing	—	963	1,555
Legal and professional fees	—	1,028	4,618
Advertising and promotion	—	537	467
Other	—	894	630
Total impact of acquisition-related costs to noninterest expense	<u>\$ —</u>	<u>\$ 8,661</u>	<u>\$ 17,196</u>

3. Cash and Cash Equivalents

The Company is required to maintain an average reserve balance with the FRB or maintain such reserve balance in the form of cash. The average required reserve balance for the years ended December 31, 2019 and 2018 was approximately \$84.9 million and \$110.2 million, respectively, and was met by holding cash and maintaining an average balance with the FRB.

4. Securities

At December 31, 2019, the Company's securities portfolio primarily consisted of securities issued by the U.S. government, U.S. government agencies, U.S. government-sponsored enterprises and state and municipalities. All of the Company's mortgage-backed securities and collateralized mortgage obligations are issued by U.S. government agencies and U.S. government-sponsored enterprises and are implicitly guaranteed by the U.S. government. The Company had no other issuances in its portfolio which exceeded ten percent of shareholders' equity.

The following table summarizes the amortized cost, gross unrealized gains and losses and the resulting fair value of debt securities available for sale:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<i>(in thousands)</i>				
December 31, 2019				
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations (1)	\$ 2,864,949	\$ 47,223	\$ (19,222)	\$ 2,892,950
Other asset-backed securities (1)	194,563	2,476	(989)	196,050
State and municipal securities	478,366	10,660	(224)	488,802
U.S. government agency and government-sponsored enterprise securities	165,218	3,127	(5)	168,340
Total	<u>\$ 3,703,096</u>	<u>\$ 63,486</u>	<u>\$ (20,440)</u>	<u>\$ 3,746,142</u>
December 31, 2018				
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations (1)	\$ 2,045,728	\$ 8,473	\$ (40,846)	\$ 2,013,355
Other asset-backed securities (1)	176,793	763	(2,621)	174,935
State and municipal securities	579,755	2,328	(7,760)	574,323
U.S. government agency and government-sponsored enterprise securities	408,088	1,235	(4,736)	404,587
U.S. government securities	251	—	(3)	248
Total	<u>\$ 3,210,615</u>	<u>\$ 12,799</u>	<u>\$ (55,966)</u>	<u>\$ 3,167,448</u>

(1) Beginning in 2019, other asset-backed securities were presented separately in this table. Prior period amounts that were previously reported in U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations have been reclassified to conform to current period presentation.

The following table provides the proceeds and both gross realized gains and losses on the sales and calls of debt securities available for sale as well as other securities gains and losses for the periods indicated:

	Years Ended December 31,		
	2019	2018	2017
<i>(in thousands)</i>			
Proceeds from sales and calls of debt securities available for sale	\$ 259,554	\$ 32,330	\$ 30,403
Gross realized gains from sales of debt securities available for sale	\$ 3,357	\$ 235	\$ 111
Gross realized losses from sales of debt securities available for sale	(1,225)	(129)	(122)
Other securities losses, net (1)	—	(195)	—
Investment securities gains (losses), net	<u>\$ 2,132</u>	<u>\$ (89)</u>	<u>\$ (11)</u>

(1) Other securities losses, net includes net unrealized loss activity associated with equity securities.

The scheduled contractual maturities of debt securities available for sale at December 31, 2019 are presented as follows:

	December 31, 2019	
	Amortized Cost	Fair Value
	<i>(in thousands)</i>	
Due within one year	\$ 77,363	\$ 77,538
Due after one year through five years	416,556	421,363
Due after five years through ten years	2,007,225	2,041,751
Due after ten years	1,201,952	1,205,490
Total debt securities available for sale	\$ 3,703,096	\$ 3,746,142

The following table summarizes the carrying value of securities pledged as collateral to secure public deposits, borrowings and other purposes as permitted or required by law:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
To secure public funds	\$ 323,055	\$ 276,343
To secure borrowings	111,488	52,303
Other securities pledged	154,030	138,492
Total securities pledged as collateral	\$ 588,573	\$ 467,138

The following tables show the gross unrealized losses and fair value of the Company's debt securities available for sale with unrealized losses that are not deemed to be other-than-temporarily impaired, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2019 and 2018:

	Less than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2019						
<i>(in thousands)</i>						
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations (1)	\$ 1,055,903	\$ (12,424)	\$ 491,539	\$ (6,798)	\$ 1,547,442	(19,222)
Other asset-backed securities (1)	89,508	(880)	6,799	(109)	96,307	(989)
State and municipal securities	12,363	(142)	12,587	(82)	24,950	(224)
U.S. government agency and government-sponsored enterprise securities	—	—	10,495	(5)	10,495	(5)
Total	\$ 1,157,774	\$ (13,446)	\$ 521,420	\$ (6,994)	\$ 1,679,194	\$ (20,440)
December 31, 2018						
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations (1)	\$ 114,551	\$ (750)	\$ 1,207,020	\$ (40,096)	\$ 1,321,571	\$ (40,846)
Other asset-backed securities (1)	40,071	(222)	94,367	(2,399)	134,438	(2,621)
State and municipal securities	106,292	(581)	280,496	(7,179)	386,788	(7,760)
U.S. government agency and government-sponsored enterprise securities	15,392	(45)	291,435	(4,691)	306,827	(4,736)
U.S. government securities	—	—	247	(3)	247	(3)
Total	\$ 276,306	\$ (1,598)	\$ 1,873,565	\$ (54,368)	\$ 2,149,871	\$ (55,966)

(1) Beginning in 2019, other asset-backed securities were presented separately in this table. Prior period amounts that were previously reported in U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations have been reclassified to conform to current period presentation.

At December 31, 2019, there were 243 U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligation securities in an unrealized loss position, of which 162 were in a continuous loss position for 12 months or more. The decline in fair value is attributable to changes in interest rates relative to where these investments fall within the yield curve and their individual characteristics. Because the Company does not currently intend to sell these securities nor does the Company consider it more likely than not that it will be required to sell these securities before the recovery of amortized cost basis, which may be upon maturity, the Company does not consider these investments to be other-than-temporarily impaired at December 31, 2019.

At December 31, 2019, there were 18 other asset-backed securities in an unrealized loss position, of which six were in a continuous loss position for 12 months or more. The decline in fair value is attributable to changes in interest rates relative to where these investments fall within the yield curve and their individual characteristics. Because the Company does not currently intend to sell these securities nor does the Company consider it more likely than not that it will be required to sell these securities before the recovery of amortized cost basis, which may be upon maturity, the Company does not consider these investments to be other-than-temporarily impaired at December 31, 2019.

At December 31, 2019, there were 24 state and municipal government securities in an unrealized loss position, of which 14 were in a continuous loss position for 12 months or more. The unrealized losses on state and municipal securities were caused by interest rate changes or widening of market spreads subsequent to the purchase of the individual securities. Management monitors published credit ratings of these securities for adverse changes. As of December 31, 2019, none of the rated obligations of state and local government entities held by the Company had a below investment grade credit rating. Because the credit quality of these securities is investment grade and the Company does not currently intend to sell these securities nor does the Company consider it more likely than not that it will be required to sell these securities before the recovery of amortized cost basis, which may be upon maturity, the Company does not consider these investments to be other-than-temporarily impaired at December 31, 2019.

At December 31, 2019, there were three U.S. government agency and government-sponsored enterprise securities in an unrealized loss position, all of which were in a continuous loss position for 12 months or more. The decline in fair value is attributable to changes in interest rates relative to where these investments fall within the yield curve and their individual characteristics. Because the Company does not currently intend to sell these securities nor does the Company consider it more likely than not that it will be required to sell these securities before the recovery of amortized cost basis, which may be upon maturity, the Company does not consider these investments to be other-than-temporarily impaired at December 31, 2019.

At December 31, 2019, there were no U.S. government securities in an unrealized loss position.

5. Loans

The Company's loan portfolio includes originated and purchased loans. Originated loans and purchased loans for which there was no evidence of credit deterioration at their acquisition date and it was probable that we would be able to collect all contractually required payments are referred to collectively as loans, excluding PCI loans. Purchased loans for which there was, at acquisition date, evidence of credit deterioration since their origination and it was probable that we would be unable to collect all contractually required payments are referred to as PCI loans.

The following is an analysis of the loan portfolio by segment (net of unearned income):

	December 31,					
	2019			2018		
	Loans, excluding PCI loans	PCI Loans	Total	Loans, excluding PCI loans	PCI Loans	Total
	<i>(in thousands)</i>					
Commercial business	\$ 3,602,597	\$ 7,863	\$ 3,610,460	\$ 3,438,422	\$ 9,240	\$ 3,447,662
Real estate:						
One-to-four family residential	265,144	7,203	272,347	238,367	8,017	246,384
Commercial and multifamily residential	4,183,961	54,212	4,238,173	3,846,027	62,910	3,908,937
Total real estate	4,449,105	61,415	4,510,520	4,084,394	70,927	4,155,321
Real estate construction:						
One-to-four family residential	192,762	—	192,762	217,790	153	217,943
Commercial and multifamily residential	163,103	—	163,103	284,394	534	284,928
Total real estate construction	355,865	—	355,865	502,184	687	502,871
Consumer	292,697	8,238	300,935	318,945	8,906	327,851
Less: Net unearned income	(34,315)	—	(34,315)	(42,194)	—	(42,194)
Total loans, net of unearned income	8,665,949	77,516	8,743,465	8,301,751	89,760	8,391,511
Less: ALLL	(81,124)	(2,844)	(83,968)	(79,758)	(3,611)	(83,369)
Total loans, net	\$ 8,584,825	\$ 74,672	\$ 8,659,497	\$ 8,221,993	\$ 86,149	\$ 8,308,142
Loans held for sale	\$ 17,718	\$ —	\$ 17,718	\$ 3,849	\$ —	\$ 3,849

At December 31, 2019 and 2018, the Company had no material foreign activities. Substantially all of the Company's loans and unfunded commitments are geographically concentrated in its service areas within the states of Washington, Oregon and Idaho.

At December 31, 2019 and 2018, \$3.24 billion and \$3.22 billion, respectively, of commercial and residential real estate loans were pledged as collateral on FHLB advances. The Company has also pledged \$151.3 million and \$82.0 million of commercial loans to the FRB for additional borrowing capacity at December 31, 2019 and 2018, respectively.

Nonaccrual loans totaled \$33.1 million and \$54.8 million at December 31, 2019 and 2018, respectively. The amount of interest income foregone as a result of these loans being placed on nonaccrual status totaled \$2.0 million for 2019, \$3.6 million for 2018 and \$2.4 million for 2017. There were no loans 90 days past due and still accruing interest as of December 31, 2019 and 2018. At December 31, 2019 and 2018, there were \$2.0 million and \$2.1 million, respectively, of commitments of additional funds for loans accounted for on a nonaccrual basis.

The following is an analysis of nonaccrual loans as of December 31, 2019 and 2018:

	December 31,			
	2019		2018	
	Recorded Investment Nonaccrual Loans	Unpaid Principal Balance Nonaccrual Loans	Recorded Investment Nonaccrual Loans	Unpaid Principal Balance Nonaccrual Loans
<i>(in thousands)</i>				
Commercial business:				
Secured	\$ 26,615	\$ 38,278	\$ 35,504	\$ 45,072
Unsecured	359	360	9	9
Real estate:				
One-to-four family residential	591	632	1,158	1,178
Commercial and multifamily residential:				
Commercial land	1,985	1,994	2,261	2,270
Income property	205	206	2,721	3,062
Owner occupied	1,287	1,325	9,922	10,300
Real estate construction:				
One-to-four family residential:				
Land and acquisition	—	—	318	318
Residential construction	—	59	—	—
Consumer	2,018	2,355	2,949	3,149
Total	<u>\$ 33,060</u>	<u>\$ 45,209</u>	<u>\$ 54,842</u>	<u>\$ 65,358</u>

Loans, excluding PCI loans

The following is an aging of the recorded investment of the loan portfolio as of December 31, 2019 and 2018:

	Current Loans	30 - 59 Days Past Due	60 - 89 Days Past Due	Greater than 90 Days Past Due	Total Past Due	Nonaccrual Loans	Total Loans
December 31, 2019							
<i>(in thousands)</i>							
Commercial business:							
Secured	\$ 3,422,313	\$ 7,684	\$ 5,035	\$ —	\$ 12,719	\$ 26,615	\$ 3,461,647
Unsecured	128,852	392	80	—	472	359	129,683
Real estate:							
One-to-four family residential	261,886	2,162	256	—	2,418	591	264,895
Commercial and multifamily residential:							
Commercial land	300,580	625	—	—	625	1,985	303,190
Income property	2,057,359	1,797	—	—	1,797	205	2,059,361
Owner occupied	1,795,771	4,287	—	—	4,287	1,287	1,801,345
Real estate construction:							
One-to-four family residential:							
Land and acquisition	1,364	—	—	—	—	—	1,364
Residential construction	189,350	951	—	—	951	—	190,301
Commercial and multifamily residential:							
Income property	88,389	—	—	—	—	—	88,389
Owner occupied	73,203	—	—	—	—	—	73,203
Consumer	290,174	284	95	—	379	2,018	292,571
Total	<u>\$ 8,609,241</u>	<u>\$ 18,182</u>	<u>\$ 5,466</u>	<u>\$ —</u>	<u>\$ 23,648</u>	<u>\$ 33,060</u>	<u>\$ 8,665,949</u>
	Current Loans	30 - 59 Days Past Due	60 - 89 Days Past Due	Greater than 90 Days Past Due	Total Past Due	Nonaccrual Loans	Total Loans
December 31, 2018							
<i>(in thousands)</i>							
Commercial business:							
Secured	\$ 3,267,709	\$ 5,864	\$ 3,624	\$ —	\$ 9,488	\$ 35,504	\$ 3,312,701
Unsecured	111,868	240	—	—	240	9	112,117
Real estate:							
One-to-four family residential	233,941	694	233	—	927	1,158	236,026
Commercial and multifamily residential:							
Commercial land	283,416	—	—	—	—	2,261	285,677
Income property	1,910,505	5,009	2,241	—	7,250	2,721	1,920,476
Owner occupied	1,606,085	1,744	—	—	1,744	9,922	1,617,751
Real estate construction:							
One-to-four family residential:							
Land and acquisition	4,099	—	—	—	—	318	4,417
Residential construction	212,303	93	—	—	93	—	212,396
Commercial and multifamily residential:							
Income property	194,912	—	—	—	—	—	194,912
Owner occupied	79,805	7,258	—	—	7,258	—	87,063
Consumer	314,008	1,057	201	—	1,258	2,949	318,215
Total	<u>\$ 8,218,651</u>	<u>\$ 21,959</u>	<u>\$ 6,299</u>	<u>\$ —</u>	<u>\$ 28,258</u>	<u>\$ 54,842</u>	<u>\$ 8,301,751</u>

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The following is an analysis of the impaired loans (see [Note 1, “Summary of Significant Accounting Policies.”](#)) as of December 31, 2019 and 2018:

	Recorded Investment of Loans Collectively Measured for Contingency Provision	Recorded Investment of Loans Individually Measured for Specific Impairment	Impaired Loans With Recorded Allowance			Impaired Loans Without Recorded Allowance		
			Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	
December 31, 2019								
<i>(in thousands)</i>								
Commercial business:								
Secured	\$ 3,437,564	\$ 24,083	\$ 3,286	\$ 3,851	\$ 93	\$ 20,797	\$ 28,658	
Unsecured	129,671	12	12	12	—	—	—	
Real estate:								
One-to-four family residential	264,513	382	299	588	5	83	182	
Commercial and multifamily residential:								
Commercial land	300,973	2,217	1,592	1,601	312	625	663	
Income property	2,059,361	—	—	—	—	—	—	
Owner occupied	1,797,682	3,663	3,663	5,233	29	—	—	
Real estate construction:								
One-to-four family residential:								
Land and acquisition	1,364	—	—	—	—	—	—	
Residential construction	190,301	—	—	—	—	—	—	
Commercial and multifamily residential:								
Income property	88,389	—	—	—	—	—	—	
Owner occupied	73,203	—	—	—	—	—	—	
Consumer	290,934	1,637	483	637	22	1,154	1,310	
Total	<u>\$ 8,633,955</u>	<u>\$ 31,994</u>	<u>\$ 9,335</u>	<u>\$ 11,922</u>	<u>\$ 461</u>	<u>\$ 22,659</u>	<u>\$ 30,813</u>	
	Recorded Investment of Loans Collectively Measured for Contingency Provision	Recorded Investment of Loans Individually Measured for Specific Impairment	Impaired Loans With Recorded Allowance			Impaired Loans Without Recorded Allowance		
			Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	
December 31, 2018								
<i>(in thousands)</i>								
Commercial business:								
Secured	\$ 3,286,416	\$ 26,285	\$ 6,350	\$ 8,460	\$ 2,023	\$ 19,935	\$ 24,404	
Unsecured	112,097	20	20	20	—	—	—	
Real estate:								
One-to-four family residential	235,138	888	325	798	8	563	575	
Commercial and multifamily residential:								
Commercial land	283,451	2,226	—	—	—	2,226	2,272	
Income property	1,917,522	2,954	99	165	1	2,855	3,011	
Owner occupied	1,605,042	12,709	3,231	4,666	69	9,478	9,750	
Real estate construction:								
One-to-four family residential:								
Land and acquisition	4,417	—	—	—	—	—	—	
Residential construction	212,396	—	—	—	—	—	—	
Commercial and multifamily residential:								
Income property	194,912	—	—	—	—	—	—	
Owner occupied	87,063	—	—	—	—	—	—	
Consumer	314,193	4,022	3,326	3,584	31	696	704	
Total	<u>\$ 8,252,647</u>	<u>\$ 49,104</u>	<u>\$ 13,351</u>	<u>\$ 17,693</u>	<u>\$ 2,132</u>	<u>\$ 35,753</u>	<u>\$ 40,716</u>	

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The following table provides additional information on impaired loans for the years ended December 31, 2019, 2018 and 2017:

	Years Ended December 31,					
	2019		2018		2017	
	Average Recorded Investment Impaired Loans	Interest Recognized on Impaired Loans	Average Recorded Investment Impaired Loans	Interest Recognized on Impaired Loans	Average Recorded Investment Impaired Loans	Interest Recognized on Impaired Loans
<i>(in thousands)</i>						
Commercial business						
Secured	\$ 24,682	\$ 202	\$ 39,701	\$ 81	\$ 20,282	\$ 60
Unsecured	16	1	191	2	5	—
Real estate:						
One-to-four family residential	665	42	748	42	730	49
Commercial and multifamily residential						
Commercial land	2,606	31	2,371	34	2,079	—
Income property	1,121	—	3,284	130	4,314	51
Owner occupied	10,681	168	9,730	720	5,335	445
Real estate construction:						
One-to-four family residential						
Land and acquisition	—	—	—	—	3	—
Residential construction	—	—	484	—	309	—
Owner occupied	—	—	3,240	—	1,620	203
Consumer	2,960	8	5,712	129	5,973	163
Total	\$ 42,731	\$ 452	\$ 65,461	\$ 1,138	\$ 40,650	\$ 971

The following is an analysis of loans classified as TDR for the years ended December 31, 2019, 2018 and 2017:

	Years Ended December 31,								
	2019			2018			2017		
	Number of TDR Modifications	Pre-Modification Outstanding Recorded Investment	Post-Modification Outstanding Recorded Investment	Number of TDR Modifications	Pre-Modification Outstanding Recorded Investment	Post-Modification Outstanding Recorded Investment	Number of TDR Modifications	Pre-Modification Outstanding Recorded Investment	Post-Modification Outstanding Recorded Investment
<i>(dollars in thousands)</i>									
Commercial business:									
Secured	11	\$ 6,642	\$ 6,642	12	\$ 18,379	\$ 18,379	10	\$ 5,655	\$ 5,655
Unsecured	—	—	—	—	—	—	1	26	26
Real estate:									
One-to-four family residential	1	45	45	—	—	—	3	583	583
Commercial and multifamily residential:									
Commercial land	—	—	—	—	—	—	1	687	687
Income property	1	217	217	1	891	891	1	1,152	1,152
Owner occupied	—	—	—	—	—	—	1	78	78
Real estate construction:									
Commercial and multifamily residential:									
Owner occupied	—	—	—	—	—	—	1	4,050	4,050
Consumer	11	444	444	21	2,777	2,777	42	5,891	5,891
Total	24	\$ 7,348	\$ 7,348	34	\$ 22,047	\$ 22,047	60	\$ 18,122	\$ 18,122

The Company's loans classified as TDR are loans that have been modified or the borrower has been granted special concessions due to financial difficulties, that if not for the challenges of the borrower, the Company would not otherwise consider. The Company had \$1.1 million of commitments to lend additional funds on loans classified as TDR as of December 31, 2019 as compared to \$2.1 million of similar commitments at December 31, 2018. The TDR modifications or concessions are made to increase the likelihood that these borrowers with financial difficulties will be able to satisfy their debt obligations as amended. The concessions granted in the restructurings, summarized in the table above, largely consisted of maturity extensions, interest rate modifications or a combination of both. In limited circumstances, a reduction in the principal balance of the loan could also be made as a concession. Credit losses for loans classified as TDR are measured on the same basis as impaired loans. For impaired loans, an allowance is established when the collateral value less selling costs (or discounted cash flows or observable market price) of the impaired loan is lower than the recorded investment of that loan. The Company did have one \$26 thousand consumer loan that defaulted within 12 months of being modified as a TDR during the year ended December 31, 2019. This defaulted TDR loan did not impact the allowance for loan loss as it paid off prior to year end. The Company did not experience any similar defaults during the years ended December 31, 2018 and 2017.

PCI Loans

PCI loans are accounted for under ASC 310-30 and initially measured at fair value based on expected future cash flows over the life of the loans. Loans that have common risk characteristics are aggregated into pools. The Company re-measures contractual and expected cash flows, at the pool-level, on a quarterly basis.

Contractual cash flows are calculated based upon the loan pool terms after applying a prepayment factor. Calculation of the applied prepayment factor for contractual cash flows is the same as described below for expected cash flows.

Inputs to the determination of expected cash flows include cumulative default and prepayment data as well as loss severity and recovery lag information. Cumulative default and prepayment data are calculated via a transition matrix. The transition matrix is a matrix of probability values that specifies the probability of a loan pool transitioning into a particular delinquency state (e.g. 0-30 days past due, 31 to 60 days, etc.) given its delinquency state at the re-measurement date. Loss severity factors are based upon either actual charge-off data within the loan pools or industry averages, and recovery lags are based upon the collateral within the loan pools.

The excess of cash flows expected to be collected over the initial fair value of PCI loans is referred to as the accretable yield and is accreted into interest income over the estimated life of the acquired loans using the effective yield method. Other adjustments to the accretable yield include changes in the estimated remaining life of the acquired loans, changes in expected cash flows and changes of indices for acquired loans with variable interest rates.

The following is an analysis of our PCI loans, net of related allowance for losses and remaining valuation discounts as of December 31, 2019 and 2018:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Commercial business	\$ 8,083	\$ 9,672
Real estate:		
One-to-four family residential	8,453	9,848
Commercial and multifamily residential	56,752	66,340
Total real estate	65,205	76,188
Real estate construction:		
One-to-four family residential	—	153
Commercial and multifamily residential	—	507
Total real estate construction	—	660
Consumer	8,984	9,765
Subtotal of PCI loans	82,272	96,285
Less:		
Valuation discount resulting from acquisition accounting	4,756	6,525
ALLL	2,844	3,611
PCI loans, net of valuation discounts and allowance for loan losses	\$ 74,672	\$ 86,149

The following table shows the changes in accretable yield for acquired loans for the years ended December 31, 2019, 2018, and 2017:

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Balance at beginning of period	\$ 21,949	\$ 31,176	\$ 45,191
Accretion	(6,053)	(8,194)	(12,357)
Disposals	46	(387)	(158)
Reclassifications from (to) nonaccretable difference	3,719	(646)	(1,500)
Balance at end of period	\$ 19,661	\$ 21,949	\$ 31,176

The Company did not acquire any loans accounted for under ASC 310-30 during 2019 or 2018.

6. Allowance for Loan and Lease Losses and Allowance for Unfunded Commitments and Letters of Credit

We record an ALLL to recognize management's estimate of credit losses incurred in the loan portfolio at each balance sheet date. We have used the same methodology for the ALLL calculation for the years ended December 31, 2019 and 2018.

The following tables show a detailed analysis of the ALLL for the years ended December 31, 2019, 2018 and 2017:

	Beginning Balance	Charge-offs	Recoveries	Provision (Recapture)	Ending Balance	Specific Reserve	General Allocation
Year Ended December 31, 2019							
<i>(in thousands)</i>							
Commercial business:							
Secured	\$ 43,188	\$ (10,249)	\$ 2,755	\$ 7,381	\$ 43,075	\$ 93	\$ 42,982
Unsecured	2,626	(75)	350	184	3,085	—	3,085
Real estate:							
One-to-four family residential	593	(2)	242	(226)	607	5	602
Commercial and multifamily residential:							
Commercial land	3,947	—	286	2,146	6,379	312	6,067
Income property	4,044	—	320	2,062	6,426	—	6,426
Owner occupied	4,533	—	4	1,567	6,104	29	6,075
Real estate construction:							
One-to-four family residential:							
Land and acquisition	549	—	362	(799)	112	—	112
Residential construction	5,536	(170)	3,092	(3,982)	4,476	—	4,476
Commercial and multifamily residential:							
Income property	5,784	—	1	(3,286)	2,499	—	2,499
Owner occupied	2,604	—	—	702	3,306	—	3,306
Consumer	5,301	(1,400)	930	(376)	4,455	22	4,433
PCI	3,611	(3,319)	3,979	(1,427)	2,844	—	2,844
Unallocated	1,053	—	—	(453)	600	—	600
Total	<u>\$ 83,369</u>	<u>\$ (15,215)</u>	<u>\$ 12,321</u>	<u>\$ 3,493</u>	<u>\$ 83,968</u>	<u>\$ 461</u>	<u>\$ 83,507</u>
Year Ended December 31, 2018							
<i>(in thousands)</i>							
Commercial business:							
Secured	\$ 29,341	\$ (11,560)	\$ 3,024	\$ 22,383	\$ 43,188	\$ 2,023	\$ 41,165
Unsecured	2,000	(159)	403	382	2,626	—	2,626
Real estate:							
One-to-four family residential	701	—	408	(516)	593	8	585
Commercial and multifamily residential:							
Commercial land	4,265	—	99	(417)	3,947	—	3,947
Income property	5,672	(780)	912	(1,760)	4,044	1	4,043
Owner occupied	5,459	—	20	(946)	4,533	69	4,464
Real estate construction:							
One-to-four family residential:							
Land and acquisition	963	—	726	(1,140)	549	—	549
Residential construction	3,709	—	890	937	5,536	—	5,536
Commercial and multifamily residential:							
Income property	7,053	—	—	(1,269)	5,784	—	5,784
Owner occupied	4,413	—	—	(1,809)	2,604	—	2,604
Consumer	5,163	(1,194)	1,180	152	5,301	31	5,270
PCI	6,907	(4,862)	3,847	(2,281)	3,611	—	3,611
Unallocated	—	—	—	1,053	1,053	—	1,053
Total	<u>\$ 75,646</u>	<u>\$ (18,555)</u>	<u>\$ 11,509</u>	<u>\$ 14,769</u>	<u>\$ 83,369</u>	<u>\$ 2,132</u>	<u>\$ 81,237</u>

	Beginning Balance	Charge-offs	Recoveries	Provision (Recapture)	Ending Balance	Specific Reserve	General Allocation
Year Ended December 31, 2017							
<i>(in thousands)</i>							
Commercial business:							
Secured	\$ 36,050	\$ (7,524)	\$ 4,283	\$ (3,468)	\$ 29,341	\$ 1,867	\$ 27,474
Unsecured	960	(89)	553	576	2,000	3	1,997
Real estate:							
One-to-four family residential:							
Commercial and multifamily residential:							
Commercial land	1,797	—	53	2,415	4,265	—	4,265
Income property	7,342	(287)	498	(1,881)	5,672	185	5,487
Owner occupied	6,439	—	124	(1,104)	5,459	3	5,456
Real estate construction:							
One-to-four family residential:							
Land and acquisition	316	(14)	72	589	963	—	963
Residential construction	669	—	106	2,934	3,709	—	3,709
Commercial and multifamily residential:							
Income property	404	—	1	6,648	7,053	—	7,053
Owner occupied	1,192	—	—	3,221	4,413	—	4,413
Consumer	3,534	(1,474)	1,187	1,916	5,163	199	4,964
PCI	10,515	(6,812)	6,187	(2,983)	6,907	—	6,907
Unallocated	226	—	—	(226)	—	—	—
Total	\$ 70,043	\$ (16,660)	\$ 13,632	\$ 8,631	\$ 75,646	\$ 2,360	\$ 73,286

Changes in the allowance for unfunded commitments and letters of credit, a component of “Other liabilities” in the Consolidated Balance Sheets, are summarized as follows:

	Years Ended December 31,		
	2019	2018	2017
<i>(in thousands)</i>			
Beginning balance	\$ 4,330	\$ 3,130	\$ 2,705
Net changes in the allowance for unfunded commitments and letters of credit	(900)	1,200	425
Ending balance	\$ 3,430	\$ 4,330	\$ 3,130

Risk Elements

The extension of credit in the form of loans or other credit products to individuals and businesses is one of our principal business activities. Our policies and applicable laws and regulations require risk analysis as well as ongoing portfolio and credit management. We manage our credit risk through lending limit constraints, credit review, approval policies and extensive, ongoing internal monitoring. We also manage credit risk through diversification of the loan portfolio by type of loan, type of industry and type of borrower and by limiting the aggregation of debt to a single borrower.

Risk ratings are reviewed and updated whenever appropriate, with more periodic reviews as the risk and dollar value of loss on the loan increases. In the event full collection of principal and interest is not reasonably assured, the loan is appropriately downgraded and, if warranted, placed on nonaccrual status even though the loan may be current as to principal and interest payments. Additionally, we assess whether an impairment of a loan warrants specific reserves or a write-down of the loan.

Pass rated loans are generally considered to have sufficient sources of repayment in order to repay the loan in full in accordance with all terms and conditions. Special Mention rated loans have potential weaknesses that, if left uncorrected, may result in deterioration of the repayment prospects for the asset or in the Company’s credit position at some future date. Loans with a risk rating of Substandard or worse are reviewed to assess the ability of our borrowers to service all interest and principal obligations and, as a result, the risk rating may be adjusted accordingly. Loans risk rated as Substandard reflect loans where a loss is possible if loan weaknesses are not corrected. Doubtful rated loans have a high probability of loss; however, the amount of loss has not yet been determined. Loss rated loans are considered uncollectable and when identified, are charged-off.

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The following is an analysis of the credit quality of our loan portfolio, excluding PCI loans as of December 31, 2019 and 2018:

	Pass	Special Mention	Substandard	Doubtful	Loss	Total
December 31, 2019	<i>(in thousands)</i>					
Loans, excluding PCI loans						
Commercial business:						
Secured	\$ 3,296,776	\$ 37,394	\$ 127,477	\$ —	\$ —	\$ 3,461,647
Unsecured	129,518	—	165	—	—	129,683
Real estate:						
One-to-four family residential	264,051	—	844	—	—	264,895
Commercial and multifamily residential:						
Commercial land	283,254	1,344	18,592	—	—	303,190
Income property	2,014,233	5,658	39,470	—	—	2,059,361
Owner occupied	1,757,757	6,158	37,430	—	—	1,801,345
Real estate construction:						
One-to-four family residential:						
Land and acquisition	1,364	—	—	—	—	1,364
Residential construction	190,301	—	—	—	—	190,301
Commercial and multifamily residential:						
Income property	88,389	—	—	—	—	88,389
Owner occupied	73,203	—	—	—	—	73,203
Consumer	289,588	—	2,983	—	—	292,571
Total	<u>\$ 8,388,434</u>	<u>\$ 50,554</u>	<u>\$ 226,961</u>	<u>\$ —</u>	<u>\$ —</u>	<u>8,665,949</u>
Less:						
ALLL						81,124
Loans, excluding PCI loans, net						<u>\$ 8,584,825</u>
December 31, 2018	<i>(in thousands)</i>					
Loans, excluding PCI loans						
Commercial business:						
Secured	\$ 3,160,910	\$ 48,779	\$ 103,007	\$ 5	\$ —	\$ 3,312,701
Unsecured	112,091	21	—	5	—	112,117
Real estate:						
One-to-four family residential	234,416	—	1,610	—	—	236,026
Commercial and multifamily residential:						
Commercial land	276,348	5,082	4,247	—	—	285,677
Income property	1,876,925	36,998	6,553	—	—	1,920,476
Owner occupied	1,556,852	14,964	45,935	—	—	1,617,751
Real estate construction:						
One-to-four family residential:						
Land and acquisition	4,099	—	318	—	—	4,417
Residential construction	212,225	—	171	—	—	212,396
Commercial and multifamily residential:						
Income property	194,912	—	—	—	—	194,912
Owner occupied	87,063	—	—	—	—	87,063
Consumer	313,817	—	4,398	—	—	318,215
Total	<u>\$ 8,029,658</u>	<u>\$ 105,844</u>	<u>\$ 166,239</u>	<u>\$ 10</u>	<u>\$ —</u>	<u>8,301,751</u>
Less:						
ALLL						79,758
Loans, excluding PCI loans, net						<u>\$ 8,221,993</u>

The following is an analysis of the credit quality of our PCI loan portfolio as of December 31, 2019 and 2018:

	Pass	Special Mention	Substandard	Doubtful	Loss	Total
December 31, 2019	<i>(in thousands)</i>					
PCI loans:						
Commercial business:						
Secured	\$ 6,109	\$ 962	\$ 606	\$ —	\$ —	\$ 7,677
Unsecured	406	—	—	—	—	406
Real estate:						
One-to-four family residential	8,351	—	102	—	—	8,453
Commercial and multifamily residential:						
Commercial land	8,720	497	212	—	—	9,429
Income property	18,386	—	297	—	—	18,683
Owner occupied	21,077	—	7,563	—	—	28,640
Consumer	8,758	—	226	—	—	8,984
Total	<u>\$ 71,807</u>	<u>\$ 1,459</u>	<u>\$ 9,006</u>	<u>\$ —</u>	<u>\$ —</u>	<u>82,272</u>
Less:						
Valuation discount resulting from acquisition accounting						4,756
ALLL						2,844
PCI loans, net						<u>\$ 74,672</u>
December 31, 2018	<i>(in thousands)</i>					
PCI loans:						
Commercial business:						
Secured	\$ 8,041	\$ —	\$ 840	\$ —	\$ —	\$ 8,881
Unsecured	692	—	99	—	—	791
Real estate:						
One-to-four family residential	9,633	—	215	—	—	9,848
Commercial and multifamily residential:						
Commercial land	10,363	—	—	—	—	10,363
Income property	19,680	—	—	—	—	19,680
Owner occupied	35,944	—	353	—	—	36,297
Real estate construction:						
One-to-four family residential:						
Land and acquisition	151	—	2	—	—	153
Commercial and multifamily residential:						
Income property	507	—	—	—	—	507
Consumer	9,326	—	439	—	—	9,765
Total	<u>\$ 94,337</u>	<u>\$ —</u>	<u>\$ 1,948</u>	<u>\$ —</u>	<u>\$ —</u>	<u>96,285</u>
Less:						
Valuation discount resulting from acquisition accounting						6,525
ALLL						3,611
PCI loans, net						<u>\$ 86,149</u>

7. Other Real Estate Owned

The following table sets forth activity in OREO for the periods indicated:

	Years Ended December 31,	
	2019	2018
	<i>(in thousands)</i>	
Balance, beginning of period	\$ 6,019	\$ 13,298
Transfers in	386	1,200
Valuation adjustments	(195)	(698)
Proceeds from sale of OREO property	(6,455)	(7,261)
Gain (loss) on sale of OREO, net	797	(520)
Balance, end of period	<u>\$ 552</u>	<u>\$ 6,019</u>

At December 31, 2019, the carrying amount of foreclosed residential real estate properties held as a result of obtaining physical possession was \$311 thousand and the recorded investment of consumer mortgage loans secured by residential real estate properties for which formal foreclosure proceedings were in process was \$875 thousand.

8. Premises and Equipment

Real and personal property and software, less accumulated depreciation and amortization, were as follows:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Land	\$ 53,124	\$ 54,185
Buildings	107,371	108,890
Leasehold improvements	28,459	27,859
Furniture and equipment	37,929	32,292
Vehicles	510	511
Computer software	15,936	19,358
Total cost	<u>243,329</u>	<u>243,095</u>
Less accumulated depreciation and amortization	<u>(77,921)</u>	<u>(74,307)</u>
Total	<u>\$ 165,408</u>	<u>\$ 168,788</u>

Total depreciation and amortization expense was \$10.3 million, \$10.4 million, and \$9.8 million, for the years ended December 31, 2019, 2018, and 2017, respectively.

9. Goodwill and Other Intangible Assets

In accordance with the Intangibles – Goodwill and Other topic of the FASB ASC, goodwill is not amortized but is reviewed for potential impairment at the reporting unit level. Management analyzes its goodwill for impairment on an annual basis and between annual tests in certain circumstances such as upon material adverse changes in legal, business, regulatory and economic factors. An impairment loss is recorded to the extent that the carrying amount of goodwill exceeds its implied fair value. The Company performed its annual impairment assessment as of July 31, 2019 and concluded that there was no impairment. As of December 31, 2019, we determined there were no events or circumstances which would more likely than not reduce the fair value of our reporting unit below its carrying amount.

The CDI is evaluated for impairment if events and circumstances indicate a possible impairment. The CDI is amortized on an accelerated basis over an estimated life of 10 years.

The following table sets forth activity for goodwill and other intangible assets for the periods indicated:

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Goodwill, beginning of period	\$ 765,842	\$ 765,842	\$ 382,762
Established through acquisitions (1)	—	—	383,080
Total goodwill, end of period	765,842	765,842	765,842
Other intangible assets, net			
CDI:			
Gross CDI balance, beginning of period	105,473	105,473	58,598
Accumulated amortization, beginning of period	(60,455)	(48,219)	(41,886)
CDI, net, beginning of period	45,018	57,254	16,712
Established through acquisitions (1)	—	—	46,875
CDI current period amortization	(10,479)	(12,236)	(6,333)
Total CDI, end of period	34,539	45,018	57,254
Intangible assets not subject to amortization	919	919	919
Other intangible assets, net at end of period	35,458	45,937	58,173
Total goodwill and intangible assets, end of period	\$ 801,300	\$ 811,779	\$ 824,015

(1) See [Note 2, “Business Combinations,”](#) for additional information regarding the goodwill and CDI related to the acquisition of Pacific Continental on November 1, 2017.

The following table provides the estimated future amortization expense of CDI for the succeeding five years:

	Years Ending December 31,	
	<i>(in thousands)</i>	
2020	\$	8,724
2021		7,264
2022		5,880
2023		4,552
2024		3,432

10. Leases

Lease Commitments:

The Company’s lease commitments consist primarily of leased locations under various non-cancellable operating leases that expire between 2020 and 2043. The majority of the leases contain renewal options and provisions for increases in rental rates based on an agreed upon index or predetermined escalation schedule.

The following table shows the details of the Company’s operating lease right-of-use asset and the associated lease liability for the period indicated:

Item	Balance Sheet Location	December 31, 2019	
		<i>(in thousands)</i>	
Operating lease asset	Other assets	\$	57,226
Operating lease liability	Other liabilities	\$	63,030

At December 31, 2019, the Company’s operating leases have a weighted average remaining lease term of 7.7 years and a weighted average discount rate of 3.0%. Cash paid for amounts included in the measurement of operating lease liabilities was \$11.2 million for the year ended December 31, 2019. Right-of-use assets obtained in exchange for new operating lease liabilities during the year ended December 31, 2019 were \$20.6 million.

The following table shows the components of net lease costs:

Item	Statement of Income Location	Year Ended December 31, 2019
		<i>(in thousands)</i>
Operating lease cost (1)	Occupancy	\$ 10,851
Variable lease cost	Occupancy	1,805
Sublease income	Occupancy	(1,182)
Net lease cost		\$ 11,474

(1) Includes short-term lease costs, which are immaterial.

Total rental expense on buildings and equipment, net of rental income of \$1.2 million and \$791 thousand for the years ended December 31, 2018 and 2017, respectively, was \$9.6 million and \$7.9 million for the years ended December 31, 2018 and 2017, respectively.

The following table shows the maturity analysis for operating leases as of December 31, 2019:

	Year ending December 31,
	<i>(in thousands)</i>
2020	\$ 11,105
2021	11,126
2022	10,689
2023	9,476
2024	6,980
Thereafter	21,866
Total future minimum lease payments	71,242
Amounts representing interest	(8,212)
Present value of minimum lease payments	\$ 63,030

Future minimum lease payments for the Company's operating leases as of December 31, 2018, prior to the adoption of the new lease guidance were as follows:

	Year Ending December 31,
	<i>(in thousands)</i>
2019	\$ 10,947
2020	9,766
2021	8,729
2022	8,102
2023	6,796
Thereafter	18,703
Total minimum payments	\$ 63,043

Sale-leaseback transactions:

On September 26, 2019, the Company sold one of its Washington facilities and leased back a portion of the facility utilized for branch operations. The lease term is through September 2022, with monthly payments of approximately \$19 thousand. The sale-leaseback transaction resulted in a pre-tax gain of \$5.9 million.

For additional detail regarding the new lease guidance, see [Note 1](#), "Summary of Significant Accounting Policies and Reclassifications."

11. Deposits

Year end deposits are summarized in the following table:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Demand and other noninterest-bearing	\$ 5,328,146	\$ 5,227,216
Money market (1)	2,322,644	2,294,125
Interest-bearing demand (1)	1,150,437	1,084,863
Savings (1)	882,050	889,849
Interest-bearing public funds, other than certificates of deposit (1)	301,203	233,938
Certificates of deposit, less than \$250,000	218,764	243,849
Certificates of deposit, \$250,000 or more	151,995	89,473
Certificates of deposit insured by CDARS®	17,065	23,580
Brokered certificates of deposit	12,259	57,930
Reciprocal money market accounts	300,158	313,692
Subtotal	10,684,721	10,458,515
Valuation adjustment resulting from acquisition accounting	(13)	(389)
Total deposits	<u>\$ 10,684,708</u>	<u>\$ 10,458,126</u>

(1) Beginning in 2019, interest-bearing public funds, other than certificates of deposit, are presented separately in this table. Prior period amounts have been reclassified to conform to current period presentation.

Overdrafts of \$3.8 million and \$4.0 million were reclassified as loan balances at December 31, 2019 and 2018, respectively.

The following table shows the amount and maturity of time deposits:

	Years Ending December 31,	
	<i>(in thousands)</i>	
2020	\$	313,241
2021		53,679
2022		19,346
2023		8,060
2024		5,593
Thereafter		151
Total	<u>\$</u>	<u>400,070</u>

12. FHLB and FRB Borrowings

FHLB

The Company has entered into borrowing arrangements with the FHLB to borrow funds under a short-term floating rate fed funds overnight advance program and fixed-term loan agreements. All borrowings are secured by stock of the FHLB and a blanket pledge of qualifying loans receivable. The Company had aggregate borrowing capacity with the FHLB of \$1.96 billion and \$1.62 billion for the years ended December 31, 2019 and 2018, respectively, of which the Company had borrowed \$953.0 million and \$399.0 million, respectively. See [Note 5, "Loans,"](#) for the carrying value of pledged loans.

At December 31, 2019, FHLB advances were scheduled to mature as follows:

	Federal Home Loan Bank Advances	
	Fixed rate advances	
	Weighted Average Rate	Amount
	<i>(dollars in thousands)</i>	
Within 1 year	1.82%	\$ 946,000
Over 1 through 5 years	3.85%	2,000
Due after 10 years	5.37%	5,000
Total		953,000
Valuation adjustment from acquisition accounting		469
Total		<u>\$ 953,469</u>

The maximum, average outstanding and year end balances and average interest rates on advances from the FHLB were as follows for the years ended December 31, 2019, 2018 and 2017:

	Years ended December 31,		
	2019	2018	2017
	<i>(dollars in thousands)</i>		
Balance at end of period	\$ 953,469	\$ 399,523	\$ 11,579
Average balance during period	\$ 469,983	\$ 166,563	\$ 79,788
Maximum month end balance during period	\$ 953,469	\$ 399,523	\$ 317,480
Weighted average rate during period	2.42%	2.29%	1.33%
Weighted average rate at December 31	1.84%	2.68%	4.08%

FRB

The Company is also eligible to borrow under the FRB's primary credit program, including the Term Auction Facility auctions. All borrowings are secured by certain pledged, available for sale investment securities. While the Company had no borrowings as of December 31, 2019 and December 31, 2018, there were overnight borrowings resulting in average borrowings of \$99 thousand and \$14 thousand for 2019 and 2018, respectively. The Company had no borrowings in 2017. The Company pledges securities and loans for borrowing capacity at the FRB and had a borrowing capacity with the FRB of \$209.1 million and \$107.1 million for the years ended December 31, 2019 and 2018, respectively. See [Note 4, "Securities,"](#) for the carrying value of pledged investment securities and [Note 5, "Loans,"](#) for the carrying value of pledged loans.

13. Securities Sold Under Agreements to Repurchase

Securities Sold Under Agreements to Repurchase - Term

The Company had previously entered into wholesale repurchase agreements with certain brokers. At December 31, 2017, the Company held \$25.0 million in wholesale repurchase agreements with an interest rate of 1.88%. These agreements were settled on the repurchase date of March 19, 2018.

Securities Sold Under Agreements to Repurchase - Sweep

Sweep repurchase agreements are generally short-term agreements. These agreements are treated as financing transactions and the obligations to repurchase securities sold are reflected as a liability in the Consolidated Financial Statements. The dollar amount of securities underlying the agreements remains in the applicable asset account of the Consolidated Financial Statements. These agreements had a balance of \$64.4 million and a weighted average interest rate of 1.24% at December 31, 2019. All of these repurchase agreements in existence at December 31, 2019 mature on a daily basis. Securities available for sale with a carrying amount of \$76.0 million at December 31, 2019 were pledged as collateral for the sweep repurchase agreement borrowings.

14. Subordinated Debentures

On November 1, 2017, with its acquisition of Pacific Continental, the Company assumed \$35.0 million in aggregate principal amount of fixed-to-floating rate subordinated debentures. These debentures are callable at par on June 30, 2021, have a stated maturity of June 30, 2026 and bear interest at a fixed annual rate of 5.875% per year, from and including June 27, 2016, but excluding June 30, 2021. From and including June 30, 2021 through the maturity date or early redemption date, the interest rate will reset quarterly to an annual interest rate equal to the then-current three-month LIBOR plus 4.715%.

15. Revolving Line of Credit

During the second quarter of 2019, the Company entered into a \$30.0 million short-term credit facility with an unaffiliated bank that matures in May 2020. This facility has a variable interest rate and provides the Company additional liquidity, if needed, for various corporate activities including the repurchase of shares of Columbia Banking System, Inc. common stock. As of December 31, 2019, there was no outstanding balance. The credit agreement requires the Company to comply with certain covenants including those related to asset quality and capital levels. The Company was in compliance with all covenants associated with this facility at December 31, 2019.

16. Derivatives and Balance Sheet Offsetting

The Company is exposed to certain risks arising from both its business 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 assets and liabilities and the use of derivative financial instruments. Specifically, the Company enters into interest rate-based 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 Company's derivative financial instruments are used to manage differences in the amount, timing, and duration of the Company's known or expected cash receipts and its known or expected cash payments principally related to the Company's loan portfolio.

The Company's objectives in using interest rate derivatives are to add stability to interest income and to manage its exposure to interest rate movements. To accomplish this objective, the Company uses interest rate collars as part of its interest rate risk management strategy. Interest rate collars designated as cash flow hedges involve the payments of variable-rate amounts if interest rates rise above the cap strike rate on the contract and receipts of variable-rate amounts if interest rates fall below the floor strike rate on the contract. These derivative contracts are used to hedge the variable cash flows associated with existing variable-rate assets.

With respect to derivatives designated and that qualify as cash flow hedges of interest rate risk, the gain or loss on the derivative is recorded in accumulated other comprehensive income (loss) and subsequently reclassified into interest income in the same period(s) during which the hedged transaction affects earnings. Amounts reported in accumulated other comprehensive income (loss) related to derivatives will be reclassified to interest income as interest payments are received on the Company's variable-rate assets. During the next 12 months, the Company estimates that there will be \$3.2 million reclassified as an increase to interest income.

In addition, the Company periodically enters into certain commercial loan interest rate swap agreements in order to provide commercial loan customers the ability to convert from variable to fixed interest rates. Under these agreements, the Company enters into a variable-rate loan agreement with a customer in addition to a swap agreement. This swap agreement effectively converts the customer’s variable rate loan into a fixed rate loan. The Company then enters into a corresponding swap agreement with a third party in order to offset its exposure on the variable and fixed components of the customer agreement. As the interest rate swap agreements with the customers and third parties are not designated as hedges under the Derivatives and Hedging topic of the FASB ASC, the instruments are marked to market in earnings. The notional amount of open interest rate swap agreements at December 31, 2019 and 2018 was \$428.6 million and \$366.7 million, respectively. Mark-to-market loss of \$1 thousand for 2019 and mark-to-market gains of \$8 thousand and \$16 thousand for 2018 and 2017, respectively, were recorded to “Other” noninterest expense.

The following table presents the fair value of derivatives, as well as their classification on the Balance Sheet at December 31, 2019 and 2018:

		Asset Derivatives				Liability Derivatives			
		2019		2018		2019		2018	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value	
<i>(in thousands)</i>									
Derivatives designated as hedging instruments:									
Interest rate collar	Other assets	\$ 14,727	Other assets	\$ —	Other liabilities	\$ —	Other liabilities	\$ —	
Derivatives not designated as hedging instruments:									
Interest rate swap contracts	Other assets	\$ 19,144	Other assets	\$ 7,033	Other liabilities	\$ 19,145	Other liabilities	\$ 7,033	

The table below presents the effect of cash flow hedge accounting on accumulated other comprehensive income (loss) for the years ended December 31, 2019 and 2018:

	Amount of Gain or (Loss) Recognized in Accumulated Other Comprehensive Income on Derivative		Location of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income into Income	Amount of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income into Income	
	Years Ended December 31,			Years Ended December 31,	
	2019	2018		2019	2018
<i>(in thousands)</i>					
Interest rate collar	\$ 15,322	\$ —	Interest income	\$ 595	\$ —

The notional amount of the interest rate collar was \$500.0 million at December 31, 2019. The cash flow hedge was determined to be effective during the periods presented and, as a result, qualifies for hedge accounting treatment.

The Company is party to interest rate swap contracts, interest rate collar and repurchase agreements that are subject to enforceable master netting arrangements or similar agreements. Under these agreements, the Company may have the right to net settle multiple contracts with the same counterparty.

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The following tables show the gross interest rate swap contracts, collar agreements and repurchase agreements in the Consolidated Balance Sheets and the respective collateral received or pledged in the form of cash or other financial instruments. The collateral amounts in these tables are limited to the outstanding balances of the related asset or liability. Therefore, instances of overcollateralization are not shown.

	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset in the Consolidated Balance Sheets	Net Amounts of Assets/Liabilities Presented in the Consolidated Balance Sheets	Gross Amounts Not Offset in the Consolidated Balance Sheets	
				Collateral Pledged/Received	Net Amount
December 31, 2019					
<i>(in thousands)</i>					
Assets					
Interest rate swap contracts	\$ 19,144	\$ —	\$ 19,144	\$ —	\$ 19,144
Interest rate collar	\$ 14,727	\$ —	\$ 14,727	\$ (14,727)	\$ —
Liabilities					
Interest rate swap contracts	\$ 19,145	\$ —	\$ 19,145	\$ (19,145)	\$ —
Repurchase agreements	\$ 64,437	\$ —	\$ 64,437	\$ (64,437)	\$ —
December 31, 2018					
Assets					
Interest rate swap contracts	\$ 7,033	\$ —	\$ 7,033	\$ —	\$ 7,033
Liabilities					
Interest rate swap contracts	\$ 7,033	\$ —	\$ 7,033	\$ (3,235)	\$ 3,798
Repurchase agreements	\$ 61,094	\$ —	\$ 61,094	\$ (61,094)	\$ —

The Company's agreements with each of its derivative counterparties provide that if the Company defaults or is capable of being declared in default on any of its indebtedness, the Company could also be declared in default on its derivative obligations.

The following table presents the class of collateral pledged for repurchase agreements as well as the remaining contractual maturity of the repurchase agreements:

	Remaining contractual maturity of the agreements				Total
	Overnight and continuous	Up to 30 days	30 - 90 days	Greater than 90 days	
<i>(in thousands)</i>					
December 31, 2019					
Class of collateral pledged for repurchase agreements					
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations	\$ 64,437	\$ —	\$ —	\$ —	\$ 64,437
Gross amount of recognized liabilities for repurchase agreements					64,437
Amounts related to agreements not included in offsetting disclosure					\$ —

The collateral utilized for the Company's repurchase agreements is subject to market fluctuations as well as prepayments of principal. The Company monitors the risk of the fair value of its pledged collateral falling below acceptable amounts based on the type of the underlying repurchase agreement. The pledged collateral related to the Company's \$64.4 million sweep repurchase agreements, which mature on an overnight basis, is monitored on a daily basis as the underlying sweep accounts can have frequent transaction activity and the amount of pledged collateral is adjusted as necessary.

17. Employee Benefit Plans

401(k) Plan

The Company maintains defined contribution and profit sharing plans in conformity with the provisions of section 401(k) of the Internal Revenue Code. The Columbia Bank 401(k) Plan, permits Columbia Bank employees who are at least 18 years of age to contribute up to 75% of their eligible compensation to the 401(k) Plan starting on the first day of the month following their hire date. On a per pay period basis the Company is required to match 50% of employee contributions up to 3% of each employee's eligible compensation. The Company contributed \$3.5 million during 2019, \$3.3 million during 2018, and \$2.7 million during 2017, in matching funds to the 401(k) Plan. Additionally, as determined annually by the board of directors of the Company, the 401(k) Plan provides for a non-matching discretionary profit sharing contribution. The Company's discretionary profit sharing contributions were \$7.3 million during 2019, \$7.0 million during 2018 and \$5.7 million during 2017.

Employee Stock Purchase Plan

The Company maintains an ESP Plan in which substantially all employees of the Company are eligible to participate. The ESP Plan provides participants the opportunity to purchase common stock of the Company at a discounted price. Under the ESP Plan, participants can purchase common stock of the Company for 90% of the lowest price on either the first or last day in each of two six month look-back periods. The look-back periods are January 1st through June 30th and July 1st through December 31st of each calendar year. The 10% discount is recognized by the Company as compensation expense and does not have a material impact on net income or earnings per common share. Participants of the ESP Plan purchased 57,201 shares for \$2.1 million in 2019, 50,750 shares for \$2.0 million in 2018 and 38,387 shares for \$1.5 million in 2017. At December 31, 2019 there were 303,156 shares available for purchase under the ESP Plan.

Supplemental Compensation Plan

The Company maintains Unit Plans to provide benefits for certain employees. The Unit Plans generally vest over a 10 year period and provide a fixed annual benefit over the subsequent 10 year period. At December 31, 2019 and 2018, the liability associated with these plans was \$4.0 million and \$4.2 million, respectively. Expense associated with these plans for the years ended December 31, 2019, 2018 and 2017 was \$415 thousand, \$337 thousand and \$452 thousand, respectively.

Supplemental Executive Retirement Plan

The Company maintains a SERP, a nonqualified deferred compensation plan that provides retirement benefits to certain highly compensated executives. The SERP is unsecured and unfunded and there are no program assets. The SERP projected benefit obligation, which represents the vested net present value of future payments to individuals under the plan is accrued over the estimated remaining term of employment of the participants and has been determined by actuarial valuation using a discount rate of 3.34% for 2019 and 4.30% for 2018. Additional assumptions and features of the plan are a normal retirement age of 65 and a 2% annual cost of living benefit adjustment. The projected benefit obligation is included in "Other liabilities" on the Consolidated Balance Sheets.

The following table reconciles the accumulated liability for the projected benefit obligation:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Balance, beginning of year	\$ 21,287	\$ 20,553
Actuarial (gain) loss	2,663	(31)
Benefit expense	1,930	1,701
Benefit payments	(966)	(936)
Balance, end of year	<u>\$ 24,914</u>	<u>\$ 21,287</u>

The benefits expected to be paid in conjunction with the SERP are presented in the following table:

	Years Ending December 31,	
	<i>(in thousands)</i>	
2020	\$	1,971
2021		1,116
2022		1,135
2023		1,239
2024		1,438
2025 through 2029		8,574
Total	<u>\$</u>	<u>15,473</u>

18. Commitments and Contingent Liabilities

Financial Instruments with Off-Balance Sheet Risk: In the normal course of business, the Company makes loan commitments (typically unfunded loans and unused lines of credit) and issues standby letters of credit to accommodate the financial needs of its customers.

Standby letters of credit commit the Company to make payments on behalf of customers under specified conditions. Historically, no significant losses have been incurred by the Company under standby letters of credit. Both arrangements have credit risk essentially the same as that involved in extending loans to customers and are subject to the Company's normal credit policies, including collateral requirements, where appropriate. At December 31, 2019 and 2018, the Company's loan commitments were \$2.67 billion and \$2.62 billion, respectively. Standby letters of credit were \$25.7 million and \$28.3 million at December 31, 2019 and 2018, respectively. In addition, there were no commitments under commercial letters of credit used to facilitate customers' trade transactions and other off-balance sheet liabilities at December 31, 2019 and 2018.

Legal Proceedings: The Company and its subsidiaries are from time to time defendants in and are threatened with various legal proceedings arising from their regular business activities. Management, after consulting with legal counsel, is of the opinion that the ultimate liability, if any, resulting from these pending or threatened actions and proceedings will not have a material effect on the financial statements of the Company.

19. Shareholders' Equity

Dividends.

The following summarizes the dividend activity for the year ended December 31, 2019:

Declared	Regular Cash Dividends Per Common Share	Special Cash Dividends Per Common Share	Record Date	Paid Date
January 24, 2019	\$ 0.28	\$ 0.14	February 6, 2019	February 20, 2019
April 25, 2019	\$ 0.28	\$ 0.14	May 8, 2019	May 22, 2019
July 25, 2019	\$ 0.28	—	August 7, 2019	August 21, 2019
October 24, 2019	\$ 0.28	—	November 6, 2019	November 20, 2019

Subsequent to year end, on January 23, 2020, the Company declared a regular quarterly cash dividend of \$0.28 per common share and a special cash dividend of \$0.22 per common share payable on February 19, 2020, to shareholders of record at the close of business on February 5, 2020.

The payment of cash dividends is subject to federal regulatory requirements for capital levels and other restrictions. In addition, the cash dividends paid by Columbia Bank to the Company are subject to both federal and state regulatory requirements.

Share Repurchase Program:

For the year ended December 31, 2019, the Company repurchased 1.5 million shares of common stock at an average price of \$35.00 per share. As of December 31, 2019, there are 1.4 million remaining shares authorized to be repurchased under the current Board approved share repurchase program.

20. Accumulated Other Comprehensive Income

The following table shows changes in accumulated other comprehensive income (loss) by component for the years ended December 31, 2019, 2018 and 2017:

	Unrealized Gains and Losses on Available for Sale Securities (1)	Unrealized Gains and Losses on Pension Plan Liability (1)	Unrealized Gains and Losses on Hedging Instruments (1)	Total (1)
<i>(in thousands)</i>				
Year Ended December 31, 2019				
Beginning balance	\$ (33,128)	\$ (2,177)	\$ —	\$ (35,305)
Other comprehensive income (loss) before reclassifications	67,802	(2,042)	11,760	77,520
Amounts reclassified from accumulated other comprehensive loss (2)	(1,636)	245	(457)	(1,848)
Net current-period other comprehensive income (loss)	66,166	(1,797)	11,303	75,672
Ending balance	\$ 33,038	\$ (3,974)	\$ 11,303	\$ 40,367
Year Ended December 31, 2018				
Beginning balance	\$ (19,779)	\$ (2,446)	\$ —	\$ (22,225)
Adjustment pursuant to adoption of ASU 2016-01	157	—	—	157
Other comprehensive income (loss) before reclassifications	(13,425)	24	—	(13,401)
Amounts reclassified from accumulated other comprehensive loss (2)	(81)	245	—	164
Net current-period other comprehensive income (loss)	(13,506)	269	—	(13,237)
Ending balance	\$ (33,128)	\$ (2,177)	\$ —	\$ (35,305)
Year Ended December 31, 2017				
Beginning balance	\$ (12,704)	\$ (6,295)	\$ —	\$ (18,999)
Other comprehensive income (loss) before reclassifications	(3,391)	4,017	—	626
Amounts reclassified from accumulated other comprehensive loss (2)	7	223	—	230
Net current-period other comprehensive income (loss)	(3,384)	4,240	—	856
Adjustment pursuant to adoption of ASU 2018-02	\$ (3,691)	\$ (391)	\$ —	\$ (4,082)
Ending balance	\$ (19,779)	\$ (2,446)	\$ —	\$ (22,225)

(1) All amounts are net of tax. Amounts in parenthesis indicate debits.

(2) See following table for details about these reclassifications.

In December 2017, the Company made an election to reclassify income tax effects related to the Tax Cuts and Jobs Act of \$4.1 million from accumulated other comprehensive income to retained earnings. The Company uses the portfolio approach to account for the tax consequences of amounts reported in OCI.

The following table shows details regarding the reclassifications from accumulated other comprehensive income for the years ended December 31, 2019, 2018 and 2017:

	Amount Reclassified from Accumulated Other Comprehensive Income			Affected line Item in the Consolidated Statement of Income
	Years Ended December 31,			
	2019	2018	2017	
	<i>(in thousands)</i>			
Unrealized gains and losses on available for sale debt securities	\$ 2,132	\$ 106	\$ (11)	Investment securities gains (losses), net
	2,132	106	(11)	Total before tax
	(496)	(25)	4	Income tax provision
	<u>\$ 1,636</u>	<u>\$ 81</u>	<u>\$ (7)</u>	Net of tax
Amortization of pension plan liability actuarial losses	\$ (319)	\$ (319)	\$ (350)	Compensation and employee benefits
	(319)	(319)	(350)	Total before tax
	74	74	127	Income tax provision
	<u>\$ (245)</u>	<u>\$ (245)</u>	<u>\$ (223)</u>	Net of tax
Unrealized gains from hedging instruments	\$ 595	\$ —	\$ —	Loans
	595	—	—	Total before tax
	(138)	—	—	Income tax provision
	<u>\$ 457</u>	<u>\$ —</u>	<u>\$ —</u>	Net of tax

21. Fair Value Accounting and Measurement

The Fair Value Measurements and Disclosures topic of the FASB ASC defines fair value, establishes a consistent framework for measuring fair value and expands disclosure requirements about fair value. We hold fixed and variable rate interest-bearing securities, investments in marketable equity securities and certain other financial instruments, which are carried at fair value. Fair value is determined based upon quoted prices when available or through the use of alternative approaches, such as matrix or model pricing, when market quotes are not readily accessible or available.

The valuation techniques are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our own market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 – Quoted prices for identical instruments in active markets that are accessible at the measurement date.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3 – Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable.

Fair values are determined as follows:

Securities at fair value are priced using a combination of market activity, industry recognized information sources, yield curves, discounted cash flow models and other factors. These fair value calculations are considered a Level 2 input method under the provisions of the Fair Value Measurements and Disclosures topic of the FASB ASC for all securities other than U.S. Treasury Notes and other securities, which are considered a Level 1 input method.

Interest rate contracts and the interest rate collar are valued in models, which use as their basis, readily observable market parameters and are classified within Level 2 of the valuation hierarchy.

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The following table sets forth the Company's financial assets and liabilities that were accounted for at fair value on a recurring basis at December 31, 2019 and 2018 by level within the fair value hierarchy. Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement:

	Fair Value at December 31, 2019	Fair Value Measurements at Reporting Date Using		
		Level 1	Level 2	Level 3
<i>(in thousands)</i>				
Assets				
Debt securities available for sale				
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations (1)	\$ 2,892,950	\$ —	\$ 2,892,950	\$ —
Other asset-backed securities (1)	196,050	—	196,050	—
State and municipal securities	488,802	—	488,802	—
U.S. government agency and government-sponsored enterprise securities	168,340	—	168,340	—
Total debt securities available for sale	\$ 3,746,142	\$ —	\$ 3,746,142	\$ —
Other assets:				
Interest rate contracts	\$ 19,144	\$ —	\$ 19,144	\$ —
Interest rate collar	14,727	—	14,727	—
Liabilities				
Other liabilities:				
Interest rate contracts	\$ 19,145	\$ —	\$ 19,145	\$ —

	Fair Value at December 31, 2018	Fair Value Measurements at Reporting Date Using		
		Level 1	Level 2	Level 3
<i>(in thousands)</i>				
Assets				
Debt securities available for sale				
U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations (1)	\$ 2,013,355	\$ —	\$ 2,013,355	\$ —
Other asset-backed securities (1)	174,935	—	174,935	—
State and municipal securities	574,323	—	574,323	—
U.S. government agency and government-sponsored enterprise securities	404,587	—	404,587	—
U.S. government securities	248	248	—	—
Total debt securities available for sale	\$ 3,167,448	\$ 248	\$ 3,167,200	\$ —
Other assets:				
Interest rate contracts	\$ 7,033	\$ —	\$ 7,033	\$ —
Liabilities				
Other liabilities:				
Interest rate contracts	\$ 7,033	\$ —	\$ 7,033	\$ —

(1) Beginning in 2019, other asset-backed securities were presented separately in this table. Prior period amounts that were previously reported in U.S. government agency and government-sponsored enterprise mortgage-backed securities and collateralized mortgage obligations have been reclassified to conform to current period presentation.

There were no transfers between Level 1 and Level 2 of the valuation hierarchy during the years ended December 31, 2019 and 2018. The Company recognizes transfers between levels of the valuation hierarchy based on the valuation level at the end of the reporting period.

Nonrecurring Measurements

Certain assets and liabilities are measured at fair value on a nonrecurring basis after initial recognition such as loans measured for impairment and OREO. The following methods were used to estimate the fair value of each such class of financial instrument:

Impaired loans—A loan is considered to be impaired when, based on current information and events, it is probable that the Company will be unable to collect all amounts due (both interest and principal) according to the contractual terms of the loan agreement. Impaired loans are measured based on the present value of expected future cash flows discounted at the loan's effective interest rate, a loan's observable market price, or the fair market value of the collateral less estimated costs to sell if the loan is a collateral-dependent loan. The impairment evaluations are performed in conjunction with the ALLL process on a quarterly basis by officers in the Special Credits group, which reports to the Chief Credit Officer. The REASD, which also reports to the Chief Credit Officer, is responsible for obtaining appraisals from third-parties or performing internal evaluations. If an appraisal is obtained from a third-party, the REASD reviews the appraisal to evaluate the adequacy of the appraisal report, including its scope, methods, accuracy, and reasonableness.

The following table sets forth the Company's assets that were measured using fair value estimates on a nonrecurring basis during the years ended December 31, 2019 and 2018:

	Fair Value at December 31, 2019	Fair Value Measurements at Reporting Date Using			Losses During the Year Ended December 31, 2019
		Level 1	Level 2	Level 3	
		<i>(in thousands)</i>			
Impaired loans	\$ 10,007	\$ —	\$ —	\$ 10,007	\$ 7,519
	<u>\$ 10,007</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 10,007</u>	<u>\$ 7,519</u>

	Fair Value at December 31, 2018	Fair Value Measurements at Reporting Date Using			Losses During the Year Ended December 31, 2018
		Level 1	Level 2	Level 3	
		<i>(in thousands)</i>			
Impaired loans	\$ 11,555	\$ —	\$ —	\$ 11,555	\$ 1,821
	<u>\$ 11,555</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 11,555</u>	<u>\$ 1,821</u>

The losses on impaired loans disclosed above represent the amount of the specific reserve and/or charge-offs during the period applicable to loans held at period end. The amount of the specific reserve is included in the ALLL.

Quantitative information about Level 3 fair value measurements

The range and weighted average of the significant unobservable inputs used to fair value our Level 3 nonrecurring assets during 2019 and 2018, along with the valuation techniques used, are shown in the following tables:

	Fair Value at December 31, 2019	Valuation Technique	Unobservable Input	Range (Weighted Average) (1)
<i>(dollars in thousands)</i>				
Impaired loans - collateral-dependent (2)	\$ 10,007	Fair Market Value of Collateral	Adjustment to Stated Value	0% - 100% (49.68%)

(1) Adjustment applied to appraisal value and stated value (in the case of fixed assets and inventory).

(2) Collateral consists of accounts receivable, inventory, fixed assets, real estate and cash.

	Fair Value at December 31, 2018	Valuation Technique	Unobservable Input	Range (Weighted Average) (1)
<i>(dollars in thousands)</i>				
Impaired loans - collateral-dependent (2)	\$ 8,394	Fair Market Value of Collateral	Adjustment to Stated Value	0.00% - 70.04% (7.02%)
Impaired loans - other (3)	\$ 3,161	Discounted Cash Flow	Discount Rate	0.34%

(1) Discount rate applied to discounted cash flow valuation or appraisal value and stated value (in the case of fixed assets and inventory).

(2) Collateral consists of accounts receivable, inventory, fixed assets, real estate and cash.

(3) As there was only one impaired loan re-measured using discounted cash flows, a range of discounts could not be provided.

The following tables summarize carrying amounts and estimated fair values of selected financial instruments for the periods indicated:

	December 31, 2019				
	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
<i>(in thousands)</i>					
Assets					
Cash and due from banks	\$ 223,541	\$ 223,541	\$ 223,541	\$ —	\$ —
Interest-earning deposits with banks	24,132	24,132	24,132	—	—
Debt securities available for sale	3,746,142	3,746,172	—	3,746,172	—
FHLB stock	48,120	48,120	—	48,120	—
Loans held for sale	17,718	17,718	—	17,718	—
Loans	8,659,497	8,883,865	—	—	8,883,865
Interest rate contracts	19,144	19,144	—	19,144	—
Interest rate collar	14,727	14,727	—	14,727	—
Liabilities					
Time deposits	\$ 400,070	\$ 397,736	\$ —	\$ 397,736	\$ —
FHLB advances	953,469	952,762	—	952,762	—
Repurchase agreements	64,437	64,437	—	64,437	—
Subordinated debentures	35,277	35,491	—	35,491	—
Interest rate contracts	19,145	19,145	—	19,145	—

	December 31, 2018				
	Carrying Amount	Fair Value	Level 1	Level 2	Level 3
<i>(in thousands)</i>					
Assets					
Cash and due from banks	\$ 260,180	\$ 260,180	\$ 260,180	\$ —	\$ —
Interest-earning deposits with banks	17,407	17,407	17,407	—	—
Debt securities available for sale	3,167,448	3,167,448	248	3,167,200	—
FHLB stock	25,960	25,960	—	25,960	—
Loans held for sale	3,849	3,849	—	3,849	—
Loans	8,308,142	8,316,946	—	—	8,316,946
Interest rate contracts	7,033	7,033	—	7,033	—
Liabilities					
Time deposits	\$ 414,443	\$ 407,659	\$ —	\$ 407,659	\$ —
FHLB advances	399,523	400,085	—	400,085	—
Repurchase agreements	61,094	61,094	—	61,094	—
Subordinated debentures	35,462	34,897	—	34,897	—
Interest rate contracts	7,033	7,033	—	7,033	—

22. Earnings Per Common Share

The Company applies the two-class method of computing basic and diluted EPS. Under the two-class method, EPS is determined for each class of common stock and participating security according to dividends declared and participation rights in undistributed earnings. The Company issues restricted shares under share-based compensation plans and preferred shares which qualify as participating securities.

The following table sets forth the computation of basic and diluted EPS for the periods indicated:

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands except per share amounts)</i>		
Basic EPS:			
Net income	\$ 194,451	\$ 172,882	\$ 112,828
Less: Earnings allocated to participating securities			
Preferred shares	—	—	3
Nonvested restricted shares	1,530	1,892	1,501
Earnings allocated to common shareholders	\$ 192,921	\$ 170,990	\$ 111,324
Weighted average common shares outstanding	71,999	72,385	59,882
Basic earnings per common share	\$ 2.68	\$ 2.36	\$ 1.86
Diluted EPS:			
Earnings allocated to common shareholders	\$ 192,921	\$ 170,990	\$ 111,324
Weighted average common shares outstanding	71,999	72,385	59,882
Dilutive effect of equity awards and warrants	33	5	6
Weighted average diluted common shares outstanding	72,032	72,390	59,888
Diluted earnings per common share	\$ 2.68	\$ 2.36	\$ 1.86
Potentially dilutive share options that were not included in the computation of diluted EPS because to do so would be anti-dilutive	8	4	13

23. Share-Based Payments

At December 31, 2019, the Company had one equity compensation plan (the “Plan”), which is shareholder approved, that provides for the granting of share options and shares to eligible employees and directors up to 3,050,000 shares.

Share Awards: Restricted share awards provide for the immediate issuance of shares of Company common stock to the recipient, with such shares held in escrow until certain conditions are met. Share awards provides for vesting requirements that include time-based, performance-based, or market-based conditions. Recipients of restricted shares do not pay any cash consideration to the Company for the shares and the holders of the restricted shares have voting rights. For share awards issued under our new equity incentive plan approved in 2018, the holder accrues dividends, which are paid out when the shares vest. For any awards granted prior to the new plan, the holder receives dividends whether or not the shares have vested. The fair value of time-based and performance-based share awards is equal to the fair market value of the Company’s common stock on the date of grant. The fair value of market-based awards is estimated on the date of grant using the Monte Carlo simulation model.

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A summary of changes in the Company's nonvested shares and related information for the years ended December 31, 2019, 2018 and 2017 is presented below:

	Shares	Weighted Average Grant-Date Fair Value
Nonvested at January 1, 2017	818,755	\$ 27.19
Granted	337,384	\$ 38.51
Vested	(253,509)	\$ 25.67
Forfeited	(96,924)	\$ 28.97
Nonvested at December 31, 2017	805,706	\$ 32.23
Granted	306,592	\$ 41.47
Vested	(237,146)	\$ 28.78
Forfeited	(61,012)	\$ 35.92
Nonvested at December 31, 2018	814,140	\$ 36.43
Granted	405,516	\$ 35.08
Vested	(268,253)	\$ 32.50
Forfeited	(62,386)	\$ 37.12
Nonvested at December 31, 2019	889,017	\$ 36.96

As of December 31, 2019, there was \$23.1 million of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the Plan. That cost is expected to be recognized over a weighted average period of 2.7 years. The total fair value, as measured on the date of vesting, of shares vested during the years ended December 31, 2019, 2018, and 2017 was \$8.7 million, \$6.7 million, and \$6.5 million, respectively.

Share Options: Option awards are generally granted with an exercise price equal to the market price of the Company's stock at the date of grant; those option awards generally vest based on three years of continual service and are exercisable for a five-year period after vesting. Option awards granted have a 10-year maximum term.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option valuation model. The fair value of all options is amortized on a straight-line basis over the requisite service periods, which are generally the vesting periods. The expected life of options granted represents the period of time that they are expected to be outstanding. The expected life is determined based on historical experience with similar awards, giving consideration to the contractual terms and vesting schedules. Expected volatilities of our common stock are estimated at the date of grant based on the historical volatility of the stock. The volatility factor is based on historical stock prices over the most recent period commensurate with the estimated expected life of the award. The risk-free interest rate is based on the U.S. Treasury curve in effect at the time of the award. The expected dividend yield is based on dividend trends and the market value of the Company's stock price at the time of the award.

A summary of option activity under the Plan as of December 31, 2019, and changes during the year then ended is presented below:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (\$000)
Balance at December 31, 2018	5,514	\$ 9.91		
Expired	(1,187)	9.91		
Exercised	(4,327)	9.91		
Balance at December 31, 2019	—	\$ —	0	\$ —

The total intrinsic value of options exercised during the years ended December 31, 2019, 2018, and 2017 was \$108 thousand, \$29 thousand, and \$67 thousand, respectively. There were no options granted during the years ended December 31, 2019, 2018, and 2017. There were no options that vested during the years ended December 2019, 2018, and 2017.

It is the Company's policy to issue new shares for share option exercises and share awards. The Company expenses awards of share options and shares on a straight-line basis over the related vesting term of the award. For the years ended December 31, 2019, 2018 and 2017, the Company recognized pre-tax share-based compensation expense of \$9.3 million, \$8.4 million and \$7.7 million, respectively.

24. Income Tax

The components of income tax expense are as follows:

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Current expense			
Federal	\$ 40,471	\$ 33,400	\$ 39,708
State	6,359	5,446	3,016
Total current tax expense	\$ 46,830	\$ 38,846	\$ 42,724
Deferred tax expense (benefit)			
Federal	\$ 60	\$ (291)	\$ 21,524
State	270	399	907
Total deferred tax expense	330	108	22,431
Total	\$ 47,160	\$ 38,954	\$ 65,155

Significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31,	
	2019	2018
<i>(in thousands)</i>		
Deferred tax assets:		
ALLL	\$ 20,489	\$ 20,578
Lease liability	14,776	—
Deferred compensation	11,079	9,501
Stock options and restricted stock	2,016	1,850
OREO	—	288
Nonaccrual interest	112	446
Unrealized loss on investment securities	—	10,129
Net operating losses and credit carryforwards	4,136	5,356
Other	245	733
Total deferred tax assets	<u>52,853</u>	<u>48,881</u>
Deferred tax liabilities:		
Asset purchase tax basis difference	(7,888)	(7,229)
Right of use asset	(13,415)	—
FHLB stock dividends	(789)	(790)
Deferred loan fees	(4,097)	(4,399)
Unrealized gain on investment securities	(10,091)	—
Purchase accounting	(8,946)	(9,245)
Depreciation	(3,152)	(2,609)
Cash flow hedge	(3,452)	—
Other	(100)	(195)
Total deferred tax liabilities	<u>(51,930)</u>	<u>(24,467)</u>
Net deferred tax asset	<u>\$ 923</u>	<u>\$ 24,414</u>

A reconciliation of the Company's effective income tax rate with the federal statutory tax rate is as follows:

	Years Ended December 31,					
	2019		2018		2017	
	Amount	Percent	Amount	Percent	Amount	Percent
<i>(dollars in thousands)</i>						
Income tax based on statutory rate	\$ 50,738	21 %	\$ 44,485	21 %	\$ 62,262	35 %
Increase (decrease) resulting from:						
Tax exempt instruments	(6,771)	(3)%	(6,423)	(3)%	(8,485)	(5)%
Bank owned life insurance	(1,963)	(1)%	(1,261)	(1)%	(3,351)	(2)%
Acquisition costs	—	— %	—	— %	825	1 %
Deferred tax asset revaluation	—	— %	—	— %	12,210	7 %
State income tax, net of federal benefit	5,134	2 %	4,931	2 %	2,550	1 %
Other, net	22	1 %	(2,778)	(1)%	(856)	— %
Income tax provision	<u>\$ 47,160</u>	<u>20 %</u>	<u>\$ 38,954</u>	<u>18 %</u>	<u>\$ 65,155</u>	<u>37 %</u>

As of December 31, 2019 and 2018, we had no unrecognized tax benefits. Our policy is to recognize interest and penalties on unrecognized tax benefits in "Provision for income taxes" in the Consolidated Statements of Income. There were no amounts related to interest and penalties recognized for the years ended December 31, 2019 and 2018. As a result of recent acquisitions, the Company has net operating loss carryforwards in the federal, Idaho and Oregon jurisdictions of \$15.8 million, \$14.3 million and \$121 thousand, respectively, which begin to expire in 2024.

The Tax Cuts and Jobs Act was signed into law on December 22, 2017. The law included significant changes to the U.S. corporate tax system, including a Federal corporate rate reduction from 35% to 21%. In 2017, the Company applied the newly enacted corporate federal income tax rate of 21% resulting in a \$12.2 million increase in tax expense from the re-measurement of its net deferred tax assets.

25. Regulatory Capital Requirements

The Company (on a consolidated basis) and its banking subsidiary 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 and its banking subsidiary's financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and its banking subsidiary must meet specific capital guidelines that involve quantitative measures of assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors. Prompt corrective action provisions are not applicable to bank holding companies.

Basel III capital requirements became effective on January 1, 2015. The capital requirements, among other things (i) specify that Tier 1 capital consists of CET1, and "Additional Tier 1 capital" instruments meeting specified requirements, (ii) define CET1 narrowly by requiring that most deductions/adjustments to regulatory capital measures be made to CET1 and not to the other components of capital and (iii) expand the scope of the deductions/adjustments to capital as compared to existing regulations. Under the requirements that are now effective, the minimum capital ratios are (i) 4.5% CET1 to risk-weighted assets, (ii) 6% Tier 1 capital to risk-weighted assets, (iii) 8% total capital to risk-weighted assets and (iv) 4% Tier 1 capital to average total assets (Tier 1 leverage). The Company and the Bank have made the one-time election to opt-out of including accumulated other comprehensive income items in regulatory capital calculations.

The Capital Rules also require a capital conservation buffer designed to absorb losses during periods of economic stress. The capital conservation buffer is composed entirely of CET1, on top of these minimum risk-weighted asset ratios. In addition, the Capital Rules provide for a countercyclical capital buffer applicable only to certain covered institutions. We do not expect the countercyclical capital buffer to be applicable to us or the Bank. Banking institutions with a ratio of CET1 to risk-weighted assets above the minimum but below the capital conservation buffer (or below the combined capital conservation buffer and countercyclical capital buffer, when the latter is applied) will face constraints on dividends, equity repurchases and compensation based on the amount of the shortfall.

The implementation of the capital conservation buffer began on January 1, 2016 at the 0.625% level and was fully phased in over a three-year period (increasing by 0.625% on each subsequent January 1, until it reached 2.5% on January 1, 2019). As a result, the Company and the Bank are now required to maintain such additional capital conservation buffer of 2.5% of CET1, effectively resulting in minimum ratios of (i) 7% CET1 to risk-weighted assets, (ii) 8.5% Tier 1 capital to risk-weighted assets, and (iii) 10.5% total capital to risk-weighted assets. At December 31, 2019, the capital conservation buffer for the Company and the Bank was 5.60% and 5.29%, respectively. As of December 31, 2019, we and the Bank met all capital adequacy requirements under the Capital Rules.

FDIC regulations set forth the qualifications necessary for a bank to be classified as "well-capitalized," primarily for assignment of FDIC insurance premium rates. To qualify as "well-capitalized," banks must have a CET1 risk-adjusted capital ratio of 6.5%, a Tier I risk-adjusted capital ratio of at least 8%, a total risk-adjusted capital ratio of at least 10% and a leverage ratio of at least 5%. Failure to qualify as "well-capitalized" can negatively impact a bank's ability to expand and to engage in certain activities.

As of December 31, 2019, the most recent notification from the FDIC categorized Columbia Bank as well-capitalized under the regulatory framework for prompt corrective action. To be categorized as well-capitalized, an institution must maintain minimum CET1 risk-based, Tier 1 risk-based, total risk-based and Tier 1 leverage ratios as set forth in the following table. There are no conditions or events since the notification that management believes have changed Columbia Bank's category.

The Company and its banking subsidiary's actual capital amounts and ratios as of December 31, 2019 and 2018 are presented in the following table:

	Actual		Minimum Required For Capital Adequacy Purposes		Minimum Required Plus Capital Conservation Buffer Phase-In		Minimum Required Plus Capital Conservation Buffer Fully Phased-In		To Be Well Capitalized Under Prompt Corrective Action Provision	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
<i>(dollars in thousands)</i>										
December 31, 2019										
CET1 Capital (to risk-weighted assets):										
The Company	\$ 1,317,202	12.45%	\$ 476,260	4.50%	N/A	N/A	\$ 740,849	7.00%	N/A	N/A
Columbia Bank	\$ 1,318,044	12.46%	\$ 475,913	4.50%	N/A	N/A	\$ 740,310	7.00%	\$ 687,430	6.50%
Tier 1 Capital (to risk-weighted assets):										
The Company	\$ 1,317,202	12.45%	\$ 635,014	6.00%	N/A	N/A	\$ 899,603	8.50%	N/A	N/A
Columbia Bank	\$ 1,318,044	12.46%	\$ 634,551	6.00%	N/A	N/A	\$ 898,947	8.50%	\$ 846,068	8.00%
Total Capital (to risk-weighted assets):										
The Company	\$ 1,439,877	13.60%	\$ 846,685	8.00%	N/A	N/A	\$ 1,111,274	10.50%	N/A	N/A
Columbia Bank	\$ 1,405,422	13.29%	\$ 846,068	8.00%	N/A	N/A	\$ 1,110,464	10.50%	\$ 1,057,585	10.00%
Tier 1 Capital Leverage (to average assets):										
The Company	\$ 1,317,202	10.17%	\$ 517,938	4.00%	N/A	N/A	\$ 517,938	4.00%	N/A	N/A
Columbia Bank	\$ 1,318,044	10.22%	\$ 515,797	4.00%	N/A	N/A	\$ 515,797	4.00%	\$ 644,746	5.00%
December 31, 2018										
CET1 Capital (to risk-weighted assets):										
The Company	\$ 1,253,394	12.74%	\$ 442,717	4.50%	\$ 627,182	6.38%	\$ 688,670	7.00%	N/A	N/A
Columbia Bank	\$ 1,274,317	12.96%	\$ 442,552	4.50%	\$ 626,948	6.38%	\$ 688,414	7.00%	\$ 639,241	6.50%
Tier 1 Capital (to risk-weighted assets):										
The Company	\$ 1,253,394	12.74%	\$ 590,289	6.00%	\$ 774,754	7.88%	\$ 836,243	8.50%	N/A	N/A
Columbia Bank	\$ 1,274,317	12.96%	\$ 590,069	6.00%	\$ 774,465	7.88%	\$ 835,931	8.50%	\$ 786,759	8.00%
Total Capital (to risk-weighted assets):										
The Company	\$ 1,376,555	13.99%	\$ 787,052	8.00%	\$ 971,517	9.88%	\$ 1,033,006	10.50%	N/A	N/A
Columbia Bank	\$ 1,362,016	13.85%	\$ 786,759	8.00%	\$ 971,155	9.88%	\$ 1,032,621	10.50%	\$ 983,448	10.00%
Tier 1 Capital Leverage (to average assets):										
The Company	\$ 1,253,394	10.24%	\$ 489,399	4.00%	\$ 489,399	4.00%	\$ 489,399	4.00%	N/A	N/A
Columbia Bank	\$ 1,274,317	10.42%	\$ 489,254	4.00%	\$ 489,254	4.00%	\$ 489,254	4.00%	\$ 611,567	5.00%

26. Parent Company Financial Information
Condensed Balance Sheets—Parent Company Only

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Assets		
Cash	\$ 6,088	\$ 945
Interest-earning deposits	21,717	7,226
Total cash and cash equivalents	27,805	8,171
Investment in banking subsidiary	2,156,039	2,049,855
Investment in other subsidiaries	5,671	5,312
Goodwill	4,729	4,729
Other assets	1,675	1,595
Total assets	<u>\$ 2,195,919</u>	<u>\$ 2,069,662</u>
Liabilities and Shareholders' Equity		
Subordinated debentures	\$ 35,277	\$ 35,462
Other liabilities	680	551
Total liabilities	35,957	36,013
Shareholders' equity	2,159,962	2,033,649
Total liabilities and shareholders' equity	<u>\$ 2,195,919</u>	<u>\$ 2,069,662</u>

Condensed Statements of Income—Parent Company Only

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Income			
Dividend from banking subsidiary	\$ 168,000	\$ 85,250	\$ 66,800
Interest-earning deposits	100	12	2
Other income	68	56	8
Total income	168,168	85,318	66,810
Expense			
Compensation and employee benefits	791	978	732
Subordinated debentures interest expense	1,871	1,871	304
Other borrowings interest expense	—	4	60
Other expense	2,111	2,058	3,090
Total expenses	4,773	4,911	4,186
Income before income tax benefit and equity in undistributed earnings of subsidiaries	163,395	80,407	62,624
Income tax benefit	(967)	(1,017)	(548)
Income before equity in undistributed earnings of subsidiaries	164,362	81,424	63,172
Equity in undistributed earnings of subsidiaries	30,089	91,458	49,656
Net income	<u>\$ 194,451</u>	<u>\$ 172,882</u>	<u>\$ 112,828</u>

Condensed Statements of Cash Flows—Parent Company Only

	Years Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Operating Activities			
Net income	\$ 194,451	\$ 172,882	\$ 112,828
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in undistributed earnings of subsidiaries	(30,089)	(91,458)	(49,656)
Stock-based compensation expense	9,271	8,354	7,745
Net changes in other assets and liabilities	(133)	1,622	1,672
Net cash provided by operating activities	<u>173,500</u>	<u>91,400</u>	<u>72,589</u>
Investing Activities			
Net cash paid in business combinations	<u>—</u>	<u>—</u>	<u>(580)</u>
Net cash used in investing activities	—	—	(580)
Financing Activities			
Common stock dividends	(102,265)	(83,459)	(51,308)
Repayment of junior subordinated debentures	—	(8,248)	(6,186)
Cash settlement of acquired equity awards	—	—	(7,345)
Purchase and retirement of common stock	(2,792)	(2,677)	(2,299)
Purchase of treasury shares	(50,834)	—	—
Proceeds from exercise of stock options	<u>2,025</u>	<u>1,857</u>	<u>1,980</u>
Net cash used in financing activities	<u>(153,866)</u>	<u>(92,527)</u>	<u>(65,158)</u>
Increase (decrease) in cash and cash equivalents	19,634	(1,127)	6,851
Cash and cash equivalents at beginning of year	<u>8,171</u>	<u>9,298</u>	<u>2,447</u>
Cash and cash equivalents at end of year	<u>\$ 27,805</u>	<u>\$ 8,171</u>	<u>\$ 9,298</u>
Supplemental disclosure of noncash investing and financing activities			
Share-based consideration issued in business combinations	\$ —	\$ —	\$ 636,385

27. Summary of Quarterly Financial Information (Unaudited)

Quarterly financial information for the years ended December 31, 2019 and 2018 is summarized as follows:

	Fourth Quarter	Third Quarter	Second Quarter	First Quarter	Year Ended December 31,
<i>(in thousands, except per share amounts)</i>					
2019					
Total interest income	\$ 133,109	\$ 132,533	\$ 135,422	\$ 128,888	\$ 529,952
Total interest expense	8,292	10,083	10,306	7,866	36,547
Net interest income	124,817	122,450	125,116	121,022	493,405
Provision for loan and lease losses	1,614	299	218	1,362	3,493
Noninterest income	21,807	28,030	25,648	21,696	97,181
Noninterest expense	86,978	87,076	86,728	84,700	345,482
Income before income taxes	58,032	63,105	63,818	56,656	241,611
Provision for income taxes	11,903	12,378	12,094	10,785	47,160
Net income	\$ 46,129	\$ 50,727	\$ 51,724	\$ 45,871	\$ 194,451
Per common share (1)					
Earnings (basic)	\$ 0.64	\$ 0.70	\$ 0.71	\$ 0.63	\$ 2.68
Earnings (diluted)	\$ 0.64	\$ 0.70	\$ 0.71	\$ 0.63	\$ 2.68
2018					
Total interest income	\$ 129,801	\$ 127,575	\$ 120,549	\$ 119,144	\$ 497,069
Total interest expense	5,913	4,779	3,875	3,663	18,230
Net interest income	123,888	122,796	116,674	115,481	478,839
Provision for loan and lease losses	1,789	3,153	3,975	5,852	14,769
Noninterest income	20,402	21,019	23,692	23,143	88,256
Noninterest expense	87,019	82,841	84,643	85,987	340,490
Income before income taxes	55,482	57,821	51,748	46,785	211,836
Provision for income taxes	10,734	11,406	9,999	6,815	38,954
Net income	\$ 44,748	\$ 46,415	\$ 41,749	\$ 39,970	\$ 172,882
Per common share (1)					
Earnings (basic)	\$ 0.61	\$ 0.63	\$ 0.57	\$ 0.55	\$ 2.36
Earnings (diluted)	\$ 0.61	\$ 0.63	\$ 0.57	\$ 0.55	\$ 2.36

(1) Due to averaging of shares, quarterly EPS may not add up to the totals reported for the full year.

28. Revenue from Contracts with Customers

Revenue in the scope of Topic 606, *Revenue from Contracts with Customers* is measured based on the consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. The vast majority of the Company's revenue is specifically outside the scope of Topic 606. For in-scope revenue, the following is a description of principal activities, separated by the timing of revenue recognition from which the Company generates its revenue from contracts with customers.

- a. Revenue earned at a point in time - Examples of revenue earned at a point in time are ATM transaction fees, wire transfer fees, overdraft fees, interchange fees and foreign exchange transaction fees. Revenue is primarily based on the number and type of transactions and is generally derived from transactional information accumulated by our systems and is recognized immediately as the transactions occur or upon providing the service to complete the customer's transaction. The Company is the principal in each of these contracts, with the exception of interchange fees, in which case we are acting as the agent and record revenue net of expenses paid to the principal.
- b. Revenue earned over time - The Company earns revenue from contracts with customers in a variety of ways where the revenue is earned over a period of time - generally monthly. Examples of this type of revenue are deposit account maintenance fees, investment advisory fees, merchant revenue and safe deposit box fees. Revenue is generally derived from transactional information accumulated by our systems or those of third-parties and is recognized as the related transactions occur or services are rendered to the customer.

The Company recognizes revenue from contracts with customers when it satisfies its performance obligations. The Company's performance obligations are typically satisfied as services are rendered and our contracts generally do not include multiple performance obligations. As a result, there are no contract balances as payments and services are rendered simultaneously. Payment is generally collected at the time services are rendered, monthly or quarterly. Unsatisfied performance obligations at the report date are not material to our consolidated financial statements.

In certain cases, other parties are involved with providing products and services to our customers. If the Company is principal in the transaction (providing goods or services itself), revenues are reported based on the gross consideration received from the customer and any related expenses are reported gross in noninterest expense. If the Company is an agent in the transaction (arranging for another party to provide goods or services), the Company reports its net fee or commission retained as revenue.

Rebates, waivers and reversals are recorded as a reduction of the transaction price either when the revenue is recognized by the Company or at the time the rebate, waiver or reversal is earned by the customer.

Practical expedients

The Company applies the practical expedient in paragraph 606-10-32-18 and does not adjust the consideration from customers for the effects of a significant financing component if at contract inception the period between when the entity transfers the goods or services and when the customer pays for that good or service will be one year or less.

The Company pays sales commissions to its employees in accordance with certain incentive plans and in connection with obtaining certain contracts with customers. The Company applies the practical expedient in paragraph 340-40-25-4 and expenses such sales commissions when incurred if the amortization period of the asset the Company otherwise would have recognized is one year or less. Sales commissions are included in compensation and employee benefits expense.

For the Company's contracts that have an original expected duration of one year or less, the Company uses the practical expedient in paragraph 606-10-50-14 and has not disclosed the amount of the transaction price allocated to unsatisfied performance obligations as of the end of each reporting period or when the Company expects to recognize this revenue.

The following table shows the disaggregation of revenue from contracts with customers for the period indicated:

	Years Ended December 31,	
	2019	2018
	<i>(in thousands)</i>	
Noninterest income:		
Revenue from contracts with customers:		
Deposit account and treasury management fees	\$ 35,695	\$ 36,072
Card revenue	15,198	19,719
Financial services and trust revenue	12,799	12,135
Total revenue from contracts with customers	63,692	67,926
Other sources of noninterest income	33,489	20,330
Total noninterest income	\$ 97,181	\$ 88,256

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

An evaluation was carried out under the supervision and with the participation of the Company's management, including the CEO and CFO, of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934). Based on that evaluation, the CEO and CFO have concluded that as of the end of the period covered by this report, our disclosure controls and procedures are effective in ensuring that the information required to be disclosed by us in the reports we file or submit under the Securities Exchange Act of 1934 is (i) accumulated and communicated to our management (including the CEO and CFO) to allow timely decisions regarding required disclosure, and (ii) recorded, processed, summarized and reported within the time periods specified in the Security Exchange Commission's rules and forms.

Internal Control Over Financial Reporting

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. The internal control system has been designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of the Company's published financial statements. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect the Company's transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of the Company's financial statements; providing reasonable assurance that receipts and expenditures are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of company assets that could have a material effect on the Company's financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of the Company's financial statements would be prevented or detected.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. In making this assessment, it used the criteria set forth by the COSO in Internal Control-Integrated Framework (2013). Based on such evaluation, management has concluded that the Company's internal control over financial reporting is effective as of December 31, 2019. There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) during our most recently completed fiscal quarter that materially affected or are reasonably likely to materially affect internal control over financial reporting.

Our independent registered public accounting firm has issued an attestation report on our internal control over financial reporting, which appears in this annual report on Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Columbia Banking System, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Columbia Banking System, Inc. and its subsidiaries (the “Company”) as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Because management's assessment and our audit were conducted to meet the reporting requirements of Section 112 of the Federal Deposit Insurance Corporation Improvement Act (FDICIA), management's assessment and our audit of the Company's internal control over financial reporting included controls over the preparation of the schedules equivalent to the basic financial statements in accordance with the instructions for the Federal Financial Institutions Examination Council Instructions for Consolidated Reports of Condition and Income for Schedules RC, RI, and RI-A. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have not examined and, accordingly, we do not express an opinion or any other form of assurance on management's statement referring to compliance with laws and regulations.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2019, of the Company and our report dated February 27, 2020, expressed an unqualified opinion on those 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 included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Touche LLP
Seattle, Washington
February 27, 2020

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding “Directors, Executive Officers and Corporate Governance” will be set forth in the Company’s 2020 Annual Proxy Statement (the “Proxy Statement”), which will be filed with the SEC within 120 days of the end of our 2019 fiscal year and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding “Executive Compensation” will be set forth in the Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” will be set forth in the Proxy Statement and is incorporated herein by reference. Information relating to securities authorized for issuance under the Company’s equity compensation plans is included in Part II of this Annual Report on Form 10-K under “Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.”

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

Information regarding “Certain Relationships and Related Transactions, and Director Independence” will be set forth in the Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information regarding “Principal Accounting Fees and Services” will be set forth in the Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements:

The Consolidated Financial Statements and related documents set forth in “Item 8. Financial Statements and Supplementary Data” of this report are filed as part of this report.

(2) Financial Statements Schedules:

All other schedules to the Consolidated Financial Statements required by Regulation S-X are omitted because they are not applicable, not material or because the information is included in the Consolidated Financial Statements and related notes in “Item 8. Financial Statements and Supplementary Data” of this report.

(3) Exhibits:

The response to this portion of Item 15 is submitted as a separate section of this report appearing immediately following the signature page and entitled “Index to Exhibits.”

ITEM 16. FORM 10-K SUMMARY

None.

INDEX TO EXHIBITS

Exhibit No.	Exhibit
2.1 *	Agreement and Plan of Merger, by and among Columbia Banking System, Inc., Pacific Continental Corporation and Coast Merger Sub, Inc., dated January 9 2017 (1)
3.1	Amended and Restated Articles of Incorporation (2)
3.2	Articles of Amendment of the Amended and Restated Articles of Incorporation (3)
3.3	Articles of Amendment of the Amended and Restated Articles of Incorporation (4)
3.4	Articles of Amendment of the Amended and Restated Articles of Incorporation (5)
3.5	Amended and Restated Bylaws (6)
4.1	Specimen of common stock certificate (7)
4.2	Pursuant to Item 601(b) (4) (iii) (A) of Regulation S-K, copies of instruments defining the rights of holders of long-term debt and preferred securities are not filed. The Company agrees to furnish a copy thereof to the Securities and Exchange Commission upon request.
4.3+	Description of Capital Stock
10.1**	Amended and Restated Stock Option and Equity Compensation Plan (8)
10.2**	Form of Stock Option Agreement (9)
10.3**	Form of Restricted Stock Agreement (9)
10.4**	Form of Stock Appreciation Right Agreement (9)
10.5**	Form of Restricted Stock Unit Agreement (9)
10.6**	Form of Long-Term Restricted Stock Agreement (10)
10.7**	Amended and Restated Employee Stock Purchase Plan (11)
10.8	Office Lease, dated as of December 15, 1999, between the Company and Haub Brothers Enterprises Trust (12)
10.9**	Employment Agreement between the Bank, the Company and Hadley S. Robbins effective June 28, 2017 (13)
10.10**	Employment Agreement between the Bank, the Company and Melanie J. Dressel effective August 1, 2004 (14)
10.11**	Amendment to Employment Agreement between the Bank, the Company and Melanie J. Dressel effective February 1, 2009 (15)
10.12**	Amendment to Employment Agreement effective December 31, 2008 among the Bank, the Company and Melanie J. Dressel (16)
10.13**	Amendment to Employment Agreement effective February 27, 2015 among the Bank, the Company and Melanie J. Dressel (17)
10.14**	Change in Control Agreement between the Bank and Kent L. Roberts dated December 4, 2011 (18)
10.15**	Change in Control Agreement between the Bank and Mark W. Nelson dated as of October 23, 2012 (19)
10.16**	Change in Control Agreement between the Bank and Clint E. Stein dated as of October 24, 2012 (19)

INDEX TO EXHIBITS, CONTINUED

Exhibit No.	Exhibit
10.17**	Form of Long-Term Care Agreement between the Bank, the Company, and each of the following directors: Mr. Folsom, Mr. Hulbert, Mr. Matson, Mr. Rodman, Mr. Weyerhaeuser and Mr. Will (20)
10.18**	Second Amended and Restated Executive Supplemental Compensation Agreements dated as of May 27, 2009 among the Company, Columbia State Bank and Melanie J. Dressel (21)
10.19**	Second Amended and Restated Executive Supplemental Compensation Agreements dated as of May 27, 2009 among the Company, Columbia State Bank and Mark W. Nelson (21)
10.20**	First Amendment to the Second Amended and Restated Executive Supplemental Compensation Agreement, by and between the Bank and Melanie J. Dressel, effective February 27, 2015 (17)
10.21**	Amended and Restated 401 Plus Plan (Deferred Compensation Plan) dated December 14, 2011 for directors and key employees (18)
10.22**	Form of Supplemental Compensation Agreement between the Bank and Msrs. Andrew L. McDonald and Clint E. Stein, respectively (9)
10.23**	Form of Indemnification Agreement between the Company and its directors (16)
10.24**	First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Clint E. Stein, effective February 27, 2015 (17)
10.25**	First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Andrew L. McDonald, effective February 27, 2015 (17)
10.26**	Change in Control Agreement between the Bank and Hadley S. Robbins dated February 4, 2014 (effective March 1, 2014) (22)
10.27**	West Coast Bancorp 2002 Stock Incentive Plan (23)
10.28**	West Coast Bancorp 2012 Omnibus Incentive Plan (23)
10.29**	2014 Stock Option and Equity Compensation Plan (24)
10.30**	2014 Form of Restricted Stock Agreement (24)
10.31**	2014 Form of Stock Option Agreement (24)
10.32**	2014 Form of Stock Appreciation Rights Agreement (24)
10.33**	2014 Form of Restricted Stock Unit Agreement (24)
10.34**	2014 Form of Cash Award Agreement (24)
10.35**	First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and David C. Lawson, effective February 27, 2015 (17)
10.36**	Change in Control Agreement between the Bank and Andrew L. McDonald dated June 1, 2014 (25)
10.37**	Employment Agreement among the Bank, the Company and Hadley S. Robbins dated September 25, 2012 (26)
10.39**	First Amendment to the Restated and Amended West Coast Bank Supplemental Executive Retirement Plan Agreement, by and among the Company (as successor-in-interest to the West Coast Bancorp), Bank (as successor-in-interest to West Coast Bank) and Hadley S. Robbins, effective February 27, 2015 (17)

INDEX TO EXHIBITS, CONTINUED

Exhibit No.	Exhibit
10.40**	Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Hadley S. Robbins, effective February 27, 2015 (17)
10.41**	Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Kumi Baruffi, effective February 27, 2015 (17)
10.42**	Columbia State Bank Endorsement Method Split Dollar Agreement (Base Salary Benefit), dated October 30, 2015, by and between Columbia State Bank and Melanie J. Dressel (27)
10.43**	Columbia State Bank Endorsement Method Split Dollar Agreement (SERP Benefit), dated October 30, 2015 by and between Columbia State Bank and Melanie J. Dressel (27)
10.44**	Change in Control Agreement between the Bank and Kumi Baruffi dated September 1, 2014 (28)
10.45**	Amended and Restated Columbia Banking System, Inc. 2005 401 Plus Plan (Deferred Compensation Plan), dated October 26, 2016 for directors and key employees (29)
10.46**	Columbia Banking System, Inc. 2016 401 Plus Plan (Deferred Compensation Plan), dated October 26, 2016 for directors and key employees (29)
10.47**	First Amendment to the Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Kumi Baruffi, effective November 15, 2017 (31)
10.48**	First Amendment to the First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and David Lawson, effective November 15, 2017 (31)
10.49**	First Amendment to the First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Andrew L. McDonald, effective November 15, 2017 (31)
10.50**	First Amendment to the Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Hadley S. Robbins, effective November 15, 2017 (31)
10.51**	First Amendment to the First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Clinton E. Stein, effective November 15, 2017 (31)
10.52**	Employment Offer (Greg Sigrist), dated April 20, 2018 (32)
10.53**	2018 Equity Incentive Plan (33)
10.54**	Employment Offer (Lisa Dow), dated January 3, 2018 (34)
10.55**	Change in Control Agreement between the Bank and Greg Sigrist dated as of June 4, 2018 (34)
10.56**	Change in Control Agreement between the Bank and Lisa Dow dated as of January 24, 2018 (34)
10.57**	Columbia State Bank Endorsement Method Split Dollar Agreement (SERP Benefit), dated July 25, 2018 by and between Columbia State Bank and Gregory A. Sigrist (35)
10.58**	Columbia State Bank Endorsement Method Split Dollar Agreement (Base Salary Benefit), dated July 25, 2018 by and between Columbia State Bank and Gregory A. Sigrist (35)
10.59**	Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Gregory A. Sigrist, effective July 25th, 2018 (35)

INDEX TO EXHIBITS, CONTINUED

Exhibit No.	Exhibit
10.60**	First Amendment to Amended and Restated Employee Stock Purchase Plan (35)
10.61**	Change in Control Agreement between the Bank and David C. Lawson, dated December 11, 2018 (36)
10.62**	Amended and Restated Executive Supplemental Income Agreement, by and between the Company and Lisa Dow, dated December 26, 2018 (36)
10.63**	Change in Control Agreement between the Bank and Clint E. Stein dated as of October 24, 2017 (37)
10.64**	Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Lisa Dow, effective March 11, 2018 (37)
10.65**	Columbia State Bank Endorsement Method Split Dollar Agreement (SERP Benefit), by and between the Bank and Lisa Dow, effective February 25, 2019 (37)
10.66**	First Amendment to the Columbia State Bank Endorsement Split Dollar Agreement (SERP Benefit), by and between the Bank and Lisa Dow, effective February 25, 2019 (37)
10.67**	Change in Control Agreement between the Bank and Andrew L. McDonald dated as of May 23, 2019 (38)
10.68**	Second Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, by and between the Bank and David C. Lawson, effective May 31, 2019 (38)
10.69**	Second Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, by and between the Bank and Kumi Baruffi, effective May 31, 2019 (38)
10.70**	Third Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, by and between the Bank and Clinton E. Stein, effective May 31, 2019 (38)
10.71**	Employment Agreement among the Bank, the Company and Clint E. Stein dated September 30, 2019 (39)
10.72**+	Change in Control Agreement between the Bank and Kumi Yamamoto Baruffi dated as of December 2, 2019
14	Code of Ethics (30)
21+	Subsidiaries of the Company
23+	Consent of Deloitte & Touche LLP
24+	Power of Attorney
31.1+	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2+	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32+	Certification Filed Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101+	The following financial information from Columbia Banking System, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2019 is formatted in XBRL: (i) Audited Consolidated Balance Sheets, (ii) Audited Consolidated Statements of Income, (iii) Audited Consolidated Statements of Comprehensive Income, (iv) Audited Consolidated Statements of Changes in Shareholders' Equity, (v) Audited Consolidated Statements of Cash Flows, and (vi) Notes to Audited Consolidated Financial Statements.
104+	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the Inline XBRL document).

- (1) Incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed January 10, 2017
- (2) Incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005
- (3) Incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed November 21, 2008
- (4) Incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed April 2, 2013
- (5) Incorporated by reference to Exhibit 4.4 of the Company's S-3 Registration Statement (File No. 333-206125) filed August 6, 2015
- (6) Incorporated by reference to Exhibit 3.2 of the Company's Current Report on Form 8-K filed on February 2, 2010
- (7) Incorporated by reference to Exhibit 4.3 of the Company's S-3 Registration Statement (File No. 333-156350) filed December 19, 2008
- (8) Incorporated by reference to Exhibit 99.1 of the Company's S-8 Registration Statement (File No. 333-160370) filed July 1, 2009
- (9) Incorporated by reference to Exhibits 10.2-10.5 and 10.16 of the Company's Annual Report on Form 10-K for the year ended December 31, 2007
- (10) Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed January 5, 2010
- (11) Incorporated by reference to Exhibit 10.7 of the Company's Annual Report on Form 10-K for the year ended December 31, 2010
- (12) Incorporated by reference to Exhibit 10.5 of the Company's Annual Report on Form 10-K for the year ended December 31, 2000
- (13) Incorporated by reference to Exhibits 10.1 of the Company's 8-K filed June 29, 2017
- (14) Incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2004
- (15) Incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed February 19, 2009
- (16) Incorporated by reference to Exhibits 10.2 and 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009
- (17) Incorporated by reference to Exhibits 10.1-10.8 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015
- (18) Incorporated by reference to Exhibits 10.14 and 10.15 of the Company's Annual Report on Form 10-K for the year ended December 31, 2011
- (19) Incorporated by reference to Exhibits 10.1 and 10.2 of the Company's Current Report on Form 8-K filed October 29, 2012
- (20) Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001
- (21) Incorporated by reference to Exhibits 10.1 and 10.3 of the Company's Current Report on Form 8-K filed on June 2, 2009
- (22) Incorporated by reference to Exhibit 10.23 of the Company's Annual Report on Form 10-K for the year ended December 31, 2013
- (23) Incorporated by reference to Exhibits 99.1 and 99.2 of the Company's S-8 Registration Statement (File No. 333-187690) filed April 2, 2013
- (24) Incorporated by reference to Exhibits 99.1-99.6 of the Company's S-8 Registration Statement (File No. 333-195456) filed April 23, 2014
- (25) Incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014
- (26) Incorporated by reference to Exhibit 10.33 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014
- (27) Incorporated by reference to Exhibits 10.1 and 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015
- (28) Incorporated by reference to Exhibit 10.42 of the Company's Annual Report on Form 10-K for the year ended December 31, 2015
- (29) Incorporated by reference to Exhibits 10.1 and 10.2 of the Company's Current Report on Form 8-K filed October 28, 2016
- (30) Incorporated by reference to Exhibit 14 of the Company's Annual Report on Form 10-K for the year ended December 31, 2003
- (31) Incorporated by reference to Exhibits 10.47-10.51 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017
- (32) Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 4, 2018
- (33) Incorporated by reference to Exhibit 99.1 of the Company's S-8 Registration Statement (File No. 333-225955) filed June 28, 2018
- (34) Incorporated by reference to Exhibits 10.1, 10.3, and 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018
- (35) Incorporated by reference to Exhibits 10.1-10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018
- (36) Incorporated by reference to Exhibits 10.61 and 10.62 of the Company's Annual Report on Form 10-K for the year ended December 31, 2018
- (37) Incorporated by reference to Exhibits 10.1-10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019
- (38) Incorporated by reference to Exhibits 10.1-10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019
- (39) Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on October 3, 2019

* The schedules to this agreement have been omitted in accordance with Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule or exhibit will be furnished supplementally to the SEC upon request; provided, however, that the registrant may request confidential treatment of omitted items.

** Management contract or compensatory plan or arrangement

+ Filed herewith

DESCRIPTION OF CAPITAL STOCK

Unless otherwise indicated or unless the context requires otherwise, all references in this document to “Columbia,” “our” or similar references mean Columbia Banking System, Inc.

The following summary description of our common stock is based on the provisions of our Amended and Restated Articles of Incorporation, as amended (the “Articles of Incorporation”) and Amended and Restated Bylaws (the “Bylaws”). This description is not complete and is subject to, and is qualified in its entirety by reference to, our Articles of Incorporation, Bylaws (each of which are filed as exhibits to this and/or future annual reports) and the Washington Business Corporation Act.

Common Shares

Columbia’s capital stock that is registered consists of common shares, no par value per share.

General

The holders of Columbia common shares have one vote per share on all matters submitted to a vote of Columbia’s shareholders. There are no cumulative voting rights for the election of directors. Holders of common shares are entitled to receive ratably such dividends as may be declared by the board of directors out of legally available funds, subject to preferences that may be applicable to any outstanding series of preferred stock. In the event of a liquidation, dissolution or winding up of Columbia, the holders of common shares are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any outstanding preferred shares. Holders of Columbia common shares have no preemptive, subscription, redemption, sinking fund or conversion rights.

Dividends

The holders of Columbia common shares are entitled to receive dividends declared by Columbia’s board of directors out of funds legally available therefor. Holders of preferred shares and debt securities, however, have a priority right to distributions and payment over Columbia common shares. Columbia’s ability to pay dividends depends on the amount of dividends paid by Columbia’s subsidiaries. The payment of dividends is subject to government regulation, in that regulatory authorities may prohibit banks and bank holding companies from paying dividends in a manner that would constitute an unsafe or unsound banking practice. In addition, a bank may not pay cash dividends if doing so would reduce the amount of its capital below that necessary to meet minimum regulatory capital requirements. State laws also limit a bank’s ability to pay dividends. Accordingly, the dividend restrictions imposed on Columbia’s subsidiaries by statute or regulation effectively may limit the amount of dividends Columbia can pay.

Effects of Certain Provisions in Our Articles and Bylaws on Change in Control

Some provisions of our Articles of Incorporation and Bylaws may be deemed to have an effect of delaying, deferring or preventing a change in control of Columbia and that would operate only with respect to an extraordinary corporate transaction involving Columbia (or any of its subsidiaries), such as a merger, reorganization, tender offer, sale or transfer of substantially all of its assets or liquidation. These provisions include:

Preferred Stock Authorization. Our board of directors, without shareholder approval, has the authority under our Articles of Incorporation to issue 2,000,000 shares of preferred stock with rights superior to the rights of the holders of common stock. As a result, preferred stock, while not intended as a defensive measure against changes in control, could be issued quickly and easily, could adversely affect the rights of holders of common stock and could be issued with terms calculated to delay or prevent a change in control of Columbia or make removal of management more difficult.

Articles of Incorporation Limitation on Business Combinations. Our Articles of Incorporation include certain provisions that could make more difficult the acquisition of Columbia by means of a tender offer, a proxy contest, merger or otherwise. These provisions include: (a) certain non-monetary factors that the Columbia board of directors may consider when evaluating a takeover offer, as described below, and (b) a requirement that any “Business Combination” (as defined in the Articles of Incorporation) be approved by the affirmative vote of no less than 66 2/3% of the total shares attributable to persons other than a “Control Person” (as defined in the Articles of Incorporation) (such vote, a “Super-Majority”), unless certain conditions are met.

Columbia’s Articles of Incorporation allow the Columbia board of directors to consider non-monetary factors in evaluating certain takeover bids. Specifically, the Articles of Incorporation allow the board of directors, in determining what is in the best interests of Columbia and its shareholders, to consider all relevant factors, including, without limitation, the social and economic effects on its employees, customers, suppliers and other constituents of Columbia and its subsidiaries and on the communities in which Columbia and its subsidiaries operate or are located.

The requirement for Super-Majority approval of certain business transactions does not apply if the Columbia board of directors has approved the transaction or if certain other conditions are satisfied relating to non-discrimination among shareholders, receipt of fair value and the mailing of a proxy statement responsive to the requirements of the Securities Exchange Act of 1934, as amended, to Columbia’s public shareholders.

Amendment of Articles of Incorporation and Bylaws. The provisions of Article 9 of Columbia’s Articles of Incorporation, relating to Business Combinations as described above, may not be amended or repealed without the affirmative vote of holders of not less than 66 2/3% of Columbia’s outstanding voting stock. The Columbia board of directors may make certain amendments to the Articles of Incorporation without shareholder approval. The Columbia board of directors may, by a majority vote, amend or repeal Columbia’s Bylaws.

Proposals and Nominations. The Bylaws provide that no nominations for director of Columbia by any person other than the Columbia board of directors or any committee thereof may be presented to any meeting of stockholders unless the person making the nomination is a record stockholder and has timely delivered a written notice to the Secretary of Columbia (the "Secretary") which complies with the information requirements contained in the Bylaws. In general, to be timely notice must be received by the Secretary during the period beginning 150 days and ending 120 days before the anniversary of the last annual meeting. However, if the date of the upcoming annual meeting is more than 30 days before or more than 60 days after the anniversary of the last annual meeting, notice must be received by the Secretary during the period beginning 150 days before the upcoming annual meeting and ending on the later of 120 days before the upcoming annual meeting or, if the first public announcement of the date of the upcoming annual meeting is less than 100 days prior to the date of such annual meeting, 10 days after the first public announcement of such meeting date.

**COLUMBIA STATE BANK
CHANGE IN CONTROL AGREEMENT**

THIS CHANGE IN CONTROL AGREEMENT (“Agreement”) is made and entered into effective this 2nd day of December 2019, by and between COLUMBIA STATE BANK, a Washington banking corporation (the “Bank”) and wholly owned subsidiary of Columbia Banking System, Inc. (“CBSI” and, together with the Bank, the “Company”) and Kumi Yamamoto Baruffi (“Employee”).

Recitals

A. The Bank currently receives the exclusive services of Employee as its employee, and Employee desires that this employment relationship continue.

B. The Bank desires to provide a severance benefit to Employee (i) to encourage Employee to continue employment with the Bank; (ii) to continue obtaining Employee’s services in the event of a potential Change in Control (as defined below) of CBSI that may be detrimental to Employee; and (iii) to allow CBSI to maximize the benefits obtainable by its shareholders from any Change in Control.

In consideration of the mutual promises, covenants, agreements and undertakings contained in this Agreement, the parties hereby contract and agree as follows:

Agreement

1. **Term.** The term of this Agreement (“Term”) shall commence as of the date first above written and shall end on the earlier of the termination of Employee’s employment in a manner that does not constitute a Termination Event or on the fifth anniversary of the date first above written, unless extended in writing by the parties.

2. **Severance Benefit.** In the case of a Termination Event, as defined in Section 4:

(a) the Bank shall pay to Employee all salary and benefits earned through the effective date of Employee’s termination and a severance benefit (“Severance Benefit”) in an amount equal to two times the amount of Employee’s then-current annual base salary;

(b) vesting of any stock options and lapse of all restrictions with respect to any restricted stock awards shall occur; and

(c) Bank shall pay or promptly reimburse Employee for the full amount of COBRA premiums incurred by Employee for coverage under the Bank’s group health plans for Employee and his or her eligible dependents (the “COBRA Amount”) during the period commencing on the effective date of termination and ending on the 18-month anniversary thereof, provided such reimbursement shall immediately cease in the event Employee becomes eligible to participate in the health insurance plan of a subsequent employer. If Employee’s termination of employment

occurs prior to the effective date of a Change in Control, then, within 60 days following the Termination Event, the Bank shall provide Employee the COBRA Amount for each month in which Employee and/or Employee's eligible dependents elected to continue healthcare coverage prior to the date of the Change in Control.

Payment of the Severance Benefit shall begin, and vesting and lapse of restrictions described in paragraph 2(b) above shall occur, (i) in the case of a Termination Event described in paragraph 4.1, upon the effective date of termination, and (ii) in the case of a Termination Event described in paragraph 4.2, upon the effective date of the Change in Control which is then pending (or announced within sixty days of the date when the Employee's employment terminated). The Severance Benefit shall be paid over a two year period in equal monthly payments without interest on the last day of each month, beginning with the month in which the Termination Event described in paragraphs 4.1 or 4.2, as the case may be, occurs.

3. **Other Compensation and Terms of Employment.** Except with respect to the Severance Benefit, this Agreement shall have no effect on the determination of any compensation payable by the Bank to the Employee, or upon any of the other terms of Employee's employment with the Bank.

4. **Termination Events.** A Termination Event shall be deemed to occur upon, and only upon, one or more of the following:

4.1 Termination of Employee's employment by the Bank without Cause (as defined below) or by Employee for Good Reason (as defined below) within 365 days following the effective date of a Change in Control; or

4.2 Termination of Employee's employment by the Bank without Cause prior to a Change in Control if such termination occurs at any time from and after sixty days prior to the public announcement by the CBSI or any other party of a transaction which will result in a Change in Control; provided that the effective date of the Change in Control occurs within eighteen (18) months of Employee's termination.

5. **Restrictive Covenant.**

5.1 **Non-competition.** Employee agrees that, during Employee's employment with the Bank or any of its affiliates, and for a period of two years after commencement of the payment to Employee of the Severance Benefit, Employee will not directly or indirectly, be employed by, perform services for, or act directly or indirectly as an employee, agent, stockholder (other than passive holdings of less than two percent (2%) of the outstanding shares of a publicly-traded company), member, officer, director, co-partner, advisor, or in any other individual or representative capacity, on behalf of a Conflicting Organization in the Bank's Market Area (each capitalized term as defined below); provided that Employee's covenant not to compete as set forth herein shall terminate in the event Employee waives the right to payment of any balance of the Severance Benefit then payable. The provisions restricting competition by Employee may be waived by action of the Board. Employee acknowledges that the Company currently has operations in various counties within the states of Washington, Oregon, and Idaho, that the Company plans to continue to expand its operations and presence within these states

and other states, and that as a member of the Company's senior management, Employee's services are integral to these operations and expansion plans. Employee recognizes and agrees that any breach of this covenant by Employee will cause immediate and irreparable injury to the Company, and Employee hereby authorizes recourse by the Bank or CBSI to injunction and/or specific performance, as well as to other legal or equitable remedies to which either may be entitled.

5.2 *Non-interference.* During the non-competition period described in paragraph 5.1, Employee shall not (a) solicit or attempt to solicit any other employee of the Company to leave the employ of the Company, or in any way interfere with the relationship between the Company and any other employee of the Company, (b) solicit or attempt to solicit any customer of the Company to cease doing business with the Company or to otherwise divert such customer's business from the Company, or (c) solicit or attempt to solicit any supplier, licensee, or other business relations of the Company to cease doing business with the Company. Solicitation prohibited under this paragraph 5.2 includes solicitation by any means, including, without limitation, meetings, phone calls, letters or other mailings, and electronic and internet communications of any kind, or any other type of conduct intended or reasonably calculated to induce or urge a client, customer, or employee to discontinue, in whole or in part, its employment or business relationship with the Bank.

5.3 *Confidentiality.* Unless disclosure is otherwise required by legal or regulatory requirements, Employee shall keep all terms of this Agreement, including the existence of this Agreement and the amount of the Severance Benefit, strictly confidential. Employee shall keep this Agreement in a private location and shall use his or her best efforts to prevent this Agreement from being seen by others, including co-workers.

6. *Section 280G of the Code.*

6.1 *Payments.* In the event that any payments or benefits (whether under this Agreement or otherwise) payable to Employee (a) constitute "parachute payments" within the meaning of Section 280G of the Code, and (b) but for this Section 6, would be subject to the excise tax imposed by Section 4999 of the Code, then such payments and benefits will be either (x) delivered in full, or (y) delivered as to such lesser extent that would result in no portion of such payments and benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income and employment taxes and the excise tax imposed by Section 4999 of the Code (and any equivalent state or local excise taxes), results in the receipt by Employee, on an after-tax basis, of the greatest amount of benefits, notwithstanding that all or some portion of such payments and benefits may be taxable under Section 4999 of the Code. Any reduction in payments and/or benefits required by this provision will occur in the following order: (i) reduction of cash payments; (ii) reduction of vesting acceleration of equity awards; and (iii) reduction of other benefits paid or provided to Employee. In the event that acceleration of vesting of equity awards is to be reduced, such acceleration of vesting will be cancelled in the reverse order of the date of grant for equity awards. If two or more equity awards are granted on the same date, each award will be reduced on a pro-rata basis.

6.2 *Accounting Firm.* All determinations required to be made under this

Section 6, including the reduction payments hereunder and the assumptions to be utilized in arriving at such determinations, will be made by a public accounting firm or other advisor that is retained by the Company in its reasonable discretion (the “Accounting Firm”) and whose determination will be conclusive and binding upon Employee and the Company for all purposes. For purposes of making the calculations required by this Section 6, the Accounting Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Employee agree to furnish to the Accounting Firm such information and documents as the Accounting Firm may reasonably request in order to make a determination under this provision. The Company will bear all costs the Accounting Firm may reasonably incur in connection with any calculations contemplated by this provision. Any determinations by the Accounting Firm with respect to whether any payments or benefits are subject to reduction under this Section 6 will be binding upon the Company and Employee.

7. Definitions.

7.1 Bank’s Market Area. “Bank’s Market Area” shall include the following locations, either during Employee’s employment or at the time of Employee’s termination from employment: (a) any counties in the States of Washington, Oregon and Idaho in which the Bank (or any Bank subsidiary, affiliate, related business entity, successor, or assign) maintains a branch or other office, and all counties bordering on any such county, or (b) any counties in other States in which the Bank (or any Bank subsidiary, affiliate, related business entity, successor, or assign) maintains a branch or other office, and all counties bordering on any such county, or (c) any other county in which the Bank or an affiliate or related business entity has bona fide documented plans to establish a branch or office, as demonstrated by minutes of board of director meetings, regulatory correspondence, or other written communications with third parties (including legal or financial advisers) with respect to such geographic expansion, and of which Employee is aware due to her employment with the Bank.

7.2 Cause. “Cause” shall mean only (a) willful misfeasance or gross negligence in the performance of Employee’s duties, (b) conduct demonstrably and significantly harmful to the Bank (which would include willful violation of any final cease and desist order applicable to the Bank), or (c) conviction of a felony.

7.3 Change in Control. “Change in Control” shall mean the occurrence of one or more of the following events:

7.3.1 A person, or more than one person acting as a group (as defined in IRC 409A), acquires ownership of stock in CBSI or the Bank that, together with stock held by such person or group, constitutes more than fifty percent (50%) of the total fair market value or total voting power of the stock of, respectively, CBSI or the Bank;

7.3.2 A person, or more than one person acting as a group, acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or group) ownership of stock in CBSI or the Bank that comprises thirty percent (30%) or more of the total voting power of the stock of, respectively, CBSI or the Bank;

7.3.3 A majority of the members of the board of directors of either CBSI or the Bank is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the such board of directors before the date of the appointment or election; or

7.3.4 A person, or more than one person acting as a group, acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or persons) assets from CBSI or the Bank that have a total gross fair market value equal to or more than forty percent (40%) of the total gross fair market value of all of the assets of, respectively, CBSI or the Bank immediately before such acquisition or acquisitions. No Change in Control shall result if the assets are transferred to certain entities controlled directly or indirectly by the shareholders of the transferring entity.

This definition of “Change in Control” is intended to comply with, and shall be interpreted in a manner consistent with, the requirements of Section 409A of the U.S. Internal Revenue Code of 1986, as amended, as U.S. Treasury regulation issued thereunder.

7.4 *Conflicting Organization.* “Conflicting Organization” shall mean any person, entity, or organization engaged (or about to become engaged) in a business similar to, or that competes with, the business of the Bank in the Bank’s Market Area, including without limitation any bank or financial institution (including without limitation any trust company, finance company, or leasing company) in the Bank’s Market Area.

7.5 *Good Reason.* “Good Reason” shall mean (a) a material diminution in Employee’s base compensation, (b) a material diminution in Employee’s authority, duties or responsibilities, or (c) a relocation or transfer of Employee’s principal place of employment that would increase Employee’s commute on a regular basis by more than forty five (45) miles each way from her current residence to her current office location.

7.6 *Termination of Employment.* “Termination,” when used in reference to termination of employment, shall mean “separation from service,” as defined in Section 409A of the U.S. Internal Revenue Code of 1986, as amended, as U.S. Treasury regulation issued thereunder.

8. *Specified Employee - Delay in Payments.* If Employee is a “specified employee,” then amounts payable to him under this Agreement on account of a “separation from service” that could cause him to be subject to the gross income inclusion, interest and additional tax provisions of U.S. Internal Revenue Code § 409A(a)(1) shall not be paid until after the end of the sixth calendar month beginning after such separation from service (the “Suspension Period”). Within fourteen (14) calendar days after the end of the Suspension Period, the Company shall make a lump sum payment to Employee in cash in an amount equal to the sum of all payments delayed because of the preceding sentence. Thereafter, Employee shall receive any remaining payments under this Agreement as if the immediately preceding provisions of this paragraph 8 were not a part of the Agreement. For purposes of this Agreement, the terms “specified employee” and “separation from service” shall have the meanings given to those terms in U.S. Internal Revenue Code § 409A and the Treasury regulations issued thereunder.”

9. *Miscellaneous.*

9.1 **Amendment.** This Agreement may be modified or amended only upon amendment in writing signed by both parties. Employee and the Company understand, acknowledge, and agree that Employee and the Bank or CBSI have entered into other agreements which contain either change-in-control terms or restrictive covenants, including without limitation the Supplemental Executive Retirement Plan Agreement (and any amendments or restatements thereto). The parties understand, acknowledge, and agree that the terms of this Agreement are not intended by Employee, the Bank, or CBSI, and shall not be interpreted by any party, court or arbitrator, to supersede, modify, amend, change, negate, cancel or render null or void any other change-in-control terms or restrictive covenants between the parties contained in any other agreements, including without limitation, any change-in-control terms or restrictive covenants contained in the Supplemental Executive Retirement Plan Agreement (or any amendments or restatements thereof).

9.2 **Binding Effect.** This Agreement shall bind and inure to the benefit of the heirs, legal representatives, successors, and assign of the parties.

9.3 **Enforceability.** If an arbitrator or a court of competent jurisdiction shall find any provision of this Agreement illegal or unenforceable, the arbitrator or court may reform such provision to the extent necessary to render the otherwise unenforceable provision, and the rest of the Agreement, valid and enforceable, and so as to permit maximum restrictions that are legal and enforceable to be applied to the Employee's ability to compete with the Bank. If an arbitrator or court declines to amend any such provision as provided herein, the invalidity or unenforceability of any such provision shall not affect the validity or enforceability of the remaining provisions, which shall be enforced as if the offending provision had not been included in this Agreement.

9.4 **Governing Law; Venue.** This Agreement is made with reference to and is intended to be construed in accordance with the laws of the State of Washington. Venue for any action arising out of or concerning this Agreement shall lie in Pierce County, Washington. In the event of a dispute under this Agreement, the disputes shall be arbitrated pursuant to the Superior Court Mandatory Arbitration Rules ("MAR") adopted by the Washington State Supreme Court, irrespective of the amount in controversy. This Agreement shall be deemed as stipulation to that effect pursuant to MAR 1.2 and 8.1. The arbitrator, in his or her discretion, may award attorney's fees to the prevailing party or parties.

9.5 **Notices.** Any notice required to be given under this Agreement to either party shall be given by personal service or by depositing a copy thereof in the United States registered or certified mail, postage prepaid, addressed to the following address or such other address as addressee shall designate in writing:

Company:

Columbia Bank
1301 'A' Street, Ste. 800
Tacoma, WA 98402-4200
Attn: Chief Human Resources Officer

Employee:

Kumi Yamamoto Baruffi
At the most recent address on file at the Company

IN WITNESS WHEREOF, the parties have executed this Agreement effective on the date first above written.

BANK: COLUMBIA STATE BANK

By /s/ David Lawson

David Lawson

EVP and Chief Human Resources Officer

EMPLOYEE:

By /s/ Kumi Yamamoto Baruffi

Kumi Yamamoto Baruffi

EVP and General Counsel

SUBSIDIARIES OF THE COMPANY

Name of Subsidiary	State of Incorporation	Ownership
Columbia State Bank	Washington	100%
Columbia Trust Company	Oregon	100%
Totten Inc.	Washington	100%

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-195456, 333-160371 and 333-225955 on Form S-8 and Registration Statement No. 333-226585 on Form S-3 of our reports dated February 27, 2020, relating to the consolidated financial statements of Columbia Banking System, Inc., and the effectiveness of Columbia Banking System, Inc.'s internal control over financial reporting, appearing in this Annual Report on Form 10-K of Columbia Banking System, Inc., for the year ended December 31, 2019.

/s/ Deloitte & Touche LLP

Seattle, Washington

February 27, 2020

POWER OF ATTORNEY

The director of Columbia Banking System, Inc. (the "Company"), whose signature appears below, hereby appoints Clint E. Stein and Craig D. Eerkes, or either of them, as his/her attorney to sign, in his/her name and behalf and in any and all capacities stated below, the Company's Form 10-K Annual Report pursuant to Section 13 of the Securities Exchange Act of 1934, and likewise to sign any and all amendments and other documents relating thereto as shall be necessary, such person hereby granting to each such attorney power to act with or without the other and full power of substitution and revocation, and hereby ratifying all that any such attorney or his substitute may do by virtue hereof.

This Power of Attorney has been signed by the following persons in the capacity indicated, on the 27th day of February, 2020.

Signature	Title
<u>/s/ CRAIG D. EERKES</u> Craig D. Eerkes	Chairman
<u>/s/ CLINT E. STEIN</u> Clint E. Stein	President and Chief Executive Officer
<u>/s/ FORD ELSAESSER</u> Ford Elsaesser	Director
<u>/s/ MARK A. FINKELSTEIN</u> Mark A. Finkelstein	Director
<u>/s/ ERIC S. FORREST</u> Eric S. Forrest	Director
<u>/s/ THOMAS M. HULBERT</u> Thomas M. Hulbert	Director
<u>/s/ MICHELLE M. LANTOW</u> Michelle M. Lantow	Director
<u>/s/ RANDAL L. LUND</u> Randal L. Lund	Director
<u>/s/ S. MAE FUJITA NUMATA</u> S. Mae Fujita Numata	Director
<u>/s/ ELIZABETH W. SEATON</u> Elizabeth W. Seaton	Director
<u>/s/ JANINE T. TERRANO</u> Janine T. Terrano	Director

CERTIFICATION

I, Clint E. Stein, certify that:

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

/s/ CLINT E. STEIN

Clint E. Stein
President and
Chief Executive Officer

Date: February 27, 2020

CERTIFICATION

I, Gregory A. Sigrist, certify that:

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

/s/ GREGORY A. SIGRIST

Gregory A. Sigrist Executive Vice President and
Chief Financial Officer

Date: February 27, 2020

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Columbia Banking System, Inc. (the "Company") on Form 10-K for the period ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Clint E. Stein, President and Chief Executive Officer, and Gregory A. Sigrist, Executive Vice President and Chief Financial Officer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ CLINT E. STEIN

**Clint E. Stein
President and
Chief Executive Officer
Columbia Banking System, Inc.**

/s/ GREGORY A. SIGRIST

**Gregory A. Sigrist
Executive Vice President and
Chief Financial Officer
Columbia Banking System, Inc.**

Dated: February 27, 2020