



Western Alliance Bank Annual Report 2019





Kenneth A. Vecchione
President and Chief Executive Officer

Dear Fellow Shareholders,

As I write, coronavirus (COVID-19) is making an unprecedented impact in the United States and around the world. This requires that all of us at Western Alliance apply our considerable expertise and energy to supporting our clients, caring for our communities and helping our people navigate through this challenging time.

While the current crisis is unlike any other, we arrive here uniquely prepared to address what's ahead. Western Alliance achieved a record-breaking year in 2019, reaching a number of milestones – \$27 billion in assets, industry-leading performance in all key financial metrics, robust capital and liquidity levels, and high-profile industry awards – all due, we believe, to our talented and entrepreneurial people.

Our experiences steering through the financial crisis of 2008 have helped prepare us for today's challenges. In the interim, we have expanded our organization's strengths, including higher capital ratios, ample liquidity, and asset quality that is strong and stable due to lower loan-to-value ratios. At year-end 2019, the bank had \$3.3 billion in total regulatory capital and tangible common equity of more than 10% – among the highest in the banking industry. Importantly, our robust and diverse deposit sources support our capital position and have helped create a sustainable balance sheet.

Finally, in the years since 2008, our bank now lends primarily to companies that are themselves stronger and better positioned for the current crisis, with greater liquidity and capitalization. Another key strength of our bank is our seasoned and invested leadership team, many of whom played key roles at Western Alliance in working through the major impacts of the last recession.

Right now, Western Alliance is incredibly focused on helping businesses manage the economy's significant short-term challenges. During this all-encompassing health and economic crisis, we are working diligently and around the clock, in most cases remotely, to help our clients make the most of critical federal aid for small businesses, including the substantial relief of the Paycheck Protection Program in the CARES Act and the Main Street Lending Program from the Federal Reserve. Both of these programs will provide clients with the liquidity necessary to keep their people employed and meet overhead expenses.

Since the beginning of this crisis, I am pleased that Western Alliance has been able to protect the well-being of our people. The bank's business continuity plans and training have prepared us to work effectively from home, but I especially want to recognize our dedicated people who continue to serve clients at our offices. I am proud of our people who make us so resilient during these demanding times.

The qualities that differentiate Western Alliance, and contributed to our exceptional 2019, remain in place to manage present circumstances and pursue future opportunities. Our stakeholders can count on our prudent, clearheaded decision-making as we move Western Alliance forward. Our capabilities, in fair days as well as in times of uncertainty, start with our people.



The qualities that differentiate Western Alliance, and contributed to our exceptional 2019, remain in place to manage present circumstances and pursue future opportunities.”

People, Performance, Possibilities

People have always been the foundation of our extraordinary culture: People, Performance, Possibilities. Everyone across our organization – from our experienced board of directors to every person in every discipline that supports our front line – is committed to building long-term customer relationships and providing banking solutions that produce results for customers and for the bank. Our values are the precepts that guide everything we do at Western Alliance: integrity, creativity, teamwork, passion and excellence.

These core values power our flexible, differentiated business model that makes the most of our national presence and regional footprint. This proved especially effective in 2019 and will enable us to pivot to where we need to go in 2020 and beyond. In both good times and more trying ones, we have the ability to adapt quickly. Our unique organizational structure offers us various levers to optimize performance, including responsive and focused decision-making at the point of delivery.

While we remain reasonably optimistic about the longer-term economic outlook, we are ready today to manage and optimize the variables at play as the coronavirus response shifts near-term parameters. As we work with clients, we will also ask them to invest, using collateral as an even more important tentpole to secure performance. We believe our hands-on management style and diversified loan portfolio will help us to mitigate the risks in the current landscape, support our clients, and position Western Alliance for the ultimate recovery.

Conservative Credit Culture Shapes Decision-making

Our diversified business model is the centerpiece of our ability to prudently manage credit risk and allocate capital, and is not found at other similarly sized institutions. We underwrite considering stress-case scenarios in all business units. We understand the businesses we finance and understand what it takes to work through difficult situations.

Our full executive leadership team is active in relationship management to continuously assess the state of our borrowers' businesses. We are thoroughly involved in every part of the underwriting and ongoing evaluation process – a culture we believe will continue to serve us well in coming months. Western Alliance's approach to managing credit weakness is based on our philosophy of early identification, escalation and resolution that brings executive attention and heightened bank resources to bear for problem credits.

As I mentioned earlier, we see the Paycheck Protection Program and Main Street Lending Program as vital to our economy and our clients, and we are working closely with them to take advantage of these important relief programs. In addition, we are taking other specific actions, including providing liquidity on undrawn lines of credit and, where appropriate, we have granted increases to credit lines to help clients conduct business. Crucially, we are working with our clients to solve for the next year, not just the next 90 days. While we certainly hope this crisis doesn't extend through the longer time frame, we believe it is pragmatic to be fully prepared – and to help clients prepare – as the best way through to the other side of this crisis.

Caring for Our Communities

Now and always, Western Alliance people care deeply about improving quality of life in our local communities. In 2019 we increased our support, making nearly \$50 million in new community development loans in the bank's assessment areas, contributions of more than \$1.3 million to nonprofits and nearly \$62 million in new community investments. In another important way we give back to our communities, our teams across the country volunteered 10,000+ CRA-eligible hours last year.

The current economic environment calls for us to be even more engaged and creative in bringing resources and expertise to our communities and to our clients.

Last year, we were gratified to be recognized as the #1 Regional Bank on Bank Director Magazine's Bank Performance Scorecard; in the Top 10 of the Forbes "Best Banks in America" list for the fifth consecutive year; and as the #1 best-performing of the 50 largest public U.S. banks by S&P Global Market Intelligence.

I'd like to thank our client-oriented, caring and committed people all across the bank, who are the core of Western Alliance's success. I am also grateful for the leadership and active engagement of our board of directors.

Finally, to our shareholders, thank you for your confidence in Western Alliance.



Kenneth A. Vecchione
President and Chief Executive Officer
April 13, 2020



Our stakeholders can count on our prudent, clearheaded decision-making as we move Western Alliance forward. Our capabilities, in fair days as well as in times of uncertainty, start with our people.”



Robert G. Sarver
Executive Chairman of the Board

A Message From Our Executive Chairman

Amid this turbulent time for our nation and our world, it's worthwhile to look in the rear-view mirror at our bank's transformation since the last recession. Capital accumulation, liquidity management, geographic and product diversification, and stronger credit standards were designed to position us to better weather today's financial environment.

Guiding the overarching business strategy and execution for Western Alliance is the highest priority of our board. As always and even more so during the current circumstances, our board works actively with management to monitor performance against goals and priorities, adhere to appropriate governance, and underscore sound asset quality and risk management practices.

Right now, the board is actively supporting our bank's management in their concerted efforts to manage through the economic shutdown caused by COVID-19, working with clients to provide liquidity so these businesses can make it through to the other side. As we navigate this crisis, our nimble organization – which has always focused on bankers who understand the individual businesses and industries they bank, led by a hands-on executive management team – is ready to meet today's challenges as well as prosper from the future opportunities they will bring.

In these circumstances and always, understanding what it takes to guide our company so that we deliver for all our stakeholders is a central responsibility of our board.



Our nimble organization – which has always focused on bankers who understand the individual businesses and industries they bank, led by a hands-on executive management team – is ready to meet today's challenges as well as prosper from the future opportunities they will bring.”

This year, we are pleased to nominate to our board of directors two highly accomplished individuals: Juan Figuereo, C.P.A., currently a Venture Partner with Ocean Azul Partners, an early stage investment fund, who has extensive CFO experience with a number of public companies including Revlon, NII Holdings and Newell Rubbermaid; and Bryan Segedi, C.P.A., former Deputy Global Vice Chair of Ernst & Young and Executive in Residence at Arizona State University. Both Juan and Bryan will bring extensive financial and business perspectives to our board.

At this time, we wish to sincerely thank Dr. Jim Nave for his 26 years of outstanding service to our company. As a founding board member, Jim has been an invaluable supporter of the bank and contributor to our success. Jim has been a trusted advisor and an important voice for sound business principles as an accomplished veterinary entrepreneur.

On behalf of Western Alliance's board of directors, we are grateful and proud of what our company and stakeholders accomplished together in 2019, and how our organization is responding to the current situation. I would like to thank our customers and recognize our own people and loyal business partners for their contributions, and our shareholders for their support of Western Alliance Bank.

We look forward to continuing to earn your support in 2020 and the years to come.



Robert G. Sarver

Executive Chairman of the Board

April 13, 2020

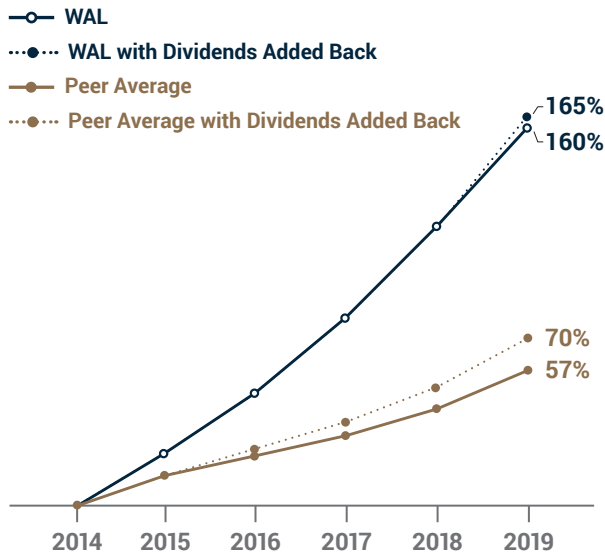


We are grateful and proud of what our company and stakeholders accomplished together in 2019, and how our organization is responding to the current situation.”

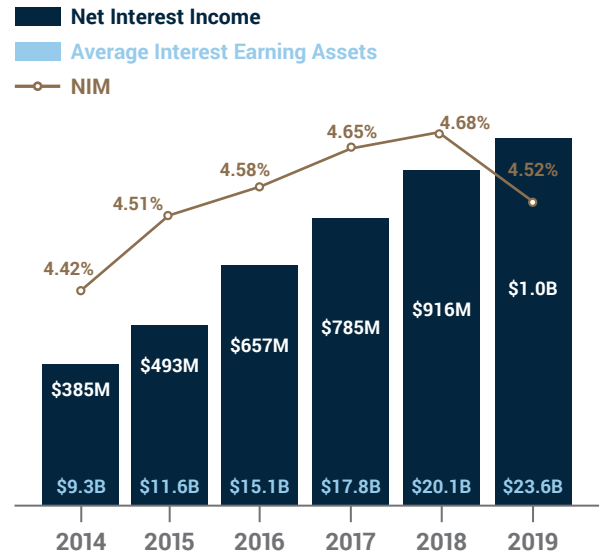
Financial highlights

	2017	2018	2019
Balance Sheet (\$ in millions)			
Total Assets	20,329	23,109	26,822
Total Loans, net of deferred fees	15,094	17,711	21,123
Total Deposits	16,973	19,177	22,796
Total Equity	2,230	2,614	3,017
Profitability			
Net Interest Income (\$000)	784,664	915,879	1,040,412
Net Income (\$000)	325,492	435,788	499,171
ROAA (%)	1.72	2.05	2.00
ROATCE (%)	18.31	20.64	19.60
Net Interest Margin (%)	4.65	4.68	4.52
Operating Efficiency Ratio ¹ (%)	41.5	41.9	42.7
Tangible Common Equity / Tangible Assets (x)	9.6	10.2	10.3
Asset Quality (%)			
Non-Performing Assets ² / Total Assets	0.36	0.20	0.26
Loan Loss Reserves / Gross Loans	0.93	0.86	0.80
Tier 1 Common Capital (CET1) Ratio	10.4	10.7	10.6
Per Share Information (\$)			
Common Dividends Declared per Share ³	–	–	0.50
Earnings Per Share	3.10	4.14	4.84

Growth in TBV per Share⁴

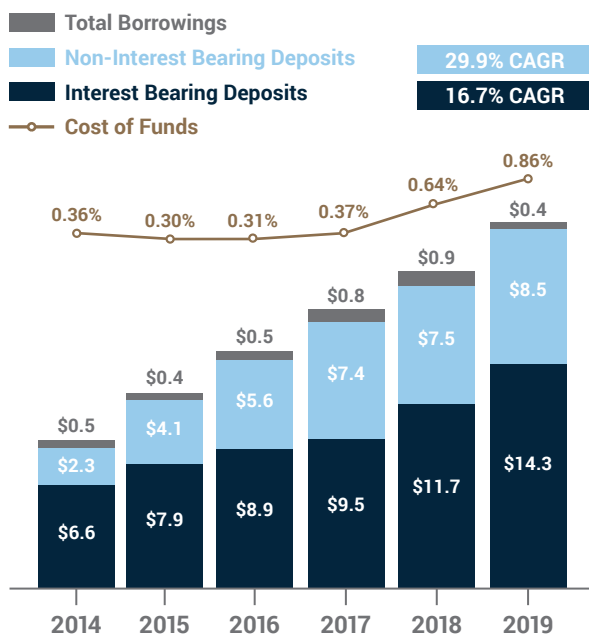


Net Interest Income, NIM and Average Interest on Earning Assets



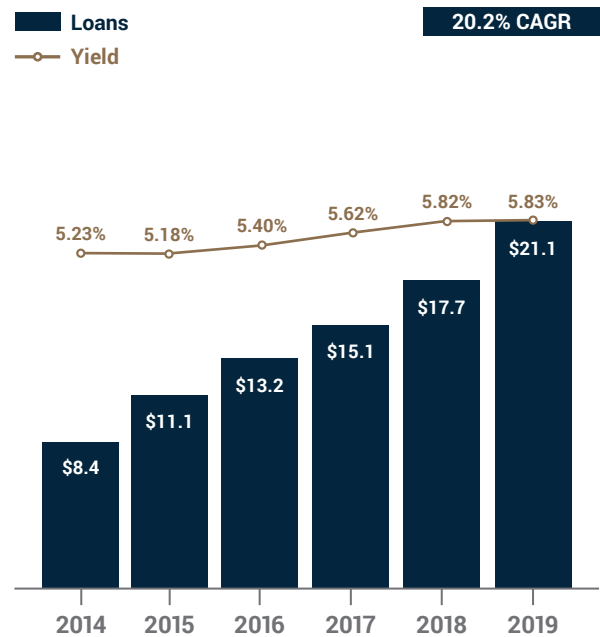
Deposits, Borrowings, and Cost of Funds

Dollars in Billions



Loan and Loan Yields

Dollars in Billions



1. Where non-GAAP financial measures are used, the comparable GAAP financial measure, as well as the reconciliation to the comparable GAAP financial measure, can be found in the Company's Annual Report on Form 10-K for the year ended December 31, 2019 as filed with the Securities and Exchange Commission.

2. Non-performing assets include nonaccrual loans, excluding troubled debt restructured loans, plus other real estate owned.

3. Quarterly cash dividend initiated in 3Q 2019.

4. Peers consist of 55 major exchange traded banks with total assets between \$15B and \$150B as of December 31, 2019, excluding target banks of pending acquisitions; S&P Global Market Intelligence.

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

For the transition period from _____ to _____

Commission file number: 001-32550

WESTERN ALLIANCE BANCORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

88-0365922

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

One E. Washington Street, Suite 1400 Phoenix Arizona
(Address of principal executive offices)

85004
(Zip Code)

(602) 389-3500

(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.0001 Par Value	WAL	New York Stock Exchange
6.25% Subordinated Debentures due 2056	WALA	New York Stock Exchange

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, or a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<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 the registrant's voting stock held by non-affiliates was approximately \$4.28 billion based on the June 30, 2019 closing price of said stock on the New York Stock Exchange (\$44.72 per share).

As of February 24, 2020, Western Alliance Bancorporation had 102,479,213 shares of common stock outstanding.

Portions of the registrant's definitive proxy statement for its 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this report.

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PART I

Forward-Looking Statements

Certain statements contained in this Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (this “Form 10-K”) are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 (the “Reform Act”). Statements that constitute forward-looking statements within the meaning of the Reform Act are generally identified through the inclusion of words such as “aim,” “anticipate,” “believe,” “drive,” “estimate,” “expect,” “expressed confidence,” “forecast,” “future,” “goals,” “guidance,” “intend,” “may,” “opportunity,” “plan,” “position,” “potential,” “project,” “seek,” “should,” “strategy,” “target,” “will,” “would” or similar statements or variations of such words and other similar expressions. All statements other than historical fact are “forward-looking statements” within the meaning of the Reform Act, including statements that are related to or are dependent on estimates or assumptions relating to expectations, beliefs, projections, future plans and strategies, anticipated events or trends and similar expressions that are not historical facts. These forward-looking statements reflect the Company's current views about future events and financial performance and involve certain risks, uncertainties, assumptions, and changes in circumstances that may cause the Company's actual results to differ significantly from historical results and those expressed in any forward-looking statement. Factors that may cause actual results to differ materially from those contemplated by such forward-looking statements include, but are not limited to, those described in “Risk Factors” in Item 1A of this Form 10-K. Forward-looking statements speak only as of the date they are made and the Company undertakes no obligation to publicly update or revise any forward-looking statements included in this Form 10-K or to update the reasons why actual results could differ from those contained in such statements, whether as a result of new information, future events or otherwise, except to the extent required by federal securities laws. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this Form 10-K might not occur, and you should not put undue reliance on any forward-looking statements.

GLOSSARY OF ENTITIES AND TERMS

The acronyms and abbreviations identified below are used in various sections of this Form 10-K, including "Management's Discussion and Analysis of Financial Condition and Results of Operations," in Item 7 and the Consolidated Financial Statements and the Notes to Consolidated Financial Statements in Item 8 of this Form 10-K:

ENTITIES / DIVISIONS:			
ABA	Alliance Bank of Arizona	HOA Services	Homeowner Associations Services
BON	Bank of Nevada	LVSP	Las Vegas Sunset Properties
Bridge	Bridge Bank	TPB	Torrey Pines Bank
Company	Western Alliance Bancorporation and subsidiaries	WA PWI	Western Alliance Public Welfare Investments, LLC
CSI	CS Insurance Company	WAB or Bank	Western Alliance Bank
FIB	First Independent Bank	WABT	Western Alliance Business Trust
HFF	Hotel Franchise Finance	WAL or Parent	Western Alliance Bancorporation
TERMS:			
ACL	Allowance for Credit Losses	FRB	Federal Reserve Bank
AFS	Available-for-Sale	FVO	Fair Value Option
ALCO	Asset and Liability Management Committee	GAAP	U.S. Generally Accepted Accounting Principles
ALLL	Allowance for Loan and Lease Losses	GLBA	Gramm-Leach-Bliley Act
AOCI	Accumulated Other Comprehensive Income	GNMA	Government National Mortgage Association
APIC	Additional paid in capital	GSE	Government-Sponsored Enterprise
ARRC	Alternative Reference Rate Committee	HFI	Held for Investment
ASC	Accounting Standards Codification	HFS	Held for Sale
ASU	Accounting Standards Update	HTM	Held-to-Maturity
Basel Committee	Basel Committee on Banking Supervision	ICS	Insured Cash Sweep Service
Basel III	Banking Supervision's December 2010 final capital framework	IRC	Internal Revenue Code
BHCA	Bank Holding Company Act of 1956	ISDA	International Swaps and Derivatives Association
BOD	Board of Directors	IT	Information Technology
BOLI	Bank Owned Life Insurance	LIBOR	London Interbank Offered Rate
CAMELS	Capital Adequacy, Assets, Management Capability, Earnings, Liquidity, Sensitivity	LIHTC	Low-Income Housing Tax Credit
Capital Rules	The FRB, the OCC, and the FDIC 2013 approved final rules	MBS	Mortgage-Backed Securities
CCO	Chief Credit Officer	MOU	Memorandum of Understanding
CDARS	Certificate Deposit Account Registry Service	NBL	National Business Lines
CDO	Collateralized Debt Obligation	NOL	Net Operating Loss
CECL	Current Expected Credit Loss	NPV	Net Present Value
CEO	Chief Executive Officer	NYSE	New York Stock Exchange
CET1	Common Equity Tier 1	OCC	Office of the Comptroller of the Currency
CFO	Chief Financial Officer	OCI	Other Comprehensive Income
CFPB	Consumer Financial Protection Bureau	OFAC	Office of Foreign Asset Control
CLO	Collateralized Loan Obligation	OREO	Other Real Estate Owned
CMO	Collateralized Mortgage Obligation	OTTI	Other-than-Temporary Impairment
COSO	Committee of Sponsoring Organizations of the Treadway Commission	PCAOB	Public Company Accounting Oversight Board
CRA	Community Reinvestment Act	PCI	Purchased Credit Impaired
CRE	Commercial Real Estate	PPNR	Pre-Provision Net Revenue
DIF	FDIC's Deposit Insurance Fund	ROU	Right of use
Dodd-Frank Act	The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010	SBA	Small Business Administration
DTA	Deferred Tax Asset	SBIC	Small Business Investment Company
DTL	Deferred Tax Liability	SBLF	Small Business Lending Fund
EGRRCPA	The Economic Growth, Regulatory Relief, and Consumer Protection Act	SEC	Securities and Exchange Commission
EPS	Earnings per share	SERP	Supplemental Executive Retirement Plan
EVE	Economic Value of Equity	SLC	Senior Loan Committee
Exchange Act	Securities Exchange Act of 1934, as amended	SOFR	Secured Overnight Funding Rate
FASB	Financial Accounting Standards Board	SR	Supervision and Regulation Letters
FCRA	Fair Credit Reporting Act of 1971	TCJA	Tax Cuts and Jobs Act of 2017
FDIA	Federal Deposit Insurance Act	TDR	Troubled Debt Restructuring
FDIC	Federal Deposit Insurance Corporation	TEB	Tax Equivalent Basis
FHLB	Federal Home Loan Bank	TSR	Total Shareholder Return
FHLMC	Federal Home Loan Mortgage Corporation	USDA	United States Department of Agriculture
FICO	The Financing Corporation	VIE	Variable Interest Entity
FNMA	Federal National Mortgage Association	XBRL	eXtensible Business Reporting Language
FRA	Federal Reserve Act		

Item 1. Business.

Organization Structure and Description of Services

WAL is a bank holding company headquartered in Phoenix, Arizona, incorporated under the laws of the state of Delaware. WAL provides a full spectrum of deposit, lending, treasury management, international banking, and online banking products and services through its wholly-owned banking subsidiary, WAB.

WAB operates the following full-service banking divisions: ABA, BON, Bridge, FIB, and TPB. The Company also serves business customers through a national platform of specialized financial services. In addition, the Company has two non-bank subsidiaries, LVSP, which held and managed certain OREO properties, and CSI, a captive insurance company formed and licensed under the laws of the State of Arizona, and established as part of the Company's overall enterprise risk management strategy.

WAL also has eight unconsolidated subsidiaries used as business trusts in connection with issuance of trust-preferred securities as described in "Note 9. Qualifying Debt" in Item 8 of this Form 10-K.

Bank Subsidiary

At December 31, 2019, WAL has the following bank subsidiary:

Bank Name	Headquarters	Location Cities	Total Assets	Net Loans	Deposits
			<i>(in millions)</i>		
Western Alliance Bank	Phoenix, Arizona	Arizona: Chandler, Flagstaff, Gilbert, Mesa, Phoenix, Scottsdale, and Tucson			
		Nevada: Carson City, Fallon, Reno, Sparks, Henderson, Las Vegas, Mesquite, and North Las Vegas			
		California: Beverly Hills, Carlsbad, Costa Mesa, La Mesa, Los Angeles, Menlo Park, Oakland, Palo Alto, Pleasanton, San Diego, San Francisco, and San Jose	\$ 26,862.7	\$ 20,955.5	\$ 23,086.0
		Other: Atlanta, Georgia; Boston, Massachusetts; and Reston, Virginia			

WAB also has the following significant wholly-owned subsidiaries:

- Western Alliance Business Trust holds certain investment securities, municipal and non-profit loans, and leases.
- WA PWI, LLC holds certain limited partnerships invested primarily in low income housing tax credits and small business investment corporations.
- BW Real Estate, Inc. operates as a real estate investment trust and holds certain real estate loans and related securities.
- Helios Prime, Inc. holds certain equity interests in renewable energy tax credit transactions.

Market Segments

The Company's reportable segments are defined primarily by geographic location, services offered, and markets served. The Company's regional segments, which include Arizona, Nevada, Southern California, and Northern California, provide full service banking and related services to their respective markets. The Company's NBL segments provide specialized banking services to niche markets. These NBLs are managed centrally and are broader in geographic scope than the Company's other segments, though still predominately within the Company's core market areas. The Corporate & Other segment consists of the Company's investment portfolio, corporate borrowings and other related items, income and expense items not allocated to other reportable segments, and inter-segment eliminations.

Loan and deposit accounts are typically assigned directly to the segments where these products are originated and/or serviced. Equity capital is assigned to each segment based on the risk profile of their assets and liabilities with a funds credit provided for the use of this equity as a funding source. Any excess equity not allocated to segments based on risk is assigned to the Corporate & Other segment.

Net interest income, provision for credit losses, and non-interest expense amounts are recorded in their respective segments to the extent that the amounts are directly attributable to those segments. Net interest income of a reportable segment includes a funds transfer pricing process that matches assets and liabilities with similar interest rate sensitivity and maturity characteristics. Using this funds transfer pricing methodology, liquidity is transferred between users and providers. Net income amounts for each reportable segment are further derived by the use of expense allocations. Certain expenses not directly attributable to a specific segment are allocated across all segments based on key metrics, such as number of employees, average loan balances, and average deposit balances. Income taxes are applied to each segment based on the effective tax rate for the geographic location of the segment. Any difference in the corporate tax rate and the aggregate effective tax rates in the segments are adjusted in the Corporate & Other segment.

Lending Activities

General

Through WAB and its banking divisions and operating subsidiaries, the Company provides a variety of financial services to customers, including CRE loans, construction and land development loans, commercial loans, and consumer loans. The Company's lending has focused primarily on meeting the needs of business customers.

Commercial and Industrial: Commercial and industrial loans are a significant portion of the Company's loan portfolio and include working capital lines of credit, inventory and accounts receivable lines, mortgage warehouse lines, equipment loans and leases, and other commercial loans. Loans to technology companies, tax-exempt municipalities, and not-for-profit organizations are also categorized as commercial and industrial loans.

CRE: Loans to fund the purchase or refinancing of CRE for investors (non-owner occupied) or owner occupants are a significant portion of the Company's loan portfolio. These CRE loans are secured by multi-family residential properties, professional offices, industrial facilities, retail centers, hotels, and other commercial properties. As of December 31, 2019 and 2018, 31% and 36% of the Company's CRE loans were owner occupied. Owner occupied CRE loans are loans secured by owner occupied non-farm nonresidential properties for which the primary source of repayment (more than 50%) is the cash flow from the ongoing operations and activities conducted by the borrower who owns the property. Non-owner occupied CRE loans are CRE loans for which the primary source of repayment is rental income generated from the collateral property.

Construction and Land Development: Construction and land development loans include single family and multi-family residential projects, industrial/warehouse properties, office buildings, retail centers, medical office facilities, and residential lot developments. These loans are primarily originated to experienced local developers with whom the Company has a satisfactory lending history. An analysis of each construction project is performed as part of the underwriting process to determine whether the type of property, location, construction costs, and contingency funds are appropriate and adequate. Loans to finance commercial raw land are primarily to borrowers who plan to initiate active development of the property within two years.

Residential: The Company has a residential mortgage acquisition program, in which it partners with strategic third parties to execute flow and bulk residential loan purchases that meet the Company's goals and underwriting criteria. These loan purchases consist of both conforming and non-conforming loans. Non-conforming loan purchases are considered to be high quality as the borrowers have high FICO scores and the loans generally have low loan-to-values. Residential loans made up 10% of the Company's total loan portfolio as of December 31, 2019, compared to 7% as of December 31, 2018.

Consumer: Limited types of consumer loans are offered to meet customer demand and to respond to community needs. Examples of these consumer loans include home equity loans and lines of credit, home improvement loans, personal lines of credit, and loans to individuals for investment purposes.

At December 31, 2019, the Company's loan portfolio totaled \$21.12 billion, or approximately 79% of total assets. The following table sets forth the composition of the Company's HFI loan portfolio as of the periods presented:

	December 31,			
	2019		2018	
	Amount	Percent	Amount	Percent
	<i>(dollars in thousands)</i>			
Commercial and industrial	\$ 9,382,043	44.5%	\$ 7,762,642	43.8%
Commercial real estate - non-owner occupied	5,245,634	24.8	4,213,428	23.8
Commercial real estate - owner occupied	2,316,913	11.0	2,325,380	13.1
Construction and land development	1,952,156	9.2	2,134,753	12.1
Residential real estate	2,147,664	10.2	1,204,355	6.8
Consumer	57,083	0.3	70,071	0.4
Loans, net of deferred loan fees and costs	<u>\$ 21,101,493</u>	<u>100.0%</u>	<u>\$ 17,710,629</u>	<u>100.0%</u>
Allowance for credit losses	(167,797)		(152,717)	
Total loans HFI	<u>\$ 20,933,696</u>		<u>\$ 17,557,912</u>	

For additional information concerning loans, see "Note 3. Loans, Leases and Allowance for Credit Losses" of the Consolidated Financial Statements contained herein or "Management's Discussion and Analysis of Financial Condition and Results of Operations —Financial Condition – Loans discussions" in Item 8 of this Form 10-K.

The Company adheres to a specific set of credit standards that are intended to ensure appropriate management of credit risk. Furthermore, the Bank's senior management team plays an active role in monitoring compliance with such standards.

Loan originations are subject to a process that includes the credit evaluation of borrowers, utilizing established lending limits, analysis of collateral, and procedures for continual monitoring and identification of credit deterioration. Loan officers actively monitor their individual credit relationships in order to report suspected risks and potential downgrades as early as possible. The BOD approves all material changes to loan policy, as well as lending limit authorities. The Bank's lending policies generally incorporate consistent underwriting standards across all geographic regions in which the Bank operates, customized as necessary to conform to state law and local market conditions. The Bank's credit culture emphasizes timely identification of troubled credits to allow management to take prompt corrective action, when necessary.

Loan Approval Procedures and Authority

The Company's loan approval procedures are executed through a tiered loan limit authorization process, which is structured as follows:

- *Individual Credit Authorities.* The credit approval levels for individual divisional and senior credit officers are set by policy and certain credit administration officers' approval authorities are established on a delegated basis.
- *Management Loan Committees.* Credits in excess of individual divisional or senior credit officer approval authority are submitted to the appropriate divisional or NBL loan committee. The divisional committees consist of members of the Bank's senior management team of each division and the NBL loan committees consist of the Bank's divisional or senior credit officers.
- *Credit Administration.* Credits in excess of the divisional or NBL loan committee approval authority require the additional approval of the Bank's CCO and any credits in excess of the CCO's individual approval authority are submitted to the WAB SLC. In addition, the SLC reviews all other loan approvals to any one new borrower in excess of established thresholds. The SLC is chaired by the WAB CCO and includes the Company's CEO.

Loans to One Borrower. In addition to the limits set forth above, subject to certain exceptions, state banking laws generally limit the amount of funds that a bank may lend to a single borrower. Under Arizona law, the obligations of one borrower to a bank generally may not exceed 20% of the bank's capital, plus an additional 10% of its capital if the additional amounts are fully secured by readily marketable collateral. Arizona law does not specifically require aggregation of loans to affiliated entities in determining compliance with the lending limit. As a matter of longstanding practice, the Arizona Department of Financial Institutions uses the same aggregation analysis as applied to national banks by the OCC.

Concentrations of Credit Risk. The Company's lending policies also establish customer and product concentration limits, which are based on commitment amounts, to control single customer and product exposures. The Company's lending policies have several different measures to limit concentration exposures. Set forth below are the primary segmentation limits and actual measures as of December 31, 2019:

	Percent of Total Capital	
	Policy Limit	Actual
CRE	435%	232%
Commercial and industrial	400	289
Construction and land development	85	59
Residential real estate	100	66
Consumer	5	2

Asset Quality

General

To measure asset quality, the Company has instituted a loan grading system consisting of nine different categories. The first five are considered satisfactory "pass" ratings. The other four "non-pass" grades range from a "Special mention" category to a "Loss" category and are consistent with the grading systems used by federal banking regulators. All loans are assigned a credit risk grade at the time they are made, and each assigned loan officer reviews the credit with his or her immediate supervisor on a quarterly basis to determine whether a change in the credit risk grade is warranted. In addition, the grading of the Company's loan portfolio is reviewed on a regular basis by its internal Loan Review Department.

Collection Procedure

If a borrower fails to make a scheduled payment on a loan, Bank personnel attempt to remedy the deficiency by contacting the borrower and seeking payment. Contacts generally are made within 15 business days after the payment becomes past due. The Bank maintains regional Special Assets Departments, which generally service and collect loans rated Substandard or worse. Each division is responsible for monitoring activity that may indicate an increased risk rating, including, but not limited to, past-dues, overdrafts, and loan agreement covenant defaults. Loans deemed uncollectible are charged-off.

Nonperforming Assets

Nonperforming assets include loans past due 90 days or more and still accruing interest, non-accrual loans, TDR loans, and repossessed assets, including OREO. In general, loans are placed on non-accrual status when the Company determines that ultimate collection of principal and interest is in doubt due to the borrower's financial condition, collateral value, and collection efforts. A TDR loan is a loan for which the Company, for reasons related to a borrower's financial difficulties, grants a concession to the borrower that the Company would not otherwise consider. Other repossessed assets result from loans where the Company has received title or physical possession of the borrower's assets. The Company generally re-appraises OREO and collateral dependent impaired loans every 12 months. The total net realized and unrealized gains and losses of repossessed and other assets was not significant during each of the years ended December 31, 2019, 2018, and 2017. However, losses may be experienced in future periods.

Criticized Assets

Federal bank regulators require banks to classify its assets on a regular basis. In addition, in connection with their examinations of the Bank, examiners have authority to identify problem assets and, if appropriate, re-classify them. A loan grade of "Special Mention" from the Company's internal loan grading system is utilized to identify potential problem assets and loan grades of "Substandard," "Doubtful," and "Loss" are utilized to identify actual problem assets.

The following describes the potential and actual problem assets using the Company's internal loan grading system definitions:

- *"Special Mention" (Grade 6):* Generally these are assets that possess potential weaknesses that warrant management's close attention. These loans may involve borrowers with adverse financial trends, higher debt to equity ratios, or weaker liquidity positions, but not to the degree of being considered a "problem loan" where risk of loss may be apparent. Loans in this category are usually performing as agreed, although there may be non-compliance with financial covenants.
- *"Substandard" (Grade 7):* These assets are characterized by well-defined credit weaknesses and carry the distinct possibility that the Company will sustain some loss if such weakness or deficiency is not corrected. All loans 90 days or more past due and all loans on non-accrual status are considered at least "Substandard," unless extraordinary circumstances would suggest otherwise.
- *"Doubtful" (Grade 8):* These assets have all the weaknesses inherent in those classified as "Substandard" with the added characteristic that the weaknesses present make collection or liquidation in full, on the basis of currently existing facts, conditions and values, highly questionable and improbable, but because of certain known factors which may work to the advantage and strengthening of the asset (for example, capital injection, perfecting liens on additional collateral and refinancing plans), classification as an estimated loss is deferred until a more precise status may be determined.
- *"Loss" (Grade 9):* These assets are considered uncollectible and having such little recoverable value that it is not practical to defer writing off the asset. This classification does not mean that the loan has absolutely no recovery or salvage value, but rather that it is not practicable or desirable to defer writing off the asset, even though partial recovery may be achieved in the future.

Allowance for Credit Losses

The Company must maintain an adequate allowance for credit losses. The allowance for credit losses is established through a provision for credit losses and is reflected as a reduction in earnings. Loans are charged against the allowance for credit losses when management believes that collectability of the contractual principal or interest is unlikely. Subsequent recoveries, if any, are credited to the allowance. The allowance is reported at an amount believed adequate to absorb probable losses on existing loans that may become uncollectable, based on evaluation of the collectability of loans and prior credit loss experience, together with other factors. For a detailed discussion of the Company's methodology see "Management's Discussion and Analysis and Financial Condition – Critical Accounting Policies – Allowance for Credit Losses" in Item 7 of this Form 10-K.

The Company also records estimated losses on unfunded loan commitments, which are classified as non-interest expense, with corresponding reserves in other liabilities.

Investment Activities

The Company has an investment policy, which was approved by the BOD. This policy dictates that investment decisions be made based on the safety of the investment, liquidity requirements of the Bank and holding company, potential returns, cash flow targets, and consistency with the Company's interest rate risk management. The Bank's ALCO is responsible for making securities portfolio decisions in accordance with established policies. The CFO and Treasurer have the authority to purchase and sell securities within specified guidelines. All investment transactions for the Bank and for the holding company were reviewed by the ALCO and BOD.

Generally, the Company's investment policy limits new securities investments to the following: securities backed by the full faith and credit of the U.S. government, including U.S. treasury bills, notes, and bonds, direct obligations of Ginnie Mae, USDA and SBA loans; MBS or CMO issued by a GSE, such as Fannie Mae or Freddie Mac; debt securities issued by a GSE, such as Fannie Mae, Freddie Mac, and the FHLB; tax-exempt securities with a rating of "Single-A" or higher; preferred stock where the issuing company is rated "BBB" or higher; corporate debt with a rating of "Single-A" or better; investment grade corporate bond mutual funds; private label collateralized mortgage obligations with a single rating of "AA" or higher; commercial mortgage-backed securities with a rating of "AAA;" low income housing development bonds; and mandatory purchases of equity securities of the FRB and FHLB.

Investment securities are further subject to the following quantitative limits of the Bank:

Securities Category	Basis Limit	Percentage or Dollar Limit
Preferred stock	Common equity tier 1	10.0%
Tax-exempt municipal securities	Total assets	5.0%
Tax-exempt low income housing development bonds	Total capital	30.0%
Investment grade corporate bond mutual funds	Tier 1 capital	5.0%
Corporate debt holdings	Total assets	2.5%
Commercial mortgage-backed securities	Aggregate purchases	\$50.0 million

The Company no longer purchases (although it may continue to hold previously acquired) CDOs. The Company's policies also govern the use of derivatives, and provide that the Company prudently use derivatives in accordance with applicable regulations as a risk management tool to reduce the overall exposure to interest rate risk, and not for speculative purposes.

As of December 31, 2019, the Company's investment securities portfolio includes debt and equity securities. Debt securities are classified as AFS or HTM pursuant to ASC Topic 320, *Investments* and ASC Topic 825, *Financial Instruments*. Equity securities are reported at fair value in accordance with Topic 321, *Equity Securities*. For further discussion of significant accounting policies related to the Company's investment securities portfolio refer to "Note 1. Summary of Significant Accounting Policies" in Item 8 of this Form 10-K.

As of December 31, 2019, the Company's investment securities portfolio totals \$4.0 billion, representing approximately 14.8% of the Company's total assets, with the majority of the portfolio invested in AAA/AA+ rated securities. The average duration of the Company's investment securities is 4.6 years as of December 31, 2019.

The following table summarizes the carrying value of investment securities as of December 31, 2019 and 2018:

	December 31,			
	2019		2018	
	Amount	Percent	Amount	Percent
	<i>(dollars in thousands)</i>			
<i>Available-for-sale debt securities</i>				
CDO	\$ 10,142	0.3%	\$ 15,327	0.4%
Commercial MBS issued by GSEs	94,253	2.4	100,106	2.7
Corporate debt securities	99,961	2.5	99,380	2.7
Municipal securities	7,773	0.2	—	—
Private label residential MBS	1,129,227	28.4	924,594	25.0
Residential MBS issued by GSEs	1,412,060	35.6	1,530,124	41.4
Tax-exempt	1,039,962	26.2	841,573	22.8
Trust preferred securities	27,040	0.7	28,617	0.8
U.S. government sponsored agency securities	10,000	0.3	38,188	1.0
U.S. treasury securities	999	0.0	1,984	0.1
Total debt securities	<u>\$ 3,831,417</u>	<u>96.5%</u>	<u>\$ 3,579,893</u>	<u>96.9%</u>
<i>Equity securities</i>				
CRA investments	\$ 52,504	1.3%	\$ 51,142	1.4%
Preferred stock	86,197	2.2	63,919	1.7
Total equity securities	<u>\$ 138,701</u>	<u>3.5%</u>	<u>\$ 115,061</u>	<u>3.1%</u>
Total investment securities	<u>\$ 3,970,118</u>	<u>100.0%</u>	<u>\$ 3,694,954</u>	<u>100.0%</u>

As of December 31, 2019 and 2018, the Company had investments in BOLI of \$174.0 million and \$170.1 million, respectively. BOLI is used to help offset employee benefit costs. For additional information concerning investments, see "Management's Discussion and Analysis of Financial Condition and Results of Operations – Financial Condition – Investments" in Item 7 of this Form 10-K.

Deposit Products

The Company offers a variety of deposit products, including checking accounts, savings accounts, money market accounts, and other types of deposit accounts, including fixed-rate, fixed maturity certificates of deposit. The Company has historically focused on growing its lower cost core customer deposits. As of December 31, 2019, the deposit portfolio was comprised of 37% non-interest-bearing deposits and 63% interest-bearing deposits.

The competition for deposits in the Company's markets is strong. The Company has historically been successful in attracting and retaining deposits due to several factors, including its:

- knowledgeable and empowered bankers committed to providing personalized and responsive service that translates into long lasting relationships;
- broad selection of cash management services offered; and
- incentives to employees for business development and retention.

Deposit balances are generally influenced by national and local economic conditions, changes in prevailing interest rates, competitiveness of the Company's offered rates, perceived stability of financial institutions and competition. In order to attract and retain deposits, the Company relies on providing quality service and introducing new products and services that meet the needs of its customers.

The Bank's deposit rates are determined through an internal oversight process under the direction of its ALCO. The Bank considers a number of factors when determining deposit rates, including:

- current and projected national and local economic conditions and the outlook for interest rates;
- local competition;
- loan and deposit positions and forecasts, including any concentrations in either; and
- rates charged on FHLB advances and other funding sources.

The following table shows the Company's deposit composition:

	December 31,			
	2019		2018	
	Amount	Percent	Amount	Percent
	<i>(in thousands)</i>			
Non-interest-bearing demand deposits	\$ 8,537,905	37.4%	\$ 7,456,141	38.9%
Interest-bearing transaction accounts	2,760,865	12.1	2,555,609	13.3
Savings and money market accounts	9,120,747	40.0	7,330,709	38.2
Time certificates of deposit (\$250,000 or more)	1,426,133	6.3	1,009,900	5.3
Other time deposits	950,843	4.2	825,088	4.3
Total deposits	<u>\$ 22,796,493</u>	<u>100.0%</u>	<u>\$ 19,177,447</u>	<u>100.0%</u>

Although the Company does not pay interest to depositors of non-interest-bearing accounts, earnings credits are awarded to some account holders, which offset charges incurred by account holders for other services. Earnings credits earned in excess of charges incurred by account holders are recorded in deposit costs as part of non-interest expense and fluctuate as a result of deposit balances eligible for earnings credits, along with the earnings credit rates on these deposit balances.

In addition to the Company's deposit base, it has access to other sources of funding, including FHLB and FRB advances, Federal funds purchased, repurchase agreements, and unsecured lines of credit with other financial institutions. Previously, the Company has also accessed the capital markets through trust preferred, subordinated debt, and Senior Note offerings. For additional information concerning the Company's deposits, see "Management's Discussion and Analysis of Financial Condition and Results of Operations – Balance Sheet Analysis – Deposits" in Item 7 of this Form 10-K.

Other Financial Products and Services

In addition to traditional commercial banking activities, the Company offers other financial services to its customers, including internet banking, wire transfers, electronic bill payment and presentment, lock box services, courier, and cash management services.

Customer, Product, and Geographic Concentrations

Approximately 45% and 49% of the Company's loan portfolio at December 31, 2019 and 2018, respectively, was represented by CRE and construction and land development loans. The Company's business is concentrated primarily in the Las Vegas, Los Angeles, Phoenix, Reno, San Francisco, San Jose, San Diego and Tucson metropolitan areas. Consequently, the Company is dependent on the trends of these regional economies.

Although commercial and industrial loans make up approximately 44% of the Company's loan portfolio as of December 31, 2019 and 2018, the Company does not consider this to be a significant concentration risk as these loans are well diversified in terms of customers and product offerings.

The Company's lending activities, including those within its NBLs, are driven in large part by the customers served in the market areas where the Company has offices in the states of Arizona, Nevada, and California. The following table presents a breakout of the in-footprint and out-of-footprint distribution of loans:

	December 31, 2019			December 31, 2018		
	In-Footprint	Out-of-Footprint	Total	In-Footprint	Out-of-Footprint	Total
Arizona	16.2%	2.0%	18.2%	18.1%	2.5%	20.6%
Nevada	10.0	0.7	10.7	11.1	0.2	11.3
Southern California	10.7	—	10.7	12.2	—	12.2
Northern California	5.7	0.5	6.2	6.8	0.5	7.3
HOA Services	0.3	0.8	1.1	0.3	0.9	1.2
Hotel Franchise Finance	2.8	6.3	9.1	1.5	6.9	8.4
Public & Nonprofit Finance	6.8	1.0	7.8	7.8	1.0	8.8
Technology & Innovation	2.4	4.9	7.3	2.4	4.4	6.8
Other NBLs	13.7	15.2	28.9	10.3	13.1	23.4
Total	68.6%	31.4%	100.0%	70.5%	29.5%	100.0%

The Company is not dependent upon any single or limited number of customers, the loss of which would have a material adverse effect on the Company. Neither the Company nor any of its reportable segments have customer relationships that individually account for 10% or more of consolidated or segment revenues. No material portion of the Company's business is seasonal.

Competition

The financial services industry is highly competitive. Many of the Company's competitors are much larger in total assets and capitalization, have greater access to capital markets, offer a broader range of financial services than the Company can offer, and may have lower cost structures.

This increasingly competitive environment is primarily a result of long-term changes in regulation that made mergers and geographic expansion easier, changes in technology and product delivery systems and web-based tools, and the accelerating pace of consolidation among financial services providers. The Company competes for loans, deposits, and customers with other banks, credit unions, brokerage companies, mortgage companies, insurance companies, finance companies, financial technology firms, and other non-bank financial services providers. This strong competition for deposit and loan products directly affects the interest rates on those products and the terms on which they are offered to customers.

Technological innovation continues to contribute to greater competition in domestic and international financial services markets.

Mergers between financial institutions have placed additional pressure on banks to consolidate their operations, reduce expenses, and increase revenues to remain competitive. The competitive environment is also significantly impacted by federal and state legislation that makes it easier for non-bank financial institutions to compete with the Company.

Employees

As of December 31, 2019, the Company has 1,835 full-time equivalent employees. The Company's employees are not represented by a union or covered by a collective bargaining agreement. Management believes that its employee relations are good.

Supervision and Regulation

The Company and its subsidiaries are extensively regulated and supervised under both federal and state laws. A summary description of the laws and regulations that relate to the Company's operations are discussed in Item 7 of this Form 10-K.

Additional Available Information

The Company maintains an internet website at <http://www.westernalliancebankcorporation.com>. The Company makes available its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to such reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act and other information related to the Company free of charge, through this site, as soon as reasonably practicable after it electronically files those documents with, or otherwise furnishes them to the SEC. The SEC maintains an internet site at <http://www.sec.gov>, from which all forms filed electronically may be accessed. The Company's internet website and the information contained therein are not incorporated into this Form 10-K.

In addition, copies of the Company's annual report will be made available, free of charge, upon written request.

Item 1A. Risk Factors.

Investing in the Company's common stock involves various risks, many of which are specific to the Company's business. The discussion below addresses the material risks and uncertainties, of which the Company is currently aware, that could have a material adverse effect on the Company's business, results of operations, and financial condition. Other risks that the Company does not know about now, or that the Company does not currently believe are significant, could negatively impact the Company's business or the trading price of the Company's securities. See additional discussions about credit, interest rate, market, and litigation risks in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Risks Relating to the Company's Business

The Company's financial performance may be adversely affected by conditions in the financial markets and economic conditions generally.

The Company's financial performance is highly dependent upon the business environment in the markets where the Company operates and in the U.S. as a whole. Unfavorable or uncertain economic and market conditions can be caused by declines in economic growth, business activity, or investor or business confidence, limitations on the availability or increases in the cost of credit and capital, increases in inflation or interest rates, government shutdowns, the imposition of tariffs on trade, natural disasters, the emergence of widespread health emergencies or pandemics, terrorist attacks, acts of war, or a combination of these or other factors. The specific impact on the Company of many of these factors is difficult to predict, could be long or short term, and may be indirect, such as disruptions in our customers' supply chain or a reduction in the demand for their products or services. A worsening of business and economic conditions generally or specifically in the principal markets in which the Company conducts business could have adverse effects, including the following:

- a decrease in deposit balances or the demand for loans and other products and services the Company offers;
- an increase in the number of borrowers who become delinquent, file for protection under bankruptcy laws or default on their loans or other obligations to the Company, which could lead to higher levels of nonperforming assets, net charge-offs, and provisions for credit losses;
- a decrease in the value of loans and other assets or in the value of collateral;
- a decrease in net interest income from the Company's lending and deposit gathering activities;
- an impairment of certain intangible assets such as goodwill; and
- an increase in competition resulting from increasing consolidation within the financial services industry.

In the U.S. financial services industry, the commercial soundness of financial institutions is closely interrelated as a result of credit, trading, clearing or other relationships between the institutions. As a result, concerns about, or a default or threatened default by, one institution could lead to significant market-wide liquidity and credit problems, losses or defaults by other institutions. This is sometimes referred to as "systemic risk" and may adversely affect financial intermediaries, such as clearing agencies, clearing houses, banks, securities firms, and exchanges, with which the Company interacts on a daily basis, and therefore could adversely affect the Company.

It is possible that the business environment in the U.S. will experience volatility in the future. There can be no assurance that these conditions will improve in the near term or that conditions will not worsen. Such conditions could adversely affect the Company's business, results of operations, and financial condition.

The Company is highly dependent on real estate and events that negatively impact the real estate market will hurt the Company's business and earnings.

The Company is located in areas in which economic growth is largely dependent on the real estate market, and a majority of the Company's loan portfolio is secured by or otherwise dependent on real estate. The market for real estate is cyclical and the outlook for this sector is uncertain. A decline in real estate activity would likely cause a decline in asset and deposit growth and negatively impact the Company's earnings and financial condition.

The Company's loan portfolio consists primarily of commercial and industrial and CRE loans, which contain concentrations in certain business lines or product types that have unique risk characteristics and may expose the Company to increased lending risks.

The Company's loan portfolio consists primarily of commercial and industrial and CRE loans, which contain material concentrations in certain business lines or product types, such as mortgage warehouse, real estate, corporate finance, municipal and nonprofit loans, as well as in specific business sectors such as technology and innovation. These loan concentrations present unique risks and involve specialized underwriting and management as they often involve large loan balances to a single borrower or group of related borrowers. Consequently, an adverse development with respect to one commercial loan or one credit relationship may adversely affect the Company. In addition, based on the nature of lending to these specialty markets, repayment of loans may be dependent upon borrowers receiving additional equity financing or, in some cases, a successful sale to a third party, public offering, or other form of liquidity event. Unforeseen adverse events, changes in regulatory policy, or a general decline in the borrower's industry may have a material adverse effect on the Company's financial condition and results of operations.

Due to the inherent risk associated with accounting estimates, the Company's allowance for credit losses may be insufficient, which could require the Company to raise additional capital or otherwise adversely affect the Company's financial condition and results of operations.

Credit losses are inherent in the business of making loans. Management makes various assumptions and judgments about the collectability of the Company's consolidated loan portfolio and maintains an allowance for estimated credit losses based on a number of factors, including the size of the portfolio, asset classifications, economic trends, industry experience and trends, industry and geographic concentrations, estimated collateral values, management's assessment of the credit risk inherent in the portfolio, historical loan loss experience, and loan underwriting policies. In addition, the Company evaluates all loans identified as problem loans and augments the allowance based upon its estimation of the potential loss associated with those problem loans. Additions to the allowance for credit losses recorded through the Company's provision for credit losses decrease the Company's net income. If such assumptions and judgments are incorrect, the Company's actual credit losses may exceed the Company's allowance for credit losses.

At December 31, 2019, the Company's allowance for credit losses and loss contingency on unfunded loan commitments and letters of credit is \$167.8 million and \$9.0 million, respectively. Deterioration in the real estate market or general economic conditions could affect the ability of the Company's loan customers to service their debt, which could result in additional loan provisions and increases in the Company's allowance for credit losses. In addition, the Company may be required to record additional loan provisions or increase the Company's allowance for credit losses based on new information regarding existing loans, input from regulators in connection with their review of the Company's allowance, changes in regulatory guidance, regulations or accounting standards, identification of additional problem loans, changes in economic outlook, and other factors, both within and outside of the Company's management's control. Moreover, because future events are uncertain and because the Company may not successfully identify all deteriorating loans in a timely manner, there may be loans that deteriorate in an accelerated time frame.

Any increases in the provision or allowance for credit losses will result in a decrease in the Company's net income and, potentially, capital, and may have a material adverse effect on the Company's financial condition and results of operations. If actual credit losses materially exceed the Company's allowance for credit losses, the Company may be required to raise additional capital, which may not be available to the Company on acceptable terms or at all. The Company's inability to raise additional capital on acceptable terms when needed could materially and adversely affect the Company's financial condition, results of operations, and capital.

Recent changes to the FASB accounting standards will result in a significant change to the Company's recognition of credit losses and may materially impact the Company's financial condition or results of operations.

The incurred loss model for recognizing credit losses was replaced with an expected loss model referred to as CECL, which became effective on January 1, 2020 and will be reported in the Company's first quarter 2020 financial results. Under the incurred loss model, the Company delays recognition of losses until it is probable that a loss has been incurred. The CECL model represents a dramatic departure from the incurred loss model. The CECL model requires the Company to present certain financial assets carried at amortized cost, such as loans held for investment and held-to-maturity debt securities, at the net amount expected to be collected. Additionally, the measurement of expected credit losses will take place at the time the financial asset is first added to the balance sheet (with periodic updates thereafter) and will be based on current conditions, information about past events, including historical experience, and reasonable and supportable forecasts that impact the collectability of the reported amount. As such, the CECL model will materially impact how the Company determines its ACL and the Company's ACL may experience more fluctuations under the CECL model, which may result in significant volatility in the provision for credit losses and, therefore, earnings. Upon transition from the incurred loss model to the CECL model, on January 1, 2020, the Company recognized an increase to its allowance for credit losses on loans and unfunded loan commitments of \$19 million and \$15 million, respectively, and established

an allowance of \$3 million on its HTM securities. These increases resulted in a one-time cumulative adjustment to retained earnings of \$25 million, which is net of related tax effects.

The Company could be subject to tax audits, challenges to its tax positions, or adverse changes or interpretations of tax laws.

The Company is subject to federal and applicable state income tax laws and regulations. Income tax laws and regulations are often complex and require significant judgment in determining the Company's effective tax rate and in evaluating its tax positions. The Company's determination of its tax liability is subject to review by applicable tax authorities. Any audits or challenges of such determinations may adversely affect the Company's effective tax rate, tax payments or financial condition.

U.S. tax legislation enacted in late 2017 made significant changes to federal tax law, including the taxation of corporations, by, among other things, reducing the corporate income tax rate, disallowing certain deductions that had previously been allowed, and altering the expensing of capital expenditures. Further changes in tax laws, changes in interpretations, guidance or regulations that may be promulgated, or challenges to judgments or actions that the Company may take with respect to tax laws could negatively impact the Company's business.

Because of the geographic concentration of the Company's assets, changes in local economic conditions could adversely affect the Company's business and results of operations.

The Company's business is primarily concentrated in selected markets in Arizona, California, and Nevada. As a result of this geographic concentration, the Company's financial condition and results of operations depend largely upon economic conditions in these market areas. Deterioration in economic conditions in these markets could result in one or more of the following: an increase in loan delinquencies and charge-offs; an increase in problem assets and foreclosures; a decrease in the demand for the Company's products and services; or a decrease in the value of collateral for loans, especially real estate.

The Company's financial instruments expose the Company to certain market risks and may increase the volatility of earnings and AOCI.

The Company holds certain financial instruments measured at fair value. For those financial instruments measured at fair value, the Company is required to recognize the changes in the fair value of such instruments in earnings or AOCI each quarter. Therefore, any increases or decreases in the fair value of these financial instruments have a corresponding impact on reported earnings or AOCI. Fair value can be affected by a variety of factors, many of which are beyond the Company's control, including the Company's credit position, interest rate volatility, capital markets volatility, and other economic factors. Accordingly, the Company is subject to mark-to-market risk and the application of fair value accounting may cause the Company's earnings and AOCI to be more volatile than would be suggested by the Company's underlying performance.

If the Company loses a significant portion of its core deposits or a significant deposit relationship, or its cost of funding deposits increases significantly, the Company's liquidity and/or profitability would be adversely impacted.

The Company's success depends on its ability to maintain sufficient liquidity to fund its current obligations and support loan growth and, specifically, to attract and retain a stable base of relatively low-cost deposits. The competition for these deposits in the Company's markets is strong and customers may demand higher interest rates on their deposits or seek other investments offering higher rates of return. The Company offers reciprocal deposit products, through third party networks to customers seeking federal insurance for deposit amounts that exceed the applicable deposit insurance limit at a single institution. The Company also from time to time offers other credit enhancements to depositors, such as FHLB letters of credit and, for certain deposits of public monies, pledges of collateral in the form of readily marketable securities. Any event or circumstance that interferes with or limits the Company's ability to offer these products to customers that require greater security for their deposits, such as a significant regulatory enforcement action or a significant decline in capital levels at the Company's bank subsidiary, could negatively impact the Company's ability to attract and retain deposits. If the Company were to lose a significant deposit relationship or a significant portion of its low-cost deposits, the Company would be required to borrow from other sources at higher rates and the Company's liquidity and profitability would be adversely impacted.

From time to time, the Company has utilized borrowings from the FHLB and the FRB, and there can be no assurance these programs will be available as needed.

As of December 31, 2019, the Company has no borrowings from the FHLB of San Francisco or the FRB. However, in the past, the Company has utilized borrowings from the FHLB of San Francisco and the FRB to satisfy its short-term liquidity needs. The Company's borrowing capacity is generally dependent on the value of its collateral pledged to these entities. These lenders could reduce the Company's borrowing capacity or eliminate certain types of collateral and could otherwise modify or even terminate their loan programs. Any change or termination could have an adverse effect on the Company's liquidity and profitability.

The Company's business may be adversely affected by fraud.

As a financial institution, the Company is inherently exposed to a wide range of operational risks, including, but not limited to, theft and other fraudulent activity by employees, customers, and other third parties targeting the Company and/or the Company's customers or data. Such activity may take many forms, including check fraud, electronic fraud, wire fraud, phishing, social engineering and other dishonest acts.

Although the Company devotes substantial resources to maintaining effective policies and internal controls to identify and prevent such incidents, given the persistence and increasing sophistication of possible perpetrators, the Company may experience financial losses or reputational harm as a result of fraud.

A failure in or breach of the Company's operational or security systems or infrastructure, or those of the Company's third-party vendors and other service providers, including as a result of cyber-attacks, could disrupt the Company's businesses, result in the disclosure or misuse of confidential or proprietary information, damage the Company's reputation, increase the Company's costs, and cause losses.

The Company's operations rely on the secure processing, storage, and transmission of confidential and other information. Although the Company takes numerous protective measures to maintain the confidentiality, integrity, and availability of the Company's and its customers' information across all geographies and product lines, and endeavors to modify these protective measures as circumstances warrant, the nature of the threats continues to evolve. As a result, the Company's computer systems, software, and networks and those of the Company's customers and third-party vendors may be vulnerable to unauthorized payments and account access, loss or destruction of data (including confidential client information), account takeovers, unavailability of service, computer viruses or other malicious code, cyber-attacks, and other events that could have an adverse security impact and result in significant losses to the Company and/or its customers. These threats may originate externally from increasingly sophisticated third parties, including foreign governments, organized criminal groups, and other hackers, or from outsourced or infrastructure-support providers and application developers, or the threats may originate from within the Company's organization.

The Company also faces the risk of operational disruption, failure, termination, or capacity constraints of any of the third parties that facilitate the Company's business activities, including vendors, exchanges, clearing agents, clearing houses, or other financial intermediaries. Such parties could also be the source or cause of an attack on, or breach of, the Company's operational systems, data or infrastructure. In addition, the Company may be at risk of an operational failure with respect to its customers' systems. The Company's risk and exposure to these matters remains heightened because of, among other things, the evolving nature of these threats, the outsourcing of many of the Company's business operations, and the continued uncertain global economic environment. As cyber threats continue to evolve, the Company may be required to expend significant additional resources to continue to modify or enhance its protective measures or to investigate and remediate any information security vulnerabilities.

The Company maintains insurance policies that it believes provide reasonable coverage at a manageable expense for an institution of the Company's size and scope with similar technological systems. However, the Company cannot assure that these policies will afford coverage for all possible losses or would be sufficient to cover all financial losses, damages, or penalties, including lost revenues, should the Company experience any one or more of its or a third party's systems failing or experiencing an attack.

The Company relies on third parties to provide key components of its business infrastructure.

The Company relies on third parties to provide key components for its business operations, such as data processing and storage, recording and monitoring transactions, online banking interfaces and services, internet connections, and network access. While the Company selects these third-party vendors carefully, it does not control their actions. Any problems caused by these third parties, including those resulting from breakdowns or other disruptions in communication services provided by a vendor, failure of a vendor to handle current or higher volumes, cyber-attacks and security breaches at a vendor, failure of a vendor to provide services for any reason, or poor performance by a vendor, could adversely affect the Company's ability to deliver products and services to its customers and otherwise conduct its business. Financial or operational difficulties of a third-party vendor could also hurt the Company's operations if those difficulties interfere with the vendor's ability to serve the Company. Replacing these third-party vendors also could create significant delays and expense. Any of these things could adversely affect the Company's business and financial performance.

A change in the Company's creditworthiness could increase the Company's cost of funding or adversely affect its liquidity.

Market participants regularly evaluate the Company's creditworthiness and the creditworthiness of the Company's long-term debt based on a number of factors, some of which are not entirely within the Company's control, including the Company's financial strength and conditions within the financial services industry generally. There can be no assurance that the Company's perceived creditworthiness will remain the same. Changes could adversely affect the cost and other terms upon which the Company is able to obtain funding and its access to the capital markets, and could increase the Company's cost of capital. Likewise, any loss of or

decline in the credit rating assigned to WAB could impair its ability to attract deposits or to obtain other funding sources, or increase its cost of funding.

The Company's controls and processes, its reporting systems and procedures, and its operational infrastructure may not be able to keep pace with its growth, which could cause it to experience compliance and operational problems or lose customers, or incur additional expenditures beyond current projections, any one of which could adversely affect the Company's financial results.

The Company's future success will depend on the ability of officers and other key employees to effectively implement solutions designed to improve operational, credit, financial, management and other internal risk controls and processes, as well as improve reporting systems and procedures, while at the same time maintaining and growing existing businesses and client relationships. The Company may not successfully implement such changes or improvements in an efficient or timely manner, or it may discover deficiencies in its existing systems and controls that adversely affect the Company's ability to support and grow its existing businesses and client relationships, and could require the Company to incur additional expenditures to expand its administrative and operational infrastructure. If the Company is unable to maintain and implement improvements to its controls, processes, and reporting systems and procedures, the Company may lose customers, experience compliance and operational problems or incur additional expenditures beyond current projections, any one of which could adversely affect the Company's financial results.

The Company's expansion strategy may not prove to be successful and its market value and profitability may suffer.

The Company continually evaluates expansion through acquisitions of banks and other financial assets and businesses. Like previous acquisitions by the Company, any future acquisitions will be accompanied by risks commonly encountered in such transactions, including, among other things:

- time and expense incurred while identifying, evaluating and negotiating potential acquisitions and transactions;
- difficulty in accurately estimating the value of target companies or assets and in evaluating target companies' or assets' credit, operations, management, and market risks;
- potential payment of a premium over book and market values that may cause dilution of the Company's tangible book value or earnings per share;
- exposure to unknown or contingent liabilities of the target company;
- potential exposure to asset quality issues of the target company;
- difficulty of integrating the operations and personnel;
- potential disruption of the Company's ongoing business;
- failure to retain key personnel at the acquired business;
- inability of the Company's management to maximize its financial and strategic position by the successful implementation of uniform product offerings and the incorporation of uniform technology into the Company's product offerings and control systems; and
- failure to realize any expected revenue increases, cost savings, and other projected benefits from an acquisition.

The Company expects that competition for suitable acquisition candidates may be significant. The Company may compete with other banks or financial service companies with similar acquisition strategies, many of which are larger and have greater financial and other resources. The Company cannot assure that it will be able to successfully identify and acquire suitable acquisition targets on acceptable terms and conditions, or that it will be able to obtain the regulatory approvals needed to complete any such transactions.

The Company cannot provide any assurance that it will be successful in overcoming these risks or any other problems encountered in connection with acquisitions. Potential regulatory enforcement actions could also adversely affect the Company's ability to engage in certain acquisition activities. The Company's inability to overcome the risks inherent in the successful completion and integration of acquisitions could have an adverse effect on the achievement of the Company's business strategy.

There are substantial risks and uncertainties associated with the introduction or expansion of lines of business or new products and services within existing lines of business.

From time to time, the Company may implement new lines of business, offer new products and services within existing lines of business, or offer existing products or services to new industries or market segments. There are substantial risks and uncertainties associated with these efforts, particularly in instances where the markets are not fully developed or industries are heavily regulated. In developing and marketing new lines of business and/or new products and services, the Company may invest significant time and resources. Initial timetables for the introduction and development of new lines of business and/or new products or services may not be achieved and price and profitability targets may not prove attainable. External factors, such as compliance with laws and regulations, competitive alternatives, and shifting market preferences or government policies, may also impact the successful implementation of a new line of business, product or service or the offering of existing products and services to an emerging industry. Furthermore, any new line of business and/or new product or service could have a significant impact on the effectiveness of the Company's system of internal controls. Failure to successfully manage these risks in the development and implementation of new lines of business or new products or services could have a material adverse effect on the Company's business, results of operations, and financial condition.

The Company's future success depends on its ability to compete effectively in a highly competitive and rapidly evolving market.

The Company faces substantial competition in all phases of its operations from a variety of different competitors. The Company's competitors, including large commercial banks, community banks, thrift institutions, mutual savings banks, credit unions, finance companies, insurance companies, securities dealers, brokers, mortgage bankers, investment advisors, money market mutual funds, and other financial institutions, compete with lending and deposit-gathering services offered by the Company. Increased competition in the Company's markets may result in reduced loans and deposits or less favorable pricing.

There is competition for financial services in the markets in which the Company conduct its businesses, including from many local commercial banks, as well as numerous national and regionally based commercial banks. In particular, the Company has experienced intense price and terms competition in some of the lending lines of business and deposits in recent years. Many of these competing institutions have much greater financial and marketing resources than the Company has. Due to their size, larger competitors can achieve economies of scale and may offer a broader range of products and services or more attractive pricing than the Company. In addition, some of the financial services organizations with which the Company competes are not subject to the same degree of regulation as is imposed on bank holding companies and federally insured depository institutions. As a result, these non-bank competitors have certain advantages over the Company in accessing funding and in providing various services.

The banking business in the Company's primary market areas is very competitive, and the level of competition facing the Company may increase further, which may limit its asset growth and financial results. In particular, the Company's predominate source of revenue is net interest income from its loan portfolio. Therefore, if the Company is unable to compete effectively, including sustaining loan and deposit growth at its historical levels, its business and results of operations may be adversely affected.

The financial services industry also is facing increasing competitive pressure from the introduction of disruptive new technologies, often by non-traditional competitors and financial technology companies. Among other things, technology and other changes are allowing customers to complete financial transactions that historically have involved banks at one or both ends of the transaction. The elimination of banks as intermediaries for certain transactions, as well as further disruption of traditional bank businesses and products by non-banks, could result in the loss of fee income and deposits and otherwise adversely affect our business and results.

The Company's success is dependent upon its ability to recruit and retain qualified employees, including members of its divisional and business line leadership and management teams.

The Company's business plan includes and is dependent upon hiring and retaining highly qualified and motivated executives and employees at every level. In particular, the Company's relative success to date has been partly the result of its management's ability to identify and retain highly qualified employees in administrative support roles, as well as those with expertise in certain specialty areas or that have long-standing relationships in their communities or markets. These professionals bring with them valuable knowledge, specialized skills and expertise, and customer relationships and have been an integral part of the Company's ability to attract deposits and to expand its market share.

Additionally, as part of the Company's strategy, the Company depends on divisional and business line leadership and management teams in each of its significant geographic locations. In addition to their skills and experience as bankers, these persons provide the Company with extensive ties within markets upon which the Company's competitive strategy is based.

The Company's ability to retain these highly qualified and motivated persons may be hindered by the fact that it has not entered into employment agreements with most of them. The Company incentivizes employee retention through its equity incentive plans; however, the Company cannot guarantee the effectiveness of its equity incentive plans in retaining these key employees and executives. Were the Company to lose key employees, it may not be able to replace them with equally qualified persons who bring the same knowledge of and ties to the communities and markets within which the Company operates. If the Company is unable to hire or retain qualified employees, it may not be able to successfully execute its business strategy or may incur additional costs to achieve its objectives.

The Company could be harmed if its succession planning is inadequate to mitigate the loss of key members of its senior management team.

The Company believes that its senior management team, including, but not limited to, Robert Sarver, its Executive Chairman and Kenneth Vecchione, its CEO, have contributed greatly to its performance. In addition, the Company from time to time experiences retirements and other changes to its senior management team. The Company's future performance depends on a smooth transition of its senior management, including finding and training highly qualified replacements who are properly equipped to lead the Company. The Company has adopted retention strategies, including equity awards, from which its senior management team benefits in order to achieve its goals, and entered into an employment agreement with Mr. Vecchione, which expires in 2020. However, the Company cannot assure its succession planning and retention strategies will be effective and the loss of senior management could have an adverse effect on the Company's business.

The Company's risk management practices may prove to be inadequate or not fully effective.

The Company's risk management framework seeks to mitigate risk and appropriately balance risk and return. The Company has established policies and procedures intended to identify, monitor, and manage the types of risk to which it is subject, including, but not limited to, credit risk, market risk, liquidity risk, operational risk, legal and compliance risk, and reputational risk. A BOD level risk committee approves and reviews the Company's key risk management policies and oversees operation of the Company's risk management framework. Although the Company has devoted significant resources to developing its risk management policies and procedures and expects to continue to do so in the future, these policies and procedures, as well as the Company's risk management techniques, may not be fully effective. In addition, as regulations and the markets in which the Company operates continue to evolve, the Company's risk management framework may not always keep sufficient pace with those changes. If the Company's risk management framework does not effectively identify or mitigate its risks, the Company could suffer unexpected losses or other material adverse impact. Management of the Company's risks in some cases depends upon the use of analytical and/or forecasting models. If the models the Company uses to mitigate these risks are inadequate, or are subject to ineffective governance, the Company may incur increased losses. In addition, there may be risks that exist, or that develop in the future, that the Company has not appropriately anticipated, identified, or mitigated.

The Company's internal controls and procedures may fail or be circumvented and the accuracy of the Company's judgments and estimates about financial and accounting matters may impact operating results and financial condition.

The Company's management regularly reviews and updates its internal controls over financial reporting, disclosure controls and procedures, and corporate governance policies and procedures. Any system of controls and procedures, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. Any failure or circumvention of the Company's controls and procedures, or failure to comply with regulations related to controls and procedures, could result in materially inaccurate reported financial statements and/or have a material adverse effect on the Company's business, results of operations, and financial condition. Similarly, the Company's management makes certain estimates and judgments in preparing the Company's financial statements. The quality and accuracy of those estimates and judgments will impact the Company's operating results and financial condition.

If the Company is unable to understand and adapt to technological change, the Company's business could be adversely affected.

The financial services industry is continually undergoing rapid technological change with frequent introductions of new technology-driven products and services. The effective use of technology can increase efficiency and enable financial institutions to better serve customers and to reduce costs. However, some new technologies needed to compete effectively result in incremental operating costs. The Company's future success depends, in part, upon its ability to address the needs of its customers by using technology to provide products and services that will satisfy customer demands, as well as to create additional efficiencies in operations. Many of the Company's competitors, because of their larger size and available capital, have substantially greater resources to invest in technological improvements. The Company may not be able to effectively implement new technology-driven products and services or be successful in marketing these products and services to its customers. Failure to successfully keep pace with technological change affecting the financial services industry could have a material adverse impact on the Company's business and, in turn, its financial condition and results of operations.

The markets in which the Company operates are subject to the risk of both natural and man-made disasters.

Many of the real and personal properties securing the Company's loans are located in California. Much of California experiences wildfires from time to time that cause significant damage throughout the state. While these wildfires did not significantly damage the Company's own properties, it is possible that its borrowers may experience losses as a result, which may materially impair their ability to meet the terms of their obligations. California is also prone to other natural disasters, including, but not limited to, drought, earthquakes, flooding, and mudslides. Additional significant natural or man-made disasters in the state of California or in the Company's other markets could lead to damage or injury to the Company's own properties and/or employees, and could increase the risk that many of its borrowers may experience losses or sustained job interruption, which may materially impair their ability to maintain deposits or meet the terms of their loan obligations. Therefore, additional natural disasters, a man-made disaster or a catastrophic event, or a combination of these or other factors, in any of the Company's markets could have a material adverse effect on the Company's business, financial condition, results of operations, and cash flows.

Risks Related to the Banking Industry

The Company operates in a highly regulated environment and the laws and regulations that govern the Company's operations, corporate governance, executive compensation, and accounting principles, or changes in them, or the Company's failure to comply with them, may adversely affect the Company.

The Company is subject to extensive regulation, supervision, and legislation that govern almost all aspects of its operations. Intended to protect customers, depositors, and the DIF, these laws and regulations, among other matters, prescribe minimum capital requirements, impose limitations on the business activities in which the Company can engage, require monitoring and reporting of suspicious activity and of customers who are perceived to present a heightened risk of money laundering or other illegal activity, limit the dividends or distributions that WAB can pay to the Company or that the Company can pay to its stockholders, restrict the ability of affiliates to guarantee the Company's debt, impose certain specific accounting requirements on the Company that may be more restrictive and may result in greater or earlier charges to earnings or reductions in the Company's capital than does GAAP, among other things. Compliance with laws and regulations can be difficult and costly, and changes to laws and regulations often impose significant additional compliance costs. To the extent the Company continues to grow larger and become more complex, regulatory oversight and risk and the cost of compliance will likely increase, which may adversely affect the Company. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Supervision and Regulation" included in this Form 10-K for a more detailed summary of the regulations and supervision to which the Company are subject.

Changes to the legal and regulatory framework governing the Company's operations, including the passage and continued implementation of the Dodd-Frank Act and EGRRCPA, have drastically revised the laws and regulations under which the Company operates. In general, bank regulators have increased their focus on risk management and regulatory compliance, and the Company expects this focus to continue. Additional compliance requirements may be costly to implement, may require additional compliance personnel, and may limit the Company's ability to offer competitive products to its customers.

The Company is also subject to changes in federal and state law, as well as regulations and governmental policies, income tax laws, and accounting principles. Regulations affecting banks and other financial institutions are undergoing continuous review and frequently change, and the ultimate effect of such changes cannot be predicted. Regulations and laws may be modified at any time, and new legislation may be enacted that will affect the Company, WAB, and the Company's other subsidiaries. Any changes in federal and state law, as well as regulations and governmental policies, income tax laws, and accounting principles, could affect the Company in substantial and unpredictable ways, including ways that may adversely affect the Company's business, financial condition, or results of operations. Failure to appropriately comply with any such laws, regulations or principles or an alleged failure to comply, even if the Company acted in good faith or the alleged failure reflects a difference in interpretation, could result in sanctions by regulatory agencies, civil money penalties or damage to the Company's reputation, all of which could adversely affect the Company's business, financial condition, or results of operations.

State and federal banking agencies periodically conduct examinations of the Company's business, including compliance with laws and regulations, and the Company's failure to comply with any supervisory actions to which the Company is or becomes subject as a result of such examinations may adversely affect the Company.

State and federal banking agencies periodically conduct examinations of the Company's business, including for compliance with laws and regulations. If, as a result of an examination, an agency were to determine that the financial condition, capital resources, asset quality, earnings prospects, management, liquidity, or other aspects of any of the Company's operations had become unsatisfactory, or that the Company or its management was in violation of any law or regulation, federal banking agencies may take a number of different remedial or enforcement actions it deems appropriate to remedy such a deficiency. These actions include the power to enjoin "unsafe or unsound" practices, to require affirmative actions to correct any conditions resulting from any violation or practice, to issue an administrative order that can be judicially enforced, to direct an increase in the Company's capital, to restrict the Company's growth, and to assess civil monetary penalties against the Company and/or officers or directors, and to remove officers and directors. If the FDIC concludes that such conditions cannot be corrected or there is an imminent risk of loss to depositors, it may terminate WAB's deposit insurance. Under Arizona law, the state banking supervisory authority has many of the same enforcement powers with respect to its state-chartered banks. Finally, the CFPB has the authority to examine the Company and has authority to take enforcement actions, including the issuance of cease-and-desist orders or civil monetary penalties against the Company if it finds that the Company offers consumer financial products and services in violation of federal consumer financial protection laws or in an unfair, deceptive, or abusive manner.

If the Company were unable to comply with regulatory directives in the future, or if the Company were unable to comply with the terms of any future supervisory requirements to which the Company may become subject, then it could become subject to a variety of supervisory actions and orders, including cease and desist orders, prompt corrective actions, MOUs, and/or other regulatory enforcement actions. If the Company's regulators were to take such supervisory actions, then the Company could, among other things, become subject to restrictions on its ability to enter into acquisitions and develop any new business, as well as restrictions on its existing business. The Company also could be required to raise additional capital, dispose of certain assets and liabilities within a prescribed period of time, or both. Failure to implement the measures in the time frames provided, or at all, could result in additional orders or penalties from federal and state regulators, which could result in one or more of the remedial actions described above. In the event the Company was ultimately unable to comply with the terms of a regulatory enforcement action, it could fail and be placed into receivership by the FDIC or the chartering agency. The terms of any such supervisory action and the consequences associated with any failure to comply therewith could have a material negative effect on the Company's business, operating flexibility, and financial condition.

Uncertainty about the future of LIBOR, and its accepted alternatives, may adversely affect our business.

The United Kingdom Financial Conduct Authority, the agency that regulates LIBOR, has announced it intends to stop compelling banks to submit rates for the calculation of LIBOR after 2021, which may result in the use of LIBOR in financial contracts being phased out by the end of 2021. The ARRC has proposed that the SOFR represents best practice as the alternative to LIBOR for use in derivatives and other financial contracts that are currently indexed to LIBOR. ARRC has proposed a paced market transition plan to SOFR from LIBOR and organizations are currently working on industry wide and company specific transition plans as it relates to derivatives and cash markets exposed to LIBOR. It is not possible at this time to predict what rate or rates may become accepted alternatives to LIBOR, or what the effect of any such changes in views or alternatives may be on the markets for LIBOR-indexed financial instruments. The market transition away from LIBOR to an alternative reference rate, such as the SOFR, is complex and could have a range of adverse effects on our loan and lease and investment portfolios, asset-liability management, business, financial condition and results of operations. LIBOR is the reference rate for many transactions in which the Company lends and borrows money, issues, purchases and sells securities and enters into derivative contracts to manage its or its customers' risk related to these transactions. Accordingly, management has established a LIBOR transition team to lead the Company in the execution of its project plan. Despite these efforts, the manner and impact of this transition and related developments, as well as the effect of these developments on the Company's funding costs, investment and trading securities portfolios, and business, is uncertain and could have a material adverse impact on the Company's profitability.

Changes in interest rates and increased rate competition could adversely affect the Company's profitability, business, and prospects.

Most of the Company's assets and liabilities are monetary in nature, which subjects the Company to significant risks from changes in interest rates and can impact the Company's net income and the valuation of its assets and liabilities. Increases or decreases in prevailing interest rates could have an adverse effect on the Company's business, asset quality, and prospects. The Company derives substantially all of its revenue from net interest income and, therefore, its operating income and net income depend to a great extent on its net interest margin. Net interest margin is the difference between the interest yields the Company receives on loans, securities, and other earning assets and the interest rates the Company pays on interest-bearing deposits, borrowings, and other liabilities. These rates are highly sensitive to many factors beyond the Company's control, including competition, general economic conditions, and monetary and fiscal policies of various governmental and regulatory authorities, including the FRB. In a rising rate environment, the rate of interest the Company pays on its interest-bearing deposits, borrowings, and other liabilities may increase more quickly than the rate of interest the Company receives on loans, securities, and other earning assets, which could adversely impact the Company's net interest income and earnings. The Company's earnings also could be adversely affected in a declining rate environment if the rates on the Company's loans and other investments fall more quickly than those on its deposits and other liabilities. Because of the Company's relatively high reliance on net interest income, its revenue and earnings are more sensitive to changes in market rates than other financial institutions that have more diversified sources of revenue. The Company experiences substantial competition on the basis of interest rates for both loans and deposits.

In addition, loan volumes are affected by market interest rates on loans. Lower interest rates are usually associated with higher loan originations, while rising interest rates are generally associated with a lower volume of loan originations. Conversely, in falling interest rate environments, loan repayment rates will increase and, in rising interest rate environments, loan repayment rates will decline. The Company cannot guarantee that it will be able to minimize interest rate risk. In addition, an increase in the general level of interest rates may adversely affect the ability of certain borrowers to pay the interest on and principal of their obligations.

Interest rates also affect how much money the Company can lend. When interest rates rise, the cost of borrowing increases. Accordingly, changes in market interest rates could materially and adversely affect the Company's net interest income, asset quality, loan origination volume, business, financial condition, results of operations, and cash flows.

The Company is exposed to risk of environmental liabilities with respect to properties to which the Company obtains title.

Approximately 55% of the Company's loan portfolio at December 31, 2019 was secured by real estate. In the course of the Company's business, the Company may foreclose on and take title to real estate, and could be subject to environmental liabilities with respect to these properties. The Company may be held liable to a governmental entity or to third parties for property damage, personal injury, investigation, and clean-up costs incurred by these parties in connection with environmental contamination, or may be required to investigate or clean up hazardous or toxic substances, or chemical releases at a property. The costs associated with investigation or remediation activities could be substantial. In addition, if the Company is the owner or former owner of a contaminated site, the Company may be subject to common law claims by third parties based on damages and costs resulting from environmental contamination emanating from the property. These costs and claims could be substantial and adversely affect the Company's business and prospects.

Risks Related to the Company's Common Stock

The price of the Company's common stock may fluctuate significantly in the future.

The price of the Company's common stock on the New York Stock Exchange constantly changes. The Company expects that the market price of its common stock will continue to fluctuate and there can be no assurances about the market price for its common stock.

The Company's stock price may fluctuate as a result of a variety of factors, many of which are beyond the Company's control. These factors include:

- actual or anticipated changes in the political climate or public policy, including international trade policy;
- sales of the Company's equity securities;
- the Company's financial condition, performance, creditworthiness, and prospects;
- quarterly variations in the Company's operating results or the quality of its assets;
- operating results that vary from the expectations of management, securities analysts, and investors;
- changes in expectations as to the Company's future financial performance;
- announcements of strategic developments, acquisitions, and other material events by the Company or its competitors;
- the operating and securities price performance of other companies that investors believe are comparable to the Company;
- the credit, mortgage, and housing markets, the markets for securities relating to mortgages or housing, and developments with respect to financial institutions generally;
- changes in interest rates and the slope of the yield curve;
- changes in national and global financial markets and economies and general market conditions, such as interest or foreign exchange rates, stock, commodity or real estate valuations or volatility and other geopolitical, regulatory or judicial events; and
- the Company's past and future dividend and share repurchase practices.

There may be future sales or other dilution of the Company's equity, which may adversely affect the market price of the Company's common stock.

The Company is not restricted from issuing additional common stock, including any securities that are convertible into or exchangeable for, or that represent the right to receive, common stock. The Company also grants a significant number of shares of common stock to employees and directors under the Company's Incentive Plan each year. The issuance of any additional shares of the Company's common stock or preferred stock or securities convertible into, exchangeable for or that represent the right to receive common stock, or the exercise of such securities could be substantially dilutive to stockholders of the Company's common stock. Holders of the Company's common stock have no preemptive rights that entitle such holders to purchase their pro rata share of any offering of shares of any class or series. Because the Company's decision to issue securities in any future offering will depend on market conditions, its acquisition activity, and other factors, the Company cannot predict or estimate the amount, timing, or nature of its future offerings. Thus, the Company's stockholders bear the risk of the Company's future offerings reducing the market price of the Company's common stock and diluting their stock holdings in the Company.

There can be no assurance that the Company will continue to declare cash dividends or repurchase stock.

On June 4, 2019, the Company announced that its BOD authorized the initiation of regular quarterly dividends pursuant to which the Company intends to pay dividends on its common stock, subject to quarterly declarations by the BOD. During 2019, the Company declared and paid two quarterly cash dividends of \$0.25 per common share. In December 2018, the Company adopted a common stock repurchase program, pursuant to which the Company was authorized to repurchase up to \$250.0 million of its outstanding common stock through December 2019. During 2019, the Company repurchased an aggregate of 2,822,402 shares of common stock. The common stock repurchase program was renewed through December 2020, authorizing the Company to repurchase up to an additional \$250.0 million of its outstanding common stock.

The Company's dividend payments and/or stock repurchases may change from time-to-time, and no assurance can be provided that it will continue to declare dividends and/or repurchase stock in any particular amounts or at all. Dividends and/or stock repurchases are subject to capital availability and the discretion of the Company's BOD, which must evaluate, among other things, whether cash dividends and/or stock repurchases are in the best interest of its stockholders and are in compliance with all applicable laws and any agreements containing provisions that limit the Company's ability to declare and pay cash dividends and/or repurchase stock. In addition, the amount the Company spends and the number of shares that it is able to repurchase under its stock repurchase program may be further affected by a number of other factors, including the stock price and blackout periods in which the Company is restricted from repurchasing shares. A reduction in or elimination of the Company's dividend payments, dividend program and/or stock repurchases could have a negative effect on the Company's stock price.

Offerings of debt, which would be senior to the Company's common stock upon liquidation, and/or preferred equity securities that may be senior to the Company's common stock for purposes of dividend distributions or upon liquidation, may adversely affect the market price of the Company's common stock.

The Company may from time to time issue debt securities, borrow money through other means, or issue preferred stock. From time to time the Company borrows money from the FRB, the FHLB, other financial institutions, and other lenders. At December 31, 2019, the Company had outstanding \$175,000,000 of 6.25% subordinated debentures with a maturity date of July 1, 2056, and WAB had outstanding \$150,000,000 aggregate principal amount of 5.00% Fixed-to-Floating Rate Subordinated Notes due July 15, 2025. All of these securities or borrowings have priority over the common stock in a liquidation, which could affect the market price of the Company's stock.

The Company's BOD is authorized to issue one or more classes or series of preferred stock from time to time without any action on the part of the stockholders. The Company's BOD also has the power, without stockholder approval, to set the terms of any such classes or series of preferred stock that may be issued, including voting rights, dividend rights, and preferences over the Company's common stock with respect to dividends or upon the Company's dissolution, winding-up, and liquidation and other terms. If the Company issues preferred stock in the future that has a preference over its common stock, with respect to the payment of dividends or upon the Company's liquidation, dissolution, or winding up, or if the Company issues preferred stock with voting rights that dilute the voting power of its common stock and/or the rights of holders of its common stock, the market price of its common stock could be adversely affected.

Anti-takeover provisions could negatively impact the Company's stockholders.

Provisions of Delaware law and provisions of the Company's Certificate of Incorporation, as amended, and its Amended and Restated Bylaws could make it more difficult for a third party to acquire control of the Company or have the effect of discouraging a third party from attempting to acquire control of the Company. Additionally, the Company's Certificate of Incorporation, as amended, authorizes the Company's BOD to issue additional series of preferred stock and such preferred stock could be issued as a defensive measure in response to a takeover proposal. These provisions could make it more difficult for a third party to acquire the Company even if an acquisition might be in the best interest of the Company's stockholders.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

The Company and WAB are headquartered at One E. Washington Street in Phoenix, Arizona. WAB operates 38 domestic branch locations, which include six executive and administrative offices, of which 20 of these locations are owned and 18 are leased. The Company also has several loan production offices across the United States. In addition, WAB owns and occupies a 36,000 square foot operations facility in Las Vegas, Nevada. See "Item 1. Business" for location cities. For information regarding rental payments, see "Note 4. Premises and Equipment" of the Consolidated Financial Statements included in this Form 10-K.

Item 3. Legal Proceedings

There are no material pending legal proceedings to which the Company is a party or to which any of its properties are subject. There are no material proceedings known to the Company to be contemplated by any governmental authority. See the "Supervision and Regulation" section of "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Form 10-K for additional information. From time to time, the Company is involved in a variety of litigation matters in the ordinary course of its business and anticipates that it will become involved in new litigation matters in the future.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

The Company's common stock began trading on the New York Stock Exchange under the symbol "WAL" on June 30, 2005. The Company has filed, without qualifications, its 2019 Domestic Company Section 303A CEO Certification regarding its compliance with the NYSE's corporate governance listing standards.

Holdings

At December 31, 2019, there were approximately 1,476 stockholders of record. This number does not include stockholders who hold shares in the name of brokerage firms or other financial institutions. The Company is not provided the exact number of or identities of these stockholders. There are no other classes of common equity outstanding.

Dividends

During the fourth quarter of 2019, the Company's Board of Directors approved a cash dividend of \$0.25 per share. The dividend payment to shareholders totaled \$25.6 million and was paid on November 29, 2019.

Share Repurchases

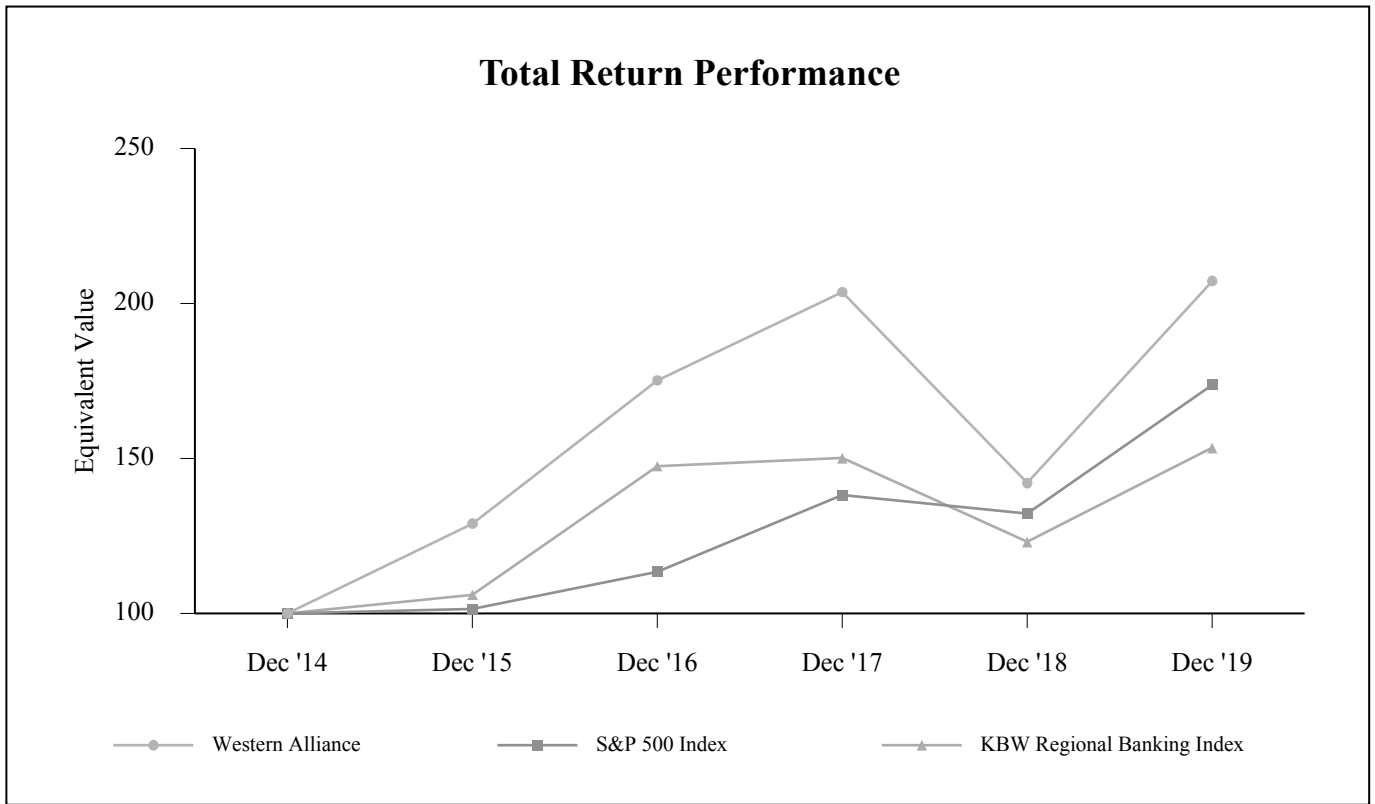
The following table provides information about the Company's purchases of equity securities that are registered by the Company pursuant to Section 12 of the Exchange Act for the periods indicated:

	Total Number of Shares Purchased ⁽¹⁾⁽²⁾	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽²⁾	Approximate Dollar Value of Shares That May Yet to be Purchased Under the Plans or Programs
October 2019	21,998	\$ 48.80	20,000	\$ 97,874,800
November 2019	44,399	51.43	44,399	95,591,561
December 2019	24,530	53.23	24,400	94,293,079
Total	90,927	\$ 51.28	88,799	\$ 94,293,079

- (1) Shares purchased during the period outside of the publicly announced repurchase program were transferred to the Company from employees in satisfaction of minimum tax withholding obligations associated with the vesting of restricted stock awards during the period.
- (2) On December 12, 2018, the Company announced that it had adopted a common stock repurchase program, pursuant to which the Company was authorized to repurchase up to \$250 million of its shares of common stock through December 31, 2019. The Company had \$94.3 million in authorized common stock repurchase capacity that expired under the original program as of December 31, 2019. The Company's common stock repurchase program was renewed through December 2020, authorizing the Company to repurchase up to an additional \$250.0 million of its outstanding common stock.

Performance Graph

The following graph summarizes a five year comparison of the cumulative total returns for the Company's common stock, the Standard & Poor's 500 stock index and the KBW Regional Banking Total Return Index, each of which assumes an initial value of \$100.00 on December 31, 2014 and reinvestment of dividends.



Item 6. Selected Financial Data.

The following selected financial data have been derived from the Company's consolidated financial condition and results of operations, as of and for the years ended December 31, 2019, 2018, 2017, 2016, and 2015, and should be read in conjunction with the Consolidated Financial Statements and the related notes included elsewhere in this report:

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	<i>(in thousands)</i>				
Results of Operations:					
Interest income	\$ 1,225,045	\$ 1,033,483	\$ 845,513	\$ 700,506	\$ 525,144
Interest expense	184,633	117,604	60,849	43,293	32,568
Net interest income	1,040,412	915,879	784,664	657,213	492,576
Provision for credit losses	18,500	23,000	17,250	8,000	3,200
Net interest income after provision for credit losses	1,021,912	892,879	767,414	649,213	489,376
Non-interest income	65,095	43,116	45,344	42,915	29,768
Non-interest expense	482,781	425,667	360,941	330,949	260,606
Income before provision for income taxes	604,226	510,328	451,817	361,179	258,538
Income tax expense	105,055	74,540	126,325	101,381	64,294
Net income	\$ 499,171	\$ 435,788	\$ 325,492	\$ 259,798	\$ 194,244

As of and for the Year Ended December 31,

	2019	2018	2017	2016	2015
	<i>(dollars in thousands, except per share data)</i>				
Per Share Data:					
Earnings per share available to common stockholders - basic	\$ 4.86	\$ 4.16	\$ 3.12	\$ 2.52	\$ 2.05
Earnings per share available to common stockholders - diluted	4.84	4.14	3.10	2.50	2.03
Dividends paid per share	0.50	—	—	—	—
Book value per common share	29.42	24.90	21.14	18.00	15.44
Tangible book value per share ¹	26.54	22.07	18.31	15.17	12.54
Shares outstanding at period end	102,524	104,949	105,487	105,071	103,087
Weighted average shares outstanding - basic	102,667	104,669	104,179	103,042	94,570
Weighted average shares outstanding - diluted	103,133	105,370	104,997	103,843	95,219
Selected Balance Sheet Data:					
Cash and cash equivalents	\$ 434,596	\$ 498,572	\$ 416,768	\$ 284,491	\$ 224,640
Investment securities and money market investments	3,970,118	3,694,961	3,754,569	2,702,512	1,984,126
Loans, net of deferred loan fees and costs	21,123,296	17,710,629	15,093,935	13,208,436	11,136,663
Allowance for credit losses	167,797	152,717	140,050	124,704	119,068
Total assets	26,821,948	23,109,486	20,329,085	17,200,842	14,275,089
Total deposits	22,796,493	19,177,447	16,972,532	14,549,863	12,030,624
Other borrowings	—	491,000	390,000	80,000	150,000
Qualifying debt	393,563	360,458	376,905	367,937	210,328
Total stockholders' equity	3,016,748	2,613,734	2,229,698	1,891,529	1,591,502
Selected Other Balance Sheet Data:					
Average assets	\$ 24,914,123	\$ 21,246,315	\$ 18,869,553	\$ 16,134,263	\$ 12,420,803
Average earning assets	23,586,512	20,064,545	17,770,939	15,117,364	11,621,977
Average stockholders' equity	2,845,379	2,411,709	2,079,287	1,770,914	1,323,952
Selected Financial and Liquidity Ratios:					
Return on average assets	2.00%	2.05%	1.72%	1.61%	1.56 %
Return on average tangible common equity ¹	19.60	20.64	18.31	17.71	17.83
Net interest margin	4.52	4.68	4.65	4.58	4.51
Loan to deposit ratio	92.66	92.35	88.93	90.78	92.57
Capital Ratios:					
Tier 1 leverage ratio	10.6%	10.9%	10.3%	9.9%	9.8 %
Tier 1 capital ratio	10.9	11.1	10.8	10.5	10.2
Total capital ratio	12.8	13.2	13.3	13.2	12.2
Selected Asset Quality Ratios:					
Net charge-offs (recoveries) to average loans outstanding	0.02%	0.06%	0.01%	0.02%	(0.06)%
Non-accrual loans to gross loans	0.27	0.16	0.29	0.31	0.44
Non-accrual loans and repossessed assets to total assets	0.26	0.20	0.36	0.51	0.65
Loans past due 90 days or more and still accruing to gross loans	—	0.00	0.00	0.01	0.03
Allowance for credit losses to gross loans	0.80	0.86	0.93	0.95	1.07
Allowance for credit losses to non-accrual loans	299.81	550.41	318.84	309.65	246.10

¹ See Non-GAAP Financial Measures section beginning on page 33.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis is designed to provide insight on the financial condition and results of operations of Western Alliance Bancorporation and its subsidiaries and should be read in conjunction with "Item 8. Financial Statements and Supplementary Data." This discussion and analysis contains forward-looking statements that involve risk, uncertainties, and assumptions. Certain risks, uncertainties, and other factors, including, but not limited to, those set forth under "Forward-Looking Statements" at the beginning of Part I of this Form 10-K and those discussed in Part I, Item 1A of this Form 10-K under the heading "Risk Factors," may cause actual results to differ materially from those projected in the forward-looking statements.

For a comparison of the 2018 results to the 2017 results and other 2017 information not included herein, refer to the "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Financial Overview and Highlights

WAL is a bank holding company headquartered in Phoenix, Arizona, incorporated under the laws of the state of Delaware. WAL provides a full spectrum of deposit, lending, treasury management, international banking, and online banking products and services through its wholly-owned banking subsidiary, WAB.

WAB operates the following full-service banking divisions: ABA, BON and FIB, Bridge, and TPB. The Company also serves business customers through a national platform of specialized financial services.

Financial Results Highlights of 2019

- Net income of \$499.2 million for 2019, compared to \$435.8 million for 2018
- Diluted earnings per share of \$4.84 for 2019, compared to \$4.14 per share for 2018
- Net operating revenue of \$1.1 billion, constituting year-over-year growth of 13.1%, or \$127.0 million, compared to an increase in operating non-interest expenses of 14.9%, or \$62.2 million¹
- Operating PPNR increased \$64.8 million to \$618.3 million, compared to \$553.5 million in 2018¹
- Income tax expense increased \$30.5 million to \$105.1 million, compared to \$74.5 million in 2018
- Total loans of \$21.1 billion, up \$3.4 billion from December 31, 2018
- Total deposits of \$22.8 billion, up \$3.6 billion from December 31, 2018
- Stockholders' equity of \$3.0 billion, an increase of \$403.0 million from December 31, 2018
- Nonperforming assets (nonaccrual loans and repossessed assets) increased to 0.26% of total assets, from 0.20% at December 31, 2018
- Net loan charge-offs to average loans outstanding of 0.02% for 2019, compared to 0.06% for 2018
- Net interest margin of 4.52% in 2019, compared to 4.68% in 2018
- Return on average assets of 2.00% for 2019, compared to 2.05% for 2018
- Tangible common equity ratio of 10.3%, compared to 10.2% at December 31, 2018¹
- Tangible book value per share, net of tax, of \$26.54, an increase of 20.3% from \$22.07 at December 31, 2018¹
- Operating efficiency ratio of 42.7% in 2019, compared to 41.9% in 2018¹

The impact to the Company from these items, and others of both a positive and negative nature, are discussed in more detail below as they pertain to the Company's overall comparative performance for the year ended December 31, 2019.

¹ See Non-GAAP Financial Measures section beginning on page 33.

As a bank holding company, management focuses on key ratios in evaluating the Company's financial condition and results of operations.

Results of Operations and Financial Condition

A summary of the Company's results of operations, financial condition, and selected metrics are included in the following tables:

	Year Ended December 31,		
	2019	2018	2017
	<i>(dollars in thousands, except per share amounts)</i>		
Net income	\$ 499,171	\$ 435,788	\$ 325,492
Earnings per share - basic	4.86	4.16	3.12
Earnings per share - diluted	4.84	4.14	3.10
Return on average assets	2.00%	2.05%	1.72%
Return on average tangible common equity ¹	19.60	20.64	18.31
Net interest margin	4.52	4.68	4.65
Operating efficiency ratio ¹	42.68	41.93	41.51

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Total assets	\$ 26,821,948	\$ 23,109,486
Total loans, net of deferred loan fees and costs	21,123,296	17,710,629
Securities and money market investments	3,970,118	3,694,961
Total deposits	22,796,493	19,177,447
Other borrowings	—	491,000
Qualifying debt	393,563	360,458
Stockholders' equity	3,016,748	2,613,734
Tangible common equity, net of tax ¹	2,721,061	2,316,464

¹ See Non-GAAP Financial Measures section beginning on page 33.

Asset Quality

For all banks and bank holding companies, asset quality plays a significant role in the overall financial condition of the institution and results of operations. The Company measures asset quality in terms of non-accrual loans as a percentage of gross loans and net charge-offs as a percentage of average loans. Net charge-offs are calculated as the difference between charged-off loans and recovery payments received on previously charged-off loans. The following table summarizes the Company's key asset quality metrics:

	At or for the Year Ended December 31,		
	2019	2018	2017
	<i>(dollars in thousands)</i>		
Non-accrual loans	\$ 55,968	\$ 27,746	\$ 43,925
Reposessed assets	13,850	17,924	28,540
Non-performing assets	98,174	82,722	114,939
Loans past due 90 days and still accruing	—	594	43
Non-accrual loans to gross loans	0.27%	0.16%	0.29%
Nonaccrual and reposessed assets to total assets	0.26	0.20	0.36
Loans past due 90 days and still accruing to gross loans	—	0.00	0.00
Allowance for credit losses to gross loans	0.80	0.86	0.93
Allowance for credit losses to non-accrual loans	299.81	550.41	318.84
Net charge-offs to average loans outstanding	0.02	0.06	0.01

Asset and Liability Growth

The Company's assets and liabilities are comprised primarily of loans and deposits. Therefore, the ability to originate new loans and attract new deposits is fundamental to the Company's growth.

Total assets increased to \$26.8 billion at December 31, 2019 from \$23.1 billion at December 31, 2018. The increase in total assets of \$3.7 billion, or 16.1%, relates primarily to organic loan growth of \$3.4 billion or 19.3%, to \$21.1 billion as of December 31, 2019, compared to \$17.7 billion as of December 31, 2018. The increase in loans from December 31, 2018 was driven by commercial and industrial loans of \$1.6 billion, CRE non-owner occupied loans of \$1.0 billion, and residential real estate loans of \$943.3 million. Total deposits increased \$3.6 billion, or 18.9%, to \$22.8 billion as of December 31, 2019 from \$19.2 billion as of December 31, 2018. The increase in deposits from December 31, 2018 was driven by an increase in savings and money market deposits of \$1.8 billion, non-interest-bearing demand deposit of \$1.1 billion, and certificates of deposits of \$542.0 million from December 31, 2018.

RESULTS OF OPERATIONS

The following table sets forth a summary financial overview for the comparable periods:

	Year Ended December 31,		Increase (Decrease)
	2019	2018	
<i>(in thousands, except per share amounts)</i>			
Consolidated Income Statement Data:			
Interest income	\$ 1,225,045	\$ 1,033,483	\$ 191,562
Interest expense	184,633	117,604	67,029
Net interest income	1,040,412	915,879	124,533
Provision for credit losses	18,500	23,000	(4,500)
Net interest income after provision for credit losses	1,021,912	892,879	129,033
Non-interest income	65,095	43,116	21,979
Non-interest expense	482,781	425,667	57,114
Income before provision for income taxes	604,226	510,328	93,898
Income tax expense	105,055	74,540	30,515
Net income	\$ 499,171	\$ 435,788	\$ 63,383
Earnings per share - basic	\$ 4.86	\$ 4.16	\$ 0.70
Earnings per share - diluted	\$ 4.84	\$ 4.14	\$ 0.70

Non-GAAP Financial Measures

The following discussion and analysis contains financial information determined by methods other than those prescribed by GAAP. The Company's management uses these non-GAAP financial measures in their analysis of the Company's performance. These measurements typically adjust GAAP performance measures to exclude the effects of certain activities or transactions that, in management's opinion, do not reflect recurring period-to-period comparisons of the Company's performance. Management believes presentation of these non-GAAP financial measures provides useful supplemental information that is essential to a complete understanding of the operating results of the Company's core businesses. Since the presentation of these non-GAAP performance measures and their impact differ between companies, these non-GAAP disclosures should not be viewed as a substitute for operating results determined in accordance with GAAP, nor are they necessarily comparable to non-GAAP performance measures that may be presented by other companies.

Operating Pre-Provision Net Revenue

Operating PPNR is defined by the Federal Reserve in SR 14-3, which requires companies subject to the rule to project PPNR over the planning horizon for each of the economic scenarios defined annually by the regulators. Banking regulations define PPNR as net interest income plus non-interest income less non-interest expense. Management has further adjusted this metric to exclude any non-recurring or non-operational elements of non-interest income or non-interest expense, which are outlined in the table below. Management believes that this is an important metric as it illustrates the underlying performance of the Company, enables investors and others to assess the Company's ability to generate capital to cover credit losses through the credit cycle, and provides consistent reporting with a key metric used by bank regulatory agencies.

The following table shows the components of operating PPNR for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Total non-interest income	\$ 65,095	\$ 43,116	\$ 45,344
Less:			
Gain (loss) on sales of investment securities, net (1)	3,152	(7,656)	2,343
Fair value gain (loss) adjustments on assets measured at fair value, net (1)	5,119	(3,611)	(1)
Total operating non-interest income	56,824	54,383	43,002
Plus: net interest income	1,040,412	915,879	784,664
Net operating revenue	\$ 1,097,236	\$ 970,262	\$ 827,666
Total non-interest expense	\$ 482,781	\$ 425,667	\$ 360,941
Less:			
Contribution to charitable foundation (2)	—	7,645	—
401(k) plan change and other miscellaneous items (2)	—	1,218	—
Net loss (gain) on sales / valuations of repossessed and other assets (1)	3,818	9	(80)
Total operating non-interest expense	\$ 478,963	\$ 416,795	\$ 361,021
Operating pre-provision net revenue	\$ 618,273	\$ 553,467	\$ 466,645
Plus:			
Revenue adjustments	8,271	(11,267)	2,342
Less:			
Provision for credit losses	18,500	23,000	17,250
Expense adjustments	3,818	8,872	(80)
Income before provision for income taxes	604,226	510,328	451,817
Income tax expense	105,055	74,540	126,325
Net income	\$ 499,171	\$ 435,788	\$ 325,492

- (1) The operating PPNR non-GAAP performance metric is adjusted to exclude the effects of this non-operational item.
- (2) The operating PPNR non-GAAP performance metric is adjusted to exclude the effects of these non-recurring items. See "Note 19. Related Party Transactions" for further information regarding the charitable contribution.

Tangible Common Equity

The following table presents financial measures related to tangible common equity. Tangible common equity represents total stockholders' equity, less identifiable intangible assets and goodwill. Management believes that tangible common equity financial measures are useful in evaluating the Company's capital strength, financial condition, and ability to manage potential losses. In addition, management believes that these measures improve comparability to other institutions that have not engaged in acquisitions that resulted in recorded goodwill and other intangible assets.

	December 31	
	2019	2018
	<i>(dollars and shares in thousands)</i>	
Total stockholders' equity	\$ 3,016,748	\$ 2,613,734
Less: goodwill and intangible assets	297,608	299,155
Total tangible stockholders' equity	2,719,140	2,314,579
Plus: deferred tax - attributed to intangible assets	1,921	1,885
Total tangible common equity, net of tax	\$ 2,721,061	\$ 2,316,464
Total assets	\$ 26,821,948	\$ 23,109,486
Less: goodwill and intangible assets, net	297,608	299,155
Tangible assets	26,524,340	22,810,331
Plus: deferred tax - attributed to intangible assets	1,921	1,885
Total tangible assets, net of tax	\$ 26,526,261	\$ 22,812,216
Tangible common equity ratio	10.3%	10.2%
Common shares outstanding	102,524	104,949
Book value per share	\$ 29.42	\$ 24.90
Tangible book value per share, net of tax	26.54	22.07

Operating Efficiency Ratio

The following table shows the components used in the calculation of the operating efficiency ratio, which management uses as a metric for assessing cost efficiency:

	Year Ended December 31,		
	2019	2018	2017
	<i>(dollars in thousands)</i>		
Total operating non-interest expense	\$ 478,963	\$ 416,795	\$ 361,021
Divided by:			
Total net interest income	\$ 1,040,412	\$ 915,879	\$ 784,664
Plus:			
Tax equivalent interest adjustment	25,094	23,809	41,989
Operating non-interest income	56,824	54,383	43,002
Net operating revenue - TEB	\$ 1,122,330	\$ 994,071	\$ 869,655
Operating efficiency ratio - TEB	42.7%	41.9%	41.5%

Regulatory Capital

The following table presents certain financial measures related to regulatory capital under Basel III, which includes Common Equity Tier 1 and total capital. The FRB and other banking regulators use Common Equity Tier 1 and total capital as a basis for assessing a bank's capital adequacy; therefore, management believes it is useful to assess financial condition and capital adequacy using this same basis. Specifically, the total capital ratio takes into consideration the risk levels of assets and off-balance sheet financial instruments. In addition, management believes that the classified assets to Common Equity Tier 1 plus allowance measure is an important regulatory metric for assessing asset quality.

	December 31,	
	2019	2018
	<i>(dollars in thousands)</i>	
Common Equity Tier 1:		
Common Equity	\$ 3,016,748	\$ 2,613,734
Less:		
Non-qualifying goodwill and intangibles	295,607	296,769
Disallowed deferred tax asset	2,243	768
AOCI related adjustments	21,379	(47,055)
Unrealized gain on changes in fair value liabilities	3,629	13,432
Common Equity Tier 1	\$ 2,693,890	\$ 2,349,820
Divided by: Risk-weighted assets	\$ 25,390,142	\$ 21,983,976
Common Equity Tier 1 ratio	10.6%	10.7%
Common Equity Tier 1	\$ 2,693,890	\$ 2,349,820
Plus:		
Trust preferred securities	81,500	81,500
Less:		
Disallowed deferred tax asset	—	—
Unrealized gain on changes in fair value liabilities	—	—
Tier 1 capital	\$ 2,775,390	\$ 2,431,320
Divided by: Tangible average assets	\$ 26,110,275	\$ 22,204,799
Tier 1 leverage ratio	10.6%	10.9%
Total Capital:		
Tier 1 capital	\$ 2,775,390	\$ 2,431,320
Plus:		
Subordinated debt	305,732	305,131
Qualifying allowance for credit losses	167,797	152,717
Other	8,955	8,188
Less: Tier 2 qualifying capital deductions	—	—
Tier 2 capital	\$ 482,484	\$ 466,036
Total capital	\$ 3,257,874	\$ 2,897,356
Total capital ratio	12.8%	13.2%
Classified assets to Tier 1 capital plus allowance for credit losses:		
Classified assets	\$ 171,246	\$ 242,101
Divided by:		
Tier 1 capital	2,775,390	2,431,320
Plus: Allowance for credit losses	167,797	152,717
Total Tier 1 capital plus allowance for credit losses	\$ 2,943,187	\$ 2,584,037
Classified assets to Tier 1 capital plus allowance	5.8%	9.4%

Net Interest Margin

The net interest margin is reported on a TEB. A tax equivalent adjustment is added to reflect interest earned on certain securities and loans that are exempt from federal and state income tax. The following tables set forth the average balances, interest income, interest expense, and average yield (on a fully TEB) for the periods indicated:

	Year Ended December 31,					
	2019			2018		
	Average Balance	Interest	Average Yield / Cost	Average Balance	Interest	Average Yield / Cost
	<i>(dollars in thousands)</i>					
Interest earning assets						
Loans:						
Commercial and industrial	\$ 8,200,542	\$ 461,918	5.78%	\$ 7,039,090	\$ 387,422	5.68%
CRE - non-owner occupied	4,629,580	270,353	5.85	3,952,702	234,753	5.95
CRE - owner occupied	2,284,746	120,607	5.38	2,263,112	118,351	5.34
Construction and land development	2,176,595	155,459	7.16	1,975,587	137,227	6.96
Residential real estate	1,663,544	80,669	4.85	616,159	29,681	4.82
Consumer	64,291	3,712	5.77	54,078	3,143	5.81
Loans held for sale	5,556	352	6.34	—	—	—
Total loans (1), (2), (3)	19,024,854	1,093,070	5.83	15,900,728	910,577	5.82
Securities:						
Securities - taxable	2,904,567	79,124	2.72	2,803,350	78,630	2.80
Securities - tax-exempt	1,008,655	36,765	4.57	879,888	33,042	4.69
Total securities (1)	3,913,222	115,889	3.20	3,683,238	111,672	3.26
Other	648,436	16,086	2.48	480,579	11,234	2.34
Total interest earning assets	23,586,512	1,225,045	5.30	20,064,545	1,033,483	5.27
Non-interest earning assets						
Cash and due from banks	214,470			145,246		
Allowance for credit losses	(159,907)			(146,288)		
Bank owned life insurance	171,960			168,685		
Other assets	1,101,088			1,014,127		
Total assets	\$ 24,914,123			\$ 21,246,315		
Interest-bearing liabilities						
Interest-bearing deposits:						
Interest-bearing transaction accounts	\$ 2,545,806	\$ 20,988	0.82%	\$ 1,891,160	\$ 11,584	0.61%
Savings and money market accounts	8,125,832	95,533	1.18	6,501,241	54,962	0.85
Certificates of deposit	2,117,177	41,884	1.98	1,748,675	23,918	1.37
Total interest-bearing deposits	12,788,815	158,405	1.24	10,141,076	90,464	0.89
Short-term borrowings	134,622	2,838	2.11	260,662	4,853	1.86
Qualifying debt	379,675	23,390	6.16	362,410	22,287	6.15
Total interest-bearing liabilities	13,303,112	184,633	1.39	10,764,148	117,604	1.09
Interest cost of funding earning assets			0.78%			0.59%
Non-interest-bearing liabilities						
Non-interest-bearing demand deposits	8,246,232			7,712,791		
Other liabilities	519,400			357,667		
Stockholders' equity	2,845,379			2,411,709		
Total liabilities and stockholders' equity	\$ 24,914,123			\$ 21,246,315		
Net interest income and margin (4)		\$ 1,040,412	4.52%		\$ 915,879	4.68%

- (1) Yields on loans and securities have been adjusted to a TEB. The taxable-equivalent adjustment was \$25.1 million and \$23.8 million for 2019 and 2018, respectively.
- (2) Included in the yield computation are net loan fees of \$56.2 million and accretion on acquired loans of \$12.7 million for 2019, compared to \$44.8 million and \$18.6 million for 2018, respectively.
- (3) Includes non-accrual loans.
- (4) Net interest margin is computed by dividing net interest income by total average earning assets.

	Year Ended December 31,		
	2019 versus 2018		
	Increase (Decrease) Due to Changes in (1)		
	Volume	Rate	Total
	<i>(in thousands)</i>		
Interest income:			
Loans:			
Commercial and industrial	\$ 65,422	\$ 9,074	\$ 74,496
CRE - non-owner occupied	39,528	(3,928)	35,600
CRE - owner occupied	1,142	1,114	2,256
Construction and land development	14,357	3,875	18,232
Residential real estate	50,790	198	50,988
Consumer	590	(21)	569
Loans held for sale	352	—	352
Total loans	<u>172,181</u>	<u>10,312</u>	<u>182,493</u>
Securities:			
Securities - taxable	2,757	(2,263)	494
Securities - tax-exempt	4,693	(970)	3,723
Total securities	<u>7,450</u>	<u>(3,233)</u>	<u>4,217</u>
Other	4,164	688	4,852
Total interest income	<u>183,795</u>	<u>7,767</u>	<u>191,562</u>
Interest expense:			
Interest-bearing transaction accounts	\$ 5,397	\$ 4,007	\$ 9,404
Savings and money market	19,100	21,471	40,571
Time certificates of deposit	7,290	10,676	17,966
Short-term borrowings	(2,657)	642	(2,015)
Qualifying debt	1,064	39	1,103
Total interest expense	<u>30,194</u>	<u>36,835</u>	<u>67,029</u>
Net increase	<u>\$ 153,601</u>	<u>\$ (29,068)</u>	<u>\$ 124,533</u>

(1) Changes due to both volume and rate have been allocated to volume changes.

Comparison of interest income, interest expense and net interest margin

The Company's primary source of revenue is interest income. For the year ended December 31, 2019, interest income was \$1.2 billion, an increase of \$191.6 million, or 18.5%, compared to \$1.0 billion for the year ended December 31, 2018. This increase was primarily the result of a \$3.1 billion increase in the average loan balance that drove a \$182.5 million increase in loan interest income for the year ended December 31, 2019. Interest income from investment securities increased by \$4.2 million for the comparable period primarily due to an increase in the average investment balance of \$230.0 million, partially offset by a decrease in interest rates from December 31, 2018. Other interest income increased \$4.9 million from the comparable period due primarily to an increase in interest-bearing cash account balances. Average yield on interest earning assets increased to 5.30% for the year ended December 31, 2019, compared to 5.27% in 2018, which was primarily the result of increased yields on the Company's interest-bearing cash accounts.

For the year ended December 31, 2019, interest expense was \$184.6 million, compared to \$117.6 million for the year ended December 31, 2018. Interest expense on deposits increased \$67.9 million for the same period as average interest-bearing deposits increased \$2.6 billion, which was paired with a 35-basis point increase in the average cost of interest-bearing deposits. Interest expense on short-term borrowings decreased by \$2.0 million as a result of a \$126.0 million decrease in average short-term borrowings for the year ended December 31, 2019 compared to the same period in 2018. Interest expense on qualifying debt increased by \$1.1 million due to changes in related interest rate swap expense arising from fluctuations in interest rates.

For the year ended December 31, 2019, net interest income was \$1.0 billion, compared to \$915.9 million for the year ended December 31, 2018. The increase in net interest income reflects a \$3.5 billion increase in average interest earning assets, offset by a \$2.5 billion increase in average interest-bearing liabilities. The decrease in net interest margin of 16 basis points compared to 2018 is the result of higher deposit and funding costs.

Provision for Credit Losses

The provision for credit losses on loans in each period is reflected as a reduction in earnings for that period. The provision is equal to the amount required to maintain the allowance for credit losses at a level that is adequate to absorb probable credit losses inherent in the loan portfolio. For the year ended December 31, 2019, the provision for credit losses was \$18.5 million, compared to \$23.0 million for the year ended December 31, 2018. The decrease in the provision was primarily due to a reduction in net charge-offs and loan mix.

The Company may also establish an additional allowance for credit losses on PCI loans through provision for credit losses when impairment is determined as a result of lower than expected cash flows. As of December 31, 2019 and 2018, the allowance for credit losses on PCI loans was \$0.1 million. For non-PCI loans, an additional allowance for credit losses is established when the remaining credit marks on these loans are lower than the Company's calculated allowance for similar types of organic loans. As of December 31, 2019 and 2018, the allowance for credit losses on non-PCI loans was \$0.9 million and \$3.4 million, respectively.

The Company also records estimated losses on unfunded loan commitments, which are classified as non-interest expense, with corresponding reserves in other liabilities. For the years ended December 31, 2019 and 2018, the Company recorded \$0.8 million and \$2.0 million, respectively, in non-interest expense for estimated losses on unfunded loan commitments. As of December 31, 2019 and 2018, the loss contingency for unfunded loan commitments and letters of credit was \$9.0 million and \$8.2 million as of December 31, 2019 and 2018, respectively.

Non-interest Income

The following table presents a summary of non-interest income for the periods presented:

	Year Ended December 31,		
	2019	2018	Increase (Decrease)
		(in thousands)	
Service charges and fees	\$ 23,353	\$ 22,295	\$ 1,058
Income from equity investments	8,290	8,595	(305)
Card income	6,979	8,009	(1,030)
Foreign currency income	4,987	4,760	227
Income from bank owned life insurance	3,901	3,946	(45)
Lending related income and gains (losses) on sale of loans, net	3,158	4,340	(1,182)
Gain (loss) on sales of investment securities, net	3,152	(7,656)	10,808
Fair value gain (loss) adjustments on assets measured at fair value, net	5,119	(3,611)	8,730
Other income	6,156	2,438	3,718
Total non-interest income	\$ 65,095	\$ 43,116	\$ 21,979

Total non-interest income for the year ended December 31, 2019 compared to 2018, increased by \$22.0 million, or 51.0%. The increase is due to sales of investment securities and fair value adjustments. The net gain on sales of investment securities of \$3.2 million during the year ended December 31, 2019 was the result of a portfolio re-balancing initiative. The net loss on sales of investment securities of \$7.7 million during the year ended December 31, 2018 relates to sales of low yielding investment securities, which were replaced with investment securities with shorter durations and higher yields, as well as losses on sales of equity securities. The net fair value gain on assets measured at fair value was \$5.1 million for the year ended December 31, 2019, compared to a net loss of \$3.6 million for the year ended December 31, 2018, which resulted from changes in the fair market value of the Company's equity securities. Other increases in non-interest income were due to increases in service charges and fees and other non-interest income. The increase in service charges and fees of \$1.1 million is due to continued growth in the Company's deposit base, which increased \$3.6 billion during the year ended December 31, 2019. The increase in other non-interest income of \$3.7 million is due primarily to an increase in rental income on equipment leases. These increases were partially offset by a decrease in lending income of \$1.2 million due to fewer gains on the sale of loans compared to the same period in 2018.

Non-interest Expense

The following table presents a summary of non-interest expense for the periods presented:

	Year Ended December 31,		
	2019	2018	Increase (Decrease)
		(in thousands)	
Salaries and employee benefits	\$ 279,274	\$ 253,238	\$ 26,036
Legal, professional, and directors' fees	37,009	28,722	8,287
Occupancy	32,507	29,404	3,103
Deposit costs	31,719	18,900	12,819
Data processing	30,577	22,716	7,861
Insurance	11,924	14,005	(2,081)
Loan and repossessed asset expenses	7,571	4,578	2,993
Business development	7,043	5,960	1,083
Marketing	4,199	3,770	429
Card expense	2,346	4,301	(1,955)
Intangible amortization	1,547	1,594	(47)
Net loss (gain) on sales / valuations of repossessed and other assets	3,818	9	3,809
Other expense	33,247	38,470	(5,223)
Total non-interest expense	\$ 482,781	\$ 425,667	\$ 57,114

Total non-interest expense for the year ended December 31, 2019 compared to 2018, increased \$57.1 million, or 13.4%. This increase primarily relates to salaries and employee benefits, deposit costs, legal, professional, and directors' fees, data processing, net loss on sales/valuations of repossessed and other assets, and occupancy expenses. Salaries and employee benefits have increased as the Company supports its continued growth through hiring and incentives. Full-time equivalent employees increased 2.7% to 1,835 during the year ended December 31, 2019. Deposit costs consist of fees to the Promontory Interfinancial Network and others for reciprocal deposits as well as earnings credits on select deposits. The increase in deposit costs of \$12.8 million for 2019 compared to 2018 relates primarily to an increase in deposit earnings credits paid to account holders due to a higher amount of deposits eligible for these credits. The increase to legal, professional, and directors' fees of \$8.3 million largely relates to consulting projects aimed at the implementation of CECL and other technology initiatives that will help position the Company for continued growth. The net loss on sales/valuations of repossessed and other assets of \$3.8 million primarily relates to valuation adjustments on OREO properties. The other significant increases to non-interest expense consist of increases in data processing and occupancy of \$7.9 million and \$3.1 million, respectively, which relate to the Company's support of its continued growth. These increases were partially offset by a decrease in other non-interest expense of \$5.2 million, which primarily relates to a non-recurring charitable donation of \$7.6 million made in 2018 as well as a decrease in FDIC insurance costs of \$2.4 million due to the elimination of the FDIC assessment surcharge in the fourth quarter of 2018. The decrease in other non-interest expense was offset in part by a \$3.2 million increase in depreciation expense on leased equipment.

Income Taxes

For the years ended December 31, 2019, 2018, and 2017 the Company's effective tax rate was 17.39%, 14.61%, and 27.96%, respectively. The increase in the effective tax rate from 2018 to 2019 is due primarily to management's decision during the third quarter of 2018 to carryback its 2017 federal NOLs. The decrease in the effective tax rate from 2017 to 2018 is due primarily to the decrease in the federal statutory rate effective in 2018, a reduction in excise taxes, and management's decision during the third quarter 2018 to carryback its 2017 federal NOLs. The reduction in excise taxes from 2017 to 2018 resulted from not deferring WAB's 2018 dividend from BW Real Estate as was the case in 2017. The Company's 2017 federal NOLs resulted from the acceleration of deductions into and deferral of revenue from 2017. As the federal income tax rate was higher in the years to which the carryback is applicable, a larger tax benefit results from the decision to carryback the 2017 federal NOLs, rather than carryforward these losses to future taxable years.

Business Segment Results

The Company's reportable segments are defined primarily based on geographic location, services offered, and markets served. The Company's regional segments, which include Arizona, Nevada, Southern California, and Northern California, provide full service banking and related services to their respective markets. The Company's NBL segments, which include HOA services, Public & Nonprofit Finance, Technology & Innovation, HFF, and Other NBLs, provide specialized banking services to niche markets. These NBLs are managed centrally and are broader in geographic scope than the Company's other segments, though still predominately located within the Company's core market areas. The Corporate & Other segment consists of corporate-related items, income and expense items not allocated to the Company's other reportable segments, and inter-segment eliminations.

The following tables present selected operating segment information for the periods presented:

	Consolidated Company	Regional Segments				
		Arizona	Nevada	Southern California	Northern California	
December 31, 2019						
Loans, net of deferred loan fees and costs	\$ 21,123.3	\$ 3,847.9	\$ 2,252.5	\$ 2,253.9	\$ 1,311.2	
Deposits	22,796.5	5,384.7	4,350.1	2,585.3	2,373.6	
December 31, 2018						
Loans, net of deferred loan fees and costs	\$ 17,710.6	\$ 3,647.9	\$ 2,003.5	\$ 2,161.1	\$ 1,300.2	
Deposits	19,177.4	5,090.2	3,996.4	2,347.5	1,839.1	
Year Ended December 31, 2019						
Income (loss) before income taxes	\$ 604,226	\$ 156,493	\$ 111,001	\$ 73,649	\$ 53,079	
Year Ended December 31, 2018						
Income (loss) before income taxes	\$ 510,328	\$ 139,047	\$ 99,322	\$ 59,334	\$ 48,132	
		National Business Lines				
	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBL	Corporate & Other
December 31, 2019						
Loans, net of deferred loan fees and costs	\$ 237.2	\$ 1,635.6	\$ 1,552.0	\$ 1,930.8	\$ 6,098.7	\$ 3.5
Deposits	3,210.1	0.1	3,771.5	—	36.9	1,084.2
December 31, 2018						
Loans, net of deferred loan fees and costs	\$ 210.0	\$ 1,547.5	\$ 1,200.9	\$ 1,479.9	\$ 4,154.9	\$ 4.7
Deposits	2,607.2	—	2,559.0	—	—	738.0
Year Ended December 31, 2019						
Income (loss) before income taxes	\$ 49,823	\$ 5,668	\$ 93,748	\$ 39,935	\$ 78,895	\$ (58,065)
Year Ended December 31, 2018						
Income (loss) before income taxes	\$ 35,097	\$ 8,288	\$ 72,334	\$ 42,467	\$ 44,281	\$ (37,974)

BALANCE SHEET ANALYSIS

Total assets increased \$3.7 billion, or 16.1%, to \$26.8 billion at December 31, 2019 compared to \$23.1 billion at December 31, 2018. The increase in total assets relates primarily to organic loan growth. Loans increased \$3.4 billion, or 19.3%, to \$21.1 billion at December 31, 2019, compared to \$17.7 billion at December 31, 2018. The increase in loans from December 31, 2018 was driven by commercial and industrial loans of \$1.6 billion, CRE, non-owner occupied loans of \$1.0 billion, and residential real estate loans of \$943.3 million.

Total liabilities increased \$3.3 billion, or 16.1%, to \$23.8 billion at December 31, 2019, compared to \$20.5 billion at December 31, 2018. The increase in liabilities is due primarily to an increase in total deposits. Total deposits increased \$3.6 billion, or 18.9%, to \$22.8 billion at December 31, 2019. The increase in deposits from December 31, 2018 was driven by an increase in savings and money market deposits of \$1.8 billion, non-interest-bearing demand deposit of \$1.1 billion, and certificates of deposits of \$542.0 million from December 31, 2018.

Total stockholders' equity increased by \$403.0 million, or 15.4%, to \$3.0 billion at December 31, 2019 compared to \$2.6 billion at December 31, 2018. The increase in stockholders' equity relates primarily to net income for the year ended December 31, 2019 and an increase in the fair value of the Company's AFS portfolio, which is recognized as part of AOCI, partially offset by share repurchases under its common stock repurchase plan and dividends paid to shareholders.

Investment securities

Debt securities are classified at the time of acquisition as either HTM, AFS, or trading based upon various factors, including asset/liability management strategies, liquidity and profitability objectives, and regulatory requirements. HTM securities are carried at amortized cost, adjusted for amortization of premiums or accretion of discounts. AFS securities are securities that may be sold prior to maturity based upon asset/liability management decisions. Investment securities classified as AFS are carried at fair value. Unrealized gains or losses on AFS securities are recorded as part of AOCI in stockholders' equity. Amortization of premiums or accretion of discounts on MBS is periodically adjusted for estimated prepayments. Trading securities are reported at fair value, with unrealized gains and losses included in current period earnings.

The Company's investment securities portfolio is utilized as collateral for borrowings, required collateral for public deposits and customer repurchase agreements, and to manage liquidity, capital, and interest rate risk.

The following table summarizes the carrying value of the investment securities portfolio for each of the periods below:

	At December 31,				
	2019	2018	2017	2016	2015
	<i>(in thousands)</i>				
Debt securities					
CDO	\$ 10,142	\$ 15,327	\$ 21,857	\$ 13,490	\$ 10,060
Commercial MBS issued by GSEs	94,253	100,106	109,077	117,792	19,114
Corporate debt securities	99,961	99,380	103,483	64,144	13,251
Municipal securities	7,773	—	—	—	—
Private label commercial MBS	—	—	—	—	4,691
Private label residential MBS	1,129,227	924,594	868,524	433,685	257,128
Residential MBS issued by GSEs	1,412,060	1,530,124	1,689,295	1,356,258	1,171,702
Tax-exempt	1,039,962	841,573	765,960	500,312	334,830
Trust preferred securities	27,040	28,617	28,617	26,532	24,314
U.S. government sponsored agency securities	10,000	38,188	61,462	56,022	—
U.S. treasury securities	999	1,984	2,482	2,502	2,993
Total debt securities	<u>\$ 3,831,417</u>	<u>\$ 3,579,893</u>	<u>\$ 3,650,757</u>	<u>\$ 2,570,737</u>	<u>\$ 1,838,083</u>
Equity securities					
CRA investments	\$ 52,504	\$ 51,142	\$ 50,616	\$ 37,113	\$ 34,685
Preferred stock	86,197	63,919	53,196	94,662	111,236
Total equity securities	<u>\$ 138,701</u>	<u>\$ 115,061</u>	<u>\$ 103,812</u>	<u>\$ 131,775</u>	<u>\$ 145,921</u>

Weighted average yield on investment securities is calculated by dividing income within each maturity range by the outstanding amount of the related investment and has not been tax-effected on tax-exempt obligations. For purposes of calculating the weighted average yield, AFS securities are carried at amortized cost in the table below. The maturity distribution and weighted average yield of the Company's investment security portfolios at December 31, 2019 are summarized in the table below:

	December 31, 2019									
	Due Under 1 Year		Due 1-5 Years		Due 5-10 Years		Due Over 10 Years		Total	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
	<i>(dollars in thousands)</i>									
<i>Held-to-maturity</i>										
Tax-exempt	\$ 7,330	5.27%	\$ 17,414	4.30%	\$ —	—%	\$ 460,363	4.57%	\$ 485,107	4.57%
<i>Available-for-sale</i>										
CDO	\$ —	—%	\$ —	—%	\$ —	—%	\$ 50	—%	\$ 50	—%
Commercial MBS issued by GSEs (1)	—	—	18,445	2.26	1,680	4.28	74,937	2.28	95,062	2.31
Corporate debt securities	—	—	5,015	4.32	100,000	2.35	—	—	105,015	2.45
Municipal securities	—	—	—	—	—	—	7,494	5.57	7,494	5.57
Private label residential MBS (1)	99	5.39	—	—	—	—	1,129,886	3.24	1,129,985	3.24
Residential MBS issued by GSEs (1)	3	5.26	1,423	2.74	8,429	2.53	1,396,739	2.66	1,406,594	2.66
Tax-exempt	—	—	9,751	3.58	39,236	3.43	481,742	3.01	530,729	3.05
Trust preferred securities	—	—	—	—	—	—	32,000	2.45	32,000	2.45
U.S. government sponsored agency securities	—	—	—	—	10,000	2.40	—	—	10,000	2.40
U.S. treasury securities	999	1.68	—	—	—	—	—	—	999	1.68
Total AFS securities	\$ 1,101	2.02%	\$ 34,634	2.95%	\$ 159,345	2.65%	\$ 3,122,848	2.92%	\$ 3,317,928	2.91%
<i>Equity</i>										
CRA investments	\$ 44,555	2.89%	\$ 5,250	2.51%	\$ 3,000	3.00%	\$ —	—%	\$ 52,805	2.86%
Preferred stock	—	—	—	—	—	—	82,514	5.81	82,514	5.81
Total equity securities	\$ 44,555	2.89%	\$ 5,250	2.51%	\$ 3,000	3.00%	\$ 82,514	5.81%	\$ 135,319	4.66%

(1) MBS are comprised of pools of loans with varying maturities, the majority of which are due after 10 years.

The Company does not own any subprime MBS in its investment portfolio. The majority of its MBS are GSE issued. The remaining MBS that are not GSE issued consist of \$1.1 billion rated AAA, \$30.7 million rated AA, \$0.2 million rated A, \$0.3 million rated BBB, and \$1.2 million non-investment grade.

Gross unrealized losses at December 31, 2019 relate primarily to market interest rate increases since the securities' original purchase date. The Company has reviewed securities on which there is an unrealized loss in accordance with its accounting policy for OTTI securities described in "Note 2. Investment Securities" to the Consolidated Financial Statements contained herein. There were no impairment charges recorded during the years ended December 31, 2019, 2018, and 2017.

The Company does not consider any securities to be other-than-temporarily impaired as of December 31, 2019, 2018, and 2017. However, the Company cannot guarantee that OTTI will not occur in future periods. At December 31, 2019, the Company has the intent and ability to retain its investments for a period of time sufficient to allow for any anticipated recovery in fair value.

Loans

The table below summarizes the distribution of the Company's held for investment loan portfolio at the end of each of the periods indicated:

	December 31,				
	2019	2018	2017	2016	2015
	<i>(in thousands)</i>				
Loans, held for investment					
Commercial and industrial	\$ 9,391,760	\$ 7,765,100	\$ 6,841,247	\$ 5,859,446	\$ 5,264,856
Commercial real estate - non-owner occupied	5,261,018	4,223,427	3,911,313	3,549,876	2,289,480
Commercial real estate - owner occupied	2,320,237	2,329,205	2,245,060	2,015,671	2,085,738
Construction and land development	1,971,633	2,155,625	1,647,726	1,489,488	1,143,228
Residential real estate	2,147,652	1,203,613	425,291	258,734	322,265
Consumer	56,932	69,995	48,583	38,572	26,474
Deferred loan fees and costs	(47,739)	(36,336)	(25,285)	(22,260)	(19,187)
Loans, net of deferred loan fees and costs	21,101,493	17,710,629	15,093,935	13,189,527	11,112,854
Allowance for credit losses	(167,797)	(152,717)	(140,050)	(124,704)	(119,068)
Total loans HFI	\$ 20,933,696	\$ 17,557,912	\$ 14,953,885	\$ 13,064,823	\$ 10,993,786

Loans that are held for investment are stated at the amount of unpaid principal, adjusted for net deferred fees and costs, premiums and discounts, purchase accounting fair value adjustments, and an allowance for credit losses. Net deferred loan fees as of December 31, 2019 and 2018 total \$47.7 million and \$36.3 million, respectively, which is a reduction in the carrying value of loans. Net unamortized purchase premiums on secondary market loan purchases total \$29.9 million and \$2.0 million as of December 31, 2019 and 2018, respectively. Total loans held for investment are also net of interest rate and credit marks on acquired loans, which are a net reduction in the carrying value of loans. Interest rate marks were \$3.8 million and \$7.1 million as of December 31, 2019 and 2018, respectively. Credit marks were \$6.5 million and \$14.6 million as of December 31, 2019 and 2018, respectively.

As of December 31, 2019, the Company also had \$21.8 million of HFS loans. There were no HFS loans as of December 31, 2018.

The following table sets forth the amount of loans, including HFS loans, outstanding by type of loan as of December 31, 2019 that were contractually due in one year or less, more than one year and less than five years, and more than five years based on remaining scheduled repayments of principal. Lines of credit or other loans having no stated final maturity and no stated schedule of repayments are reported as due in one year or less. The table also presents an analysis of the rate structure for loans within the same maturity time periods. Actual cash flows from these loans may differ materially from contractual maturities due to prepayment, refinancing, or other factors.

	Due in one year or less	Due after one year to five years	Due after five years	Total
	<i>(in thousands)</i>			
Commercial and industrial				
Floating rate	\$ 2,451,864	\$ 3,441,591	\$ 1,369,159	\$ 7,262,614
Fixed rate	91,335	833,937	1,215,960	2,141,232
Commercial real estate — non-owner occupied				
Floating rate	543,071	2,113,368	642,467	3,298,906
Fixed rate	190,053	1,194,158	562,517	1,946,728
Commercial real estate — owner occupied				
Floating rate	82,498	192,699	929,909	1,205,106
Fixed rate	51,837	301,032	758,938	1,111,807
Construction and land development				
Floating rate	746,293	932,849	142,057	1,821,199
Fixed rate	24,303	57,846	48,808	130,957
Residential real estate				
Floating rate	25,962	35,122	719,539	780,623
Fixed rate	3,218	6,888	1,356,935	1,367,041
Consumer				
Floating rate	31,735	12,063	2,350	46,148
Fixed rate	3,477	3,509	3,949	10,935
Total	<u>\$ 4,245,646</u>	<u>\$ 9,125,062</u>	<u>\$ 7,752,588</u>	<u>\$ 21,123,296</u>

As of December 31, 2019, approximately \$9.7 billion, or 67.6%, of total variable rate loans were subject to rate floors with a weighted average interest rate of 4.8%. At December 31, 2018, approximately \$8.3 billion, or 69.3% of total variable rate loans were subject to rate floors with a weighted average interest rate of 4.8%. At December 31, 2019, total loans consisted of 68.2% with floating rates and 31.8% with fixed rates, compared to 67.3% with floating rates and 32.7% with fixed rates at December 31, 2018.

Concentrations of Lending Activities

The Company monitors concentrations within four broad categories: product, collateral, geography, and industry. The Company's loan portfolio includes significant credit exposure to the CRE market. At December 31, 2019 and 2018, CRE related loans accounted for approximately 45% and 49% of total loans, respectively. Substantially all of these loans are secured by first liens with an initial loan to value ratio of generally not more than 75%. Approximately 31% and 36% of these CRE loans, excluding construction and land loans, were owner occupied at December 31, 2019 and 2018, respectively.

Impaired loans

A loan is identified as impaired when it is no longer probable that interest and principal will be collected according to the contractual terms of the original loan agreement. Impaired loans are measured for reserve requirements in accordance with ASC 310 based on the present value of expected future cash flows discounted at the loan's effective interest rate or, as a practical expedient, at the loan's observable market price or the fair value of the collateral less applicable disposition costs if the loan is collateral dependent. The amount of an impairment reserve, if any, and any subsequent changes are charged against the allowance for credit losses.

In addition to the Company's own internal loan review process, regulators may from time to time direct the Company to modify loan grades, loan impairment calculations, or loan impairment methodology.

Total non-performing loans increased by \$19.5 million, or 30.1%, at December 31, 2019 to \$84.3 million from \$64.8 million at December 31, 2018.

	December, 31				
	2019	2018	2017	2016	2015
	<i>(dollars in thousands)</i>				
Total non-accrual loans (1)	\$ 55,968	\$ 27,746	\$ 43,925	\$ 40,272	\$ 48,381
Loans past due 90 days or more on accrual status	—	594	43	1,067	3,028
Accruing troubled debt restructured loans	28,356	36,458	42,431	53,637	70,707
Total nonperforming loans, excluding loans acquired with deteriorated credit quality	84,324	64,798	86,399	94,976	122,116
Other impaired loans	31,979	47,454	12,155	4,233	6,758
Total impaired loans	\$ 116,303	\$ 112,252	\$ 98,554	\$ 99,209	\$ 128,874
Other assets acquired through foreclosure, net	\$ 13,850	\$ 17,924	\$ 28,540	\$ 47,815	\$ 43,942
Non-accrual loans to gross loans held for investment	0.27%	0.16%	0.29%	0.31%	0.44%
Loans past due 90 days or more on accrual status to gross loans held for investment	—	0.00	0.00	0.01	0.03
Interest income that would have been recorded under the original terms of non-accrual loans	2,170	2,268	2,444	2,045	2,549

(1) Includes non-accrual TDR loans of \$10.6 million and \$8.0 million at December 31, 2019 and 2018, respectively.

The composition of non-accrual loans by loan type and by segment were as follows:

	December 31, 2019			December 31, 2018		
	Non-accrual Balance	Percent of Non-Accrual Balance	Percent of Total HFI Loans	Non-accrual Balance	Percent of Non-Accrual Balance	Percent of Total HFI Loans
	<i>(dollars in thousands)</i>					
Commercial and industrial	\$ 24,501	43.77%	0.12%	\$ 15,090	54.39%	0.09%
Commercial real estate	23,720	42.38	0.11	—	—	—
Construction and land development	2,147	3.84	0.01	476	1.71	0.00
Residential real estate	5,600	10.01	0.03	11,939	43.03	0.07
Consumer	—	—	—	241	0.87	0.00
Total non-accrual loans	\$ 55,968	100.00%	0.27%	\$ 27,746	100.00%	0.16%

	December 31, 2019		December 31, 2018	
	Nonaccrual Loans	Percent of Segment's Total HFI Loans	Nonaccrual Loans	Percent of Segment's Total HFI Loans
	<i>(dollars in thousands)</i>			
Arizona	\$ 29,062	0.76%	\$ 8,312	0.23%
Nevada	8,001	0.36	6,374	0.32
Southern California	1,759	0.08	8,564	0.40
Northern California	5,193	0.40	4,255	0.33
Public & Nonprofit Finance	2,147	0.13	—	—
Technology and Innovation	5,867	0.38	—	—
Other NBLs	3,939	0.06	241	0.00
Total non-accrual loans	\$ 55,968	0.27%	\$ 27,746	0.16%

Troubled Debt Restructured Loans

A TDR loan is a loan that is granted a concession, for reasons related to a borrower's financial difficulties, that the lender would not otherwise consider. The loan terms that have been modified or restructured due to a borrower's financial situation include, but are not limited to, a reduction in the stated interest rate, an extension of the maturity or renewal of the loan at an interest rate below current market, a reduction in the face amount of the debt, a reduction in accrued interest, extensions, deferrals, renewals, and rewrites. A TDR loan is also considered impaired. Generally, a loan that is modified at an effective market rate of interest is no longer disclosed as a TDR in years subsequent to the restructuring if it is performing based on the terms specified by the restructuring agreement. However, such loans continue to be considered impaired.

As of December 31, 2019 and 2018, the aggregate amount of loans classified as impaired was \$116.3 million and \$112.3 million, respectively, a net increase of 3.6%. The total specific allowance for credit losses related to these loans was \$2.8 million and \$0.7 million at December 31, 2019 and 2018, respectively. The Company had \$28.4 million and \$36.5 million in loans classified as accruing restructured loans at December 31, 2019 and 2018, respectively.

The following tables present a breakdown of total impaired loans and the related specific reserves for the periods indicated:

	December 31, 2019					
	Impaired Balance	Percent of Impaired Balance	Percent of Total HFI Loans	Reserve Balance	Percent of Reserve Balance	Percent of Total Allowance
	<i>(dollars in thousands)</i>					
Commercial and industrial	\$ 48,984	42.12%	0.23%	\$ 1,050	37.83%	0.62%
Commercial real estate	53,274	45.81	0.25	1,219	43.91	0.73
Construction and land development	8,421	7.23	0.04	507	18.26	0.30
Residential real estate	5,600	4.82	0.03	—	—	—
Consumer	24	0.02	0.00	—	—	—
Total impaired loans	<u>\$ 116,303</u>	<u>100.00%</u>	<u>0.55%</u>	<u>\$ 2,776</u>	<u>100.00%</u>	<u>1.65%</u>

	December 31, 2018					
	Impaired Balance	Percent of Impaired Balance	Percent of Total HFI Loans	Reserve Balance	Percent of Reserve Balance	Percent of Total Allowance
	<i>(dollars in thousands)</i>					
Commercial and industrial	\$ 63,896	56.92%	0.36%	\$ 621	91.19%	0.41%
Commercial real estate	18,937	16.87	0.11	—	—	—
Construction and land development	9,403	8.38	0.05	—	—	—
Residential real estate	19,744	17.59	0.11	60	8.81	0.04
Consumer	272	0.24	0.00	—	—	—
Total impaired loans	<u>\$ 112,252</u>	<u>100.00%</u>	<u>0.63%</u>	<u>\$ 681</u>	<u>100.00%</u>	<u>0.45%</u>

Impaired loans by segment at December 31, 2019 and 2018 were as follows:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Arizona	\$ 62,175	\$ 34,899
Nevada	25,667	33,860
Southern California	6,630	8,576
Northern California	9,878	4,928
Public & Nonprofit Finance	2,147	—
Technology & Innovation	5,867	29,748
Other NBLs	3,939	241
Total impaired loans	<u>\$ 116,303</u>	<u>\$ 112,252</u>

The amount of interest income recognized on impaired loans for the years ended December 31, 2019, 2018, and 2017 was approximately \$5.0 million, \$4.5 million, and \$4.0 million, respectively.

Allowance for Credit Losses

The following table summarizes the activity in the Company's allowance for credit losses for the period indicated:

	Year Ended December 31,				
	2019	2018	2017	2016	2015
	<i>(dollars in thousands)</i>				
Allowance for credit losses:					
Balance at beginning of period	\$ 152,717	\$ 140,050	\$ 124,704	\$ 119,068	\$ 110,216
<i>Provision charged to operating expense:</i>					
Commercial and industrial	3,039	13,198	14,268	10,638	18,411
Commercial real estate	11,674	2,177	5,347	(2,449)	(9,762)
Construction and land development	1,431	1,482	(2,805)	1,732	(1,454)
Residential real estate	2,620	5,867	318	(2,137)	(3,539)
Consumer	(264)	276	122	216	(456)
Total Provision	18,500	23,000	17,250	8,000	3,200
<i>Recoveries of loans previously charged-off:</i>					
Commercial and industrial	(4,265)	(2,427)	(3,112)	(3,991)	(3,754)
Commercial real estate	(909)	(1,237)	(2,897)	(5,690)	(4,139)
Construction and land development	(91)	(1,433)	(1,229)	(485)	(1,872)
Residential real estate	(412)	(947)	(1,778)	(875)	(2,181)
Consumer	(25)	(43)	(84)	(144)	(203)
Total recoveries	(5,702)	(6,087)	(9,100)	(11,185)	(12,149)
<i>Loans charged-off:</i>					
Commercial and industrial	8,120	15,034	8,186	12,477	5,550
Commercial real estate	139	233	2,269	728	—
Construction and land development	141	1	—	18	—
Residential real estate	594	1,038	447	165	820
Consumer	128	114	102	161	127
Total charged-off	9,122	16,420	11,004	13,549	6,497
Net charge-offs (recoveries)	3,420	10,333	1,904	2,364	(5,652)
Balance at end of period	\$ 167,797	\$ 152,717	\$ 140,050	\$ 124,704	\$ 119,068
Net charge-offs (recoveries) to average loans outstanding	0.02%	0.06%	0.01%	0.02%	(0.06)%
Allowance for credit losses to gross loans	0.80	0.86	0.93	0.95	1.07
Allowance for credit losses to gross organic loans	0.82	0.92	1.03	1.11	1.23

The following table summarizes the allocation of the allowance for credit losses by loan type. However, the allocation of a portion of the allowance to one category of loans does not preclude its availability to absorb losses in other categories.

	Commercial and Industrial	Commercial Real Estate	Construction and Land Development	Residential Real Estate	Consumer	Total
<i>(dollars in thousands)</i>						
December 31, 2019						
Allowance for credit losses	\$ 82,302	\$ 47,273	\$ 23,894	\$ 13,714	\$ 614	\$ 167,797
Percent of total allowance for credit losses	49.0%	28.2%	14.2%	8.2%	0.4%	100.0%
Percent of loan type to total HFI loans	44.5	35.8	9.2	10.2	0.3	100.0
December 31, 2018						
Allowance for credit losses	\$ 83,118	\$ 34,829	\$ 22,513	\$ 11,276	\$ 981	\$ 152,717
Percent of total allowance for credit losses	54.4%	22.8%	14.8%	7.4%	0.6%	100.0%
Percent of loan type to total HFI loans	43.8	36.9	12.1	6.8	0.4	100.0
December 31, 2017						
Allowance for credit losses	\$ 82,527	\$ 31,648	\$ 19,599	\$ 5,500	\$ 776	\$ 140,050
Percent of total allowance for credit losses	58.9%	22.6%	14.0%	3.9%	0.6%	100.0%
Percent of loan type to total HFI loans	45.2	40.8	10.9	2.8	0.3	100.0
December 31, 2016						
Allowance for credit losses	\$ 73,333	\$ 25,673	\$ 21,175	\$ 3,851	\$ 672	\$ 124,704
Percent of total allowance for credit losses	58.8%	20.6%	17.0%	3.1%	0.5%	100.0%
Percent of loan type to total HFI loans	44.3	42.1	11.3	2.0	0.3	100.0
December 31, 2015						
Allowance for Credit Losses	\$ 71,181	\$ 23,160	\$ 18,976	\$ 5,278	\$ 473	\$ 119,068
Percent of Total Allowance for Credit Losses	59.8%	19.5%	15.9%	4.4%	0.4%	100.0%
Percent of loan type to total HFI loans	47.4	39.3	10.2	2.9	0.2	100.0

Problem Loans

The Company classifies loans consistent with federal banking regulations using a nine category grading system. These loan grades are described in further detail in "Item 1. Business" of this Form 10-K. The following table presents information regarding potential and actual problem loans, consisting of loans graded Special Mention, Substandard, Doubtful, and Loss, but still performing, and excluding acquired loans:

December 31, 2019				
	Number of Loans	Loan Balance	Percent of Loan Balance	Percent of Total HFI Loans
<i>(dollars in thousands)</i>				
Commercial and industrial	73	\$ 96,464	43.06%	0.46%
Commercial real estate	37	107,839	48.14	0.51
Construction and land development	10	18,971	8.47	0.09
Residential real estate	3	727	0.33	0.00
Consumer	1	10	0.00	0.00
Total	124	\$ 224,011	100.00%	1.06%
December 31, 2018				
	Number of Loans	Loan Balance	Percent of Loan Balance	Percent of Total HFI Loans
<i>(dollars in thousands)</i>				
Commercial and industrial	107	\$ 125,585	62.37%	0.71%
Commercial real estate	42	71,116	35.32	0.40
Construction and land development	3	4,040	2.01	0.02
Residential real estate	1	527	0.26	0.00
Consumer	2	75	0.04	0.00
Total	155	\$ 201,343	100.00%	1.13%

Goodwill and Other Intangible Assets

Goodwill represents the excess consideration paid for net assets acquired in a business combination over their fair value. Goodwill and other intangible assets acquired in a business combination that are determined to have an indefinite useful life are not subject to amortization, but are subsequently evaluated for impairment at least annually. The Company has goodwill of \$289.9 million and intangible assets totaling \$7.7 million as of December 31, 2019, which have been allocated to the Nevada, Northern California, Technology & Innovation, and HFF operating segments.

The Company performs its annual goodwill and intangibles impairment tests as of October 1 each year, or more often if events or circumstances indicate that the carrying value may not be recoverable. During the years ended December 31, 2019, 2018, and 2017, there were no events or circumstances that indicated an interim impairment test of goodwill or other intangible assets was necessary and, based on the Company's annual goodwill and intangibles impairment tests as of October 1 of each of these years, it was determined that goodwill and intangible assets are not impaired.

The following is a summary of acquired intangible assets:

	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	<i>(in thousands)</i>					
Subject to amortization						
Core deposit intangibles	\$ 14,647	\$ 7,284	\$ 7,363	\$ 14,647	\$ 5,737	\$ 8,910
	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Impairment	Net Carrying Amount	Gross Carrying Amount	Impairment	Net Carrying Amount
	<i>(in thousands)</i>					
Not subject to amortization						
Trade name	\$ 350	\$ —	\$ 350	\$ 350	\$ —	\$ 350

Deferred Tax Assets

Net deferred tax assets decreased \$14.0 million to \$18.0 million from December 31, 2018. This overall decrease in net deferred tax assets was primarily the result of increases in the fair market value of AFS securities. In addition, there was a large decrease to the overall estimated loss reserve, which was largely offset by increases to DTLs related to premises and equipment and income associated with tax credits for lease pass-through transactions (50(d) income).

As of December 31, 2019, the Company has no deferred tax valuation allowance. As of December 31, 2018, the Company's deferred tax valuation allowance of \$2.4 million related to net capital loss carryovers.

Deposits

Deposits are the primary source for funding the Company's asset growth. Total deposits increased to \$22.8 billion at December 31, 2019 from \$19.2 billion at December 31, 2018, an increase of \$3.6 billion, or 18.9%. The increase in deposits is attributable to an increase across all deposit types, with the largest increases in savings and money market deposits of \$1.8 billion and non-interest-bearing demand deposits of \$1.1 billion from December 31, 2018.

WAB is a participant in the Promontory Interfinancial Network, a network that offers deposit placement services such as CDARS and ICS, which offer products that qualify large deposits for FDIC insurance. At December 31, 2019, the Company has \$407.7 million of CDARS deposits and \$661.8 million of ICS deposits, compared to \$322.9 million of CDARS deposits and \$706.9 million of ICS deposits at December 31, 2018. At December 31, 2019 and 2018, the Company also has \$1.1 billion and \$718.2 million, respectively, of wholesale brokered deposits.

In addition, deposits for which the Company provides account holders with earnings credits or referral fees totaled \$3.1 billion and \$2.3 billion at December 31, 2019 and 2018, respectively. The Company incurred \$30.5 million and \$18.0 million in deposit related costs on these deposits during the year ended December 31, 2019 and 2018, respectively. These costs are reported in deposit costs as part of non-interest expense. The increase in these costs relates to both an increase in deposits eligible for earnings credits, along with higher average earnings credits paid during the first half of 2019.

The average balances and weighted average rates paid on deposits are presented below:

	Year Ended December 31,					
	2019		2018		2017	
	Average Balance	Rate	Average Balance	Rate	Average Balance	Rate
	<i>(dollars in thousands)</i>					
Interest-bearing transaction accounts	\$ 2,545,806	0.82%	\$ 1,891,160	0.61%	\$ 1,467,231	0.27%
Savings and money market accounts	8,125,832	1.18	6,501,241	0.85	6,208,057	0.42
Certificates of deposit	2,117,177	1.98	1,748,675	1.37	1,560,896	0.76
Total interest-bearing deposits	12,788,815	1.24	10,141,076	0.89	9,236,184	0.45
Non-interest-bearing demand deposits	8,246,232	—	7,712,791	—	6,788,783	—
Total deposits	\$ 21,035,047	0.75%	\$ 17,853,867	0.51%	\$ 16,024,967	0.26%

Certificates of Deposit of \$100,000 or More

The table below discloses the remaining maturity for certificates of deposit of \$100,000 or more:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
3 months or less	\$ 945,551	\$ 682,549
3 to 6 months	596,467	446,847
6 to 12 months	597,496	409,736
Over 12 months	101,615	99,211
Total	\$ 2,241,129	\$ 1,638,343

Other Borrowings

The Company from time to time utilizes short-term borrowed funds to support short-term liquidity needs generally created by increased loan demand. The majority of these short-term borrowed funds consist of advances from the FHLB, Federal funds purchased, and customer repurchase agreements. The Company's borrowing capacity with the FHLB is determined based on collateral pledged, generally consisting of securities and loans. In addition, the Company has borrowing capacity from other sources, including Federal funds purchased and securities sold under agreements to repurchase. Federal funds purchased are unsecured borrowings with other banks. Securities sold under agreements to repurchase are collateralized by securities and are reflected at the amount of cash received in connection with the transaction, and may require additional collateral based on the fair value of the underlying securities. At December 31, 2019, total short-term borrowed funds consist of customer repurchase agreements of \$16.7 million. At December 31, 2018, total short-term borrowed funds consisted of Federal funds purchased of \$256.0 million, FHLB overnight advances of \$235.0 million, and customer repurchase agreements of \$22.4 million.

Qualifying Debt

Qualifying debt consists of subordinated debt and junior subordinated debt, inclusive of issuance costs and fair market value adjustments. At December 31, 2019, the carrying value of all subordinated debt issuances, which includes the fair value of related hedges, was \$319.2 million, compared to \$299.4 million at December 31, 2018.

The junior subordinated debt has contractual balances and maturity dates as follows:

Name of Trust	Maturity	December 31,	
		2019	2018
At fair value		<i>(in thousands)</i>	
BankWest Nevada Capital Trust II	2033	\$ 15,464	\$ 15,464
Intermountain First Statutory Trust I	2034	10,310	10,310
First Independent Statutory Trust I	2035	7,217	7,217
WAL Trust No. 1	2036	20,619	20,619
WAL Statutory Trust No. 2	2037	5,155	5,155
WAL Statutory Trust No. 3	2037	7,732	7,732
Total contractual balance		66,497	66,497
FVO on junior subordinated debt		(4,812)	(17,812)
Junior subordinated debt, at fair value		\$ 61,685	\$ 48,685
At amortized cost			
Bridge Capital Holdings Trust I	2035	\$ 12,372	\$ 12,372
Bridge Capital Holdings Trust II	2036	5,155	5,155
Total contractual balance		17,527	17,527
Purchase accounting adjustment, net of accretion (1)		(4,845)	(5,155)
Junior subordinated debt, at amortized cost		\$ 12,682	\$ 12,372
Total junior subordinated debt		\$ 74,367	\$ 61,057

(1) The purchase accounting adjustment is being amortized over the remaining life of the trusts, pursuant to accounting guidance.

The weighted average interest rate of all junior subordinated debt as of December 31, 2019 was 4.25%, which is three-month LIBOR plus the contractual spread of 2.34%, compared to a weighted average interest rate of 5.15% at December 31, 2018.

Capital Resources

The Company and the Bank are subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements could trigger certain mandatory or discretionary actions that, if undertaken, could have a direct material effect on the Company's business and financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and the Bank must meet specific capital guidelines that involve quantitative measures of their assets, liabilities, and certain off-balance sheet items (discussed in "Note 15. Commitments and Contingencies" to the Consolidated Financial Statements) 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.

As of December 31, 2019 and 2018, the Company and the Bank's capital ratios exceeded the well-capitalized thresholds, as defined by the banking agencies. The actual capital amounts and ratios for the Company and the Bank are presented in the following tables as of the periods indicated:

	Total Capital	Tier 1 Capital	Risk- Weighted Assets	Tangible Average Assets	Total Capital Ratio	Tier 1 Capital Ratio	Tier 1 Leverage Ratio	Common Equity Tier 1
<i>(dollars in thousands)</i>								
December 31, 2019								
WAL	\$ 3,257,874	\$ 2,775,390	\$ 25,390,142	\$ 26,110,275	12.8%	10.9%	10.6%	10.6%
WAB	3,030,301	2,703,549	25,452,261	26,134,431	11.9	10.6	10.3	10.6
Well-capitalized ratios					10.0	8.0	5.0	6.5
Minimum capital ratios					8.0	6.0	4.0	4.5
December 31, 2018								
WAL	\$ 2,897,356	\$ 2,431,320	\$ 21,983,976	\$ 22,204,799	13.2%	11.1%	10.9%	10.7%
WAB	2,628,650	2,317,745	22,040,765	22,209,700	11.9	10.5	10.4	10.5
Well-capitalized ratios					10.0	8.0	5.0	6.5
Minimum capital ratios					8.0	6.0	4.0	4.5

Common Stock Repurchase Plan

On December 12, 2018, the Company announced that it had adopted a common stock repurchase plan, pursuant to which the Company was authorized to repurchase up to \$250 million of its shares of common stock through December 31, 2019. The Company had \$94.3 million in authorized common stock repurchase capacity that expired under the original program as of December 31, 2019. The Company's common stock repurchase program was renewed through December 2020, authorizing the Company to repurchase up to an additional \$250.0 million of its outstanding common stock.

Contractual Obligations and Off-Balance Sheet Arrangements

The Company enters into contracts for services in the ordinary course of business that may require payment for services to be provided in the future and may contain penalty clauses for early termination of the contracts. To meet the financing needs of customers, the Company has financial instruments with off-balance sheet risk, including commitments to extend credit and standby letters of credit. The Company has also committed to irrevocably and unconditionally guarantee the payments or distributions with respect to the holders of preferred securities of the Company's eight statutory business trusts to the extent that the trusts have not made such payments or distributions, including: 1) accrued and unpaid distributions; 2) the redemption price; and 3) upon a dissolution or termination of the trust, the lesser of the liquidation amount and all accrued and unpaid distributions and the amount of assets of the trust remaining available for distribution. The Company does not believe that these off-balance sheet arrangements have or are reasonably likely to have a material effect on its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources. However, there can be no assurance that such arrangements will not have a future effect.

The following table sets forth the Company's significant contractual obligations as of December 31, 2019:

	Payments Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
	<i>(in thousands)</i>				
Time deposit maturities	\$ 2,376,976	\$ 2,259,182	\$ 113,190	\$ 4,604	\$ —
Qualifying debt	409,024	—	—	—	409,024
Operating lease obligations	90,145	12,369	19,637	18,067	40,072
Purchase obligations	103,303	42,683	49,301	11,319	—
Total	\$ 2,979,448	\$ 2,314,234	\$ 182,128	\$ 33,990	\$ 449,096

Purchase obligations primarily relate to contracts for software licensing, maintenance, and outsourced service providers.

Off-balance sheet commitments associated with outstanding letters of credit, commitments to extend credit, and credit card guarantees as of December 31, 2019 are summarized below. Since commitments associated with letters of credit and commitments to extend credit may expire unused, the amounts shown do not necessarily reflect the actual future cash funding requirements.

	Amount of Commitment Expiration per Period				
	Total Amounts Committed	Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
	<i>(in thousands)</i>				
Commitments to extend credit	\$ 8,348,421	\$ 2,873,303	\$ 3,170,848	\$ 1,299,506	\$ 1,004,764
Credit card commitments and financial guarantees	302,909	302,909	—	—	—
Letters of credit	175,778	156,375	18,786	617	—
Total	\$ 8,827,108	\$ 3,332,587	\$ 3,189,634	\$ 1,300,123	\$ 1,004,764

The following table sets forth certain information regarding short-term borrowings as of December 31, 2019 and the respective prior year-end balances for customer repurchase agreements, FHLB advances, and Federal funds purchased:

	December 31,		
	2019	2018	2017
	<i>(dollars in thousands)</i>		
Customer Repurchase Accounts:			
Maximum month-end balance	\$ 20,288	\$ 30,559	\$ 41,153
Balance at end of year	16,675	22,411	26,017
Average balance	17,182	24,421	33,842
Federal Funds Purchased			
Maximum month-end balance	335,000	256,000	—
Balance at end of year	—	256,000	—
Average balance	67,851	20,542	—
FHLB Advances:			
Maximum month-end balance	380,000	625,000	440,000
Balance at end of year	—	235,000	390,000
Average balance	49,589	215,699	29,781
Total Short-Term Borrowed Funds	\$ 16,675	\$ 513,411	\$ 416,017
Weighted average interest rate at end of year	0.15%	2.46%	1.33%
Weighted average interest rate during year	1.99	1.73	0.53

Critical Accounting Policies

The Notes to the Consolidated Financial Statements contain a discussion of the Company's significant accounting policies, including information regarding recently issued accounting pronouncements, adoption of such policies, and the related impact of their adoption. The Company believes that certain of these policies, along with various estimates that it is required to make in recording its financial transactions, are important to have a complete understanding of the Company's financial position. In addition, these estimates require management to make complex and subjective judgments, many of which include matters with a high degree of uncertainty. The following is a summary of these critical accounting policies and significant estimates.

Allowance for credit losses

Credit risk is inherent in the business of extending loans and leases to borrowers, for which the Company must maintain an adequate allowance for credit losses. The allowance for credit losses is established through a provision for credit losses recorded to expense. Loans are charged against the allowance for credit losses when management believes that the contractual principal or interest will not be collected. Subsequent recoveries, if any, are credited to the allowance. The allowance is an amount believed adequate to absorb estimated probable losses on existing loans that may become uncollectable, based on evaluation of the collectability of loans and prior credit loss experience, together with other factors. The Company formally re-evaluates and establishes the appropriate level of the allowance for credit losses on a quarterly basis.

The allowance consists of specific and general components. The specific allowance applies to impaired loans. For impaired collateral dependent loans, the reserve is calculated based on the collateral value, net of estimated disposition costs. Generally, the Company obtains independent collateral valuation analysis for each loan over a specified dollar threshold every 12 months. Loans not collateral dependent are evaluated based on the expected future cash flows discounted at the original contractual interest rate.

The general allowance covers all non-impaired loans and incorporates several quantitative and qualitative factors, which are used for all of the Company's portfolio segments. Quantitative factors include company-specific, 10-year historical net charge-offs stratified by loans with similar characteristics. Qualitative factors include: 1) levels of and trends in delinquencies and impaired loans; 2) levels of and trends in charge-offs and recoveries; 3) trends in volume and terms of loans; 4) changes in underwriting standards or lending policies; 5) experience, ability, depth of lending staff; 6) national and local economic trends and conditions; 7) changes in credit concentrations; 8) out-of-market exposures; 9) changes in quality of loan review system; and 10) changes in the value of underlying collateral.

Due to the credit concentration of the Company's loan portfolio in real estate secured loans, the value of collateral is heavily dependent on real estate values in Arizona, Nevada, and California. While management uses the best information available to make its evaluation, future adjustments to the allowance may be necessary if there are significant changes in economic or other conditions. In addition, regulators, as an integral part of their examination processes, periodically review the Bank's allowance for credit losses, and may require the Bank to make additions to the allowance based on their judgment about information available to them at the time of their examination. Management regularly reviews the assumptions and formulae used in determining the allowance and makes adjustments if required to reflect the current risk profile of the portfolio.

Income taxes

The Company's income tax expense, deferred tax assets and liabilities, and liabilities for unrecognized tax benefits reflect management's best estimate of current and future taxes to be paid. The Company is subject to federal and state income taxes in the United States. Significant judgments and estimates are required in the determination of the consolidated income tax expense.

Deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements, which will result in taxable or deductible amounts in the future. In evaluating the Company's ability to recover its deferred tax assets in the jurisdictions from which they arise, all available positive and negative evidence is considered, including scheduled reversals of deferred tax liabilities, tax planning strategies, projected future taxable income, and recent operating results. The assumptions about future taxable income require the use of significant judgment and are consistent with the plans and estimates used to manage the underlying business.

Liquidity

Liquidity is the ongoing ability to accommodate liability maturities and deposit withdrawals, fund asset growth and business operations, and meet contractual obligations through unconstrained access to funding at reasonable market rates. Liquidity management involves forecasting funding requirements and maintaining sufficient capacity to meet the needs and accommodate fluctuations in asset and liability levels due to changes in the Company's business operations or unanticipated events.

The ability to have readily available funds sufficient to repay fully maturing liabilities is of primary importance to depositors, creditors, and regulators. The Company's liquidity, represented by cash and amounts due from banks, federal funds sold, and non-pledged marketable securities, is a result of the Company's operating, investing, and financing activities and related cash flows. In order to ensure that funds are available when necessary, on at least a quarterly basis, the Company projects the amount of funds that will be required over a 12-month period and it also strives to maintain relationships with a diversified customer base. Liquidity requirements can also be met through short-term borrowings or the disposition of short-term assets.

The following table presents the available and outstanding balances on the Company's lines of credit:

December 31, 2019	
Available Balance	Outstanding Balance
<i>(in millions)</i>	
\$ 1,215.0	\$ —

Unsecured fed funds credit lines at correspondent banks

In addition to lines of credit, the Company has borrowing capacity with the FHLB and FRB from pledged loans and securities. The borrowing capacity, outstanding borrowings, and available credit as of December 31, 2019 are presented in the following table:

	December 31, 2019
	<i>(in millions)</i>
FHLB:	
Borrowing capacity	\$ 4,483.4
Outstanding borrowings	—
Letters of credit	21.0
Total available credit	\$ 4,462.4
FRB:	
Borrowing capacity	\$ 1,149.4
Outstanding borrowings	—
Total available credit	\$ 1,149.4

The Company has a formal liquidity policy and, in the opinion of management, its liquid assets are considered adequate to meet cash flow needs for loan funding and deposit cash withdrawals for the next 90-120 days. At December 31, 2019, there is \$2.9 billion in liquid assets, comprised of \$434.6 million in cash and cash equivalents and \$2.5 billion in unpledged marketable securities. At December 31, 2018, the Company maintained \$3.0 billion in liquid assets, comprised of \$498.6 million of cash, cash equivalents, and money market investments, and \$2.5 billion in unpledged marketable securities.

The Parent maintains liquidity that would be sufficient to fund its operations and certain non-bank affiliate operations for an extended period should funding from normal sources be disrupted. Since deposits are taken by WAB and not by the Parent, Parent liquidity is not dependent on the Bank's deposit balances. In the Company's analysis of Parent liquidity, it is assumed that the Parent is unable to generate funds from additional debt or equity issuances, receives no dividend income from subsidiaries and does not pay dividends to stockholders, while continuing to make nondiscretionary payments needed to maintain operations and repayment of contractual principal and interest payments owed by the Parent and affiliated companies. Under this scenario, the amount of time the Parent and its non-bank subsidiaries can operate and meet all obligations before the current liquid assets are exhausted is considered as part of the Parent liquidity analysis. Management believes the Parent maintains adequate liquidity capacity to operate without additional funding from new sources for over 12 months.

WAB maintains sufficient funding capacity to address large increases in funding requirements, such as deposit outflows. This capacity is comprised of liquidity derived from a reduction in asset levels and various secured funding sources. On a long-term basis, the Company's liquidity will be met by changing the relative distribution of its asset portfolios (for example, by reducing investment or loan volumes, or selling or encumbering assets). Further, the Company can increase liquidity by soliciting higher levels of deposit accounts through promotional activities and/or borrowing from the FHLB of San Francisco and the FRB. At December 31, 2019, the Company's long-term liquidity needs primarily relate to funds required to support loan originations, commitments, and deposit withdrawals, which can be met by cash flows from investment payments and maturities, and investment sales, if necessary.

The Company's liquidity is comprised of three primary classifications: 1) cash flows provided by operating activities; 2) cash flows used in investing activities; and 3) cash flows provided by financing activities. Net cash provided by or used in operating activities consists primarily of net income, adjusted for changes in certain other asset and liability accounts and certain non-cash income and expense items, such as the provision for credit losses, investment and other amortization and depreciation. For the years ended December 31, 2019, 2018, and 2017, net cash provided by operating activities was \$717.8 million, \$541.0 million, and \$383.8 million, respectively.

The Company's primary investing activities are the origination of real estate and commercial loans, the collection of repayments of these loans, and the purchase and sale of securities. The Company's net cash provided by and used in investing activities has been primarily influenced by its loan and securities activities. The net increase in loans for the years ended December 31, 2019, 2018, and 2017, was \$3.4 billion, \$2.6 billion, and \$1.9 billion, respectively. The net increase in investment securities for the years ended December 31, 2019, 2018, and 2017 was \$109.5 million, \$12.4 million, and \$1.1 billion, respectively.

Net cash provided by financing activities has been impacted significantly by increased deposit levels. During the years ended December 31, 2019, 2018, and 2017, net deposits increased \$3.6 billion, \$2.2 billion, and \$2.4 billion, respectively.

Fluctuations in core deposit levels may increase the Company's need for liquidity as certificates of deposit mature or are withdrawn before maturity, and as non-maturity deposits, such as checking and savings account balances, are withdrawn. Additionally, the Company is exposed to the risk that customers with large deposit balances will withdraw all or a portion of such deposits, due in part to the FDIC limitations on the amount of insurance coverage provided to depositors. To mitigate the uninsured deposit risk, the Company participates in the CDARS and ICS programs, which allow an individual customer to invest up to \$50.0 million and \$120.0 million, respectively, through one participating financial institution, or a combined total of \$185.0 million per individual customer, with the entire amount being covered by FDIC insurance. As of December 31, 2019, the Company has \$407.7 million of CDARS and \$661.8 million of ICS deposits.

As of December 31, 2019, the Company has \$1.1 billion of wholesale brokered deposits outstanding. Brokered deposits are generally considered to be deposits that have been received from a third party who is engaged in the business of placing deposits on behalf of others. A traditional deposit broker will direct deposits to the banking institution offering the highest interest rate available. Federal banking laws and regulations place restrictions on depository institutions regarding brokered deposits because of the general concern that these deposits are not relationship based and are at a greater risk of being withdrawn and placed on deposit at another institution offering a higher interest rate, thus posing liquidity risk for institutions that gather brokered deposits in significant amounts.

Federal and state banking regulations place certain restrictions on dividends paid. The total amount of dividends that may be paid at any date is generally limited to the retained earnings of the bank. Dividends paid by WAB to the Parent would be prohibited if the effect thereof would cause the Bank's capital to be reduced below applicable minimum capital requirements. During the year ended December 31, 2019, WAB and LVSP paid dividends to the Parent of \$130.0 million and \$4.0 million, respectively. Subsequent to December 31, 2019, WAB paid dividends to the Parent of \$35.0 million.

Recent accounting pronouncements

See "Note 1. Summary of Significant Accounting Policies," of the Notes to Consolidated Financial Statements contained in Item 8. Financial Statements and Supplementary Data for information on recent and recently adopted accounting pronouncements and their expected impact, if any, on the Company's Consolidated Financial Statements.

SUPERVISION AND REGULATION

WAL, WAB, and certain of its non-banking subsidiaries are subject to comprehensive regulation under federal and state laws. The regulatory framework applicable to bank holding companies and their subsidiary banks is intended to protect depositors, the DIF, and the U.S. banking system as a whole. This system is not designed to protect equity investors in bank holding companies such as WAL.

Set forth below is a summary of the significant laws and regulations applicable to WAL and its subsidiaries. The description that follows is qualified in its entirety by reference to the full text of the statutes, regulations, and policies that are described. Such statutes, regulations, and policies are subject to ongoing review by Congress and state legislatures and federal and state regulatory agencies. A change in any of the statutes, regulations, or regulatory policies applicable to WAL and its subsidiaries could have a material effect on the results of the Company.

Overview

WAL is a separate and distinct legal entity from WAB and its other subsidiaries. As a registered bank holding company, WAL is subject to inspection, examination, and supervision by the FRB, and is regulated under the BHCA. WAL is also under the jurisdiction of the SEC and is subject to the disclosure and other regulatory requirements of the Securities Act of 1933, as amended, and the Exchange Act, as administered by the SEC. The Company's common stock is listed on the NYSE under the trading symbol "WAL" and the Company is subject to the rules of the NYSE for listed companies. The Company is a financial institution holding company within the meaning of Arizona law. WAL provides a full spectrum of deposit, lending, treasury management, and online banking products and services through WAB, its wholly-owned banking subsidiary. WAB is an Arizona chartered bank and a member of the Federal Reserve System. WAB operates the following full-service banking divisions: ABA, BON, Bridge, FIB, and TPB. WAB is subject to the supervision of, and to regular examination by, the Arizona Department of Financial Institutions, the FRB as its primary federal regulator, and the FDIC as its deposit insurer. WAB's deposits are insured by the FDIC up to the applicable deposit insurance limits in accordance with FDIC laws and regulations. The Company also serves business customers through a national platform of specialized financial services providers.

WAL and WAB are also supervised by the CFPB for compliance with federal consumer financial protection laws. The Company's non-bank subsidiaries are subject to federal and state laws and regulations, including regulations of the FRB.

The Dodd-Frank Act significantly changed the financial regulatory regime in the United States. Since the enactment of the Dodd-Frank Act, U.S. banks and financial services firms have been subject to enhanced regulation and oversight. Several provisions of the Dodd-Frank Act are subject to further rulemaking, guidance, and interpretation by the federal banking agencies. While the current administration and its appointees to the federal banking agencies have expressed interest in reviewing, revising, and perhaps repealing portions of the Dodd-Frank Act and certain of its implementing regulations, it is not clear whether any such legislation or regulatory changes will be enacted or, if enacted, what the effect on the Company would be.

EGRRCPA

On May 24, 2018, the President signed into law the EGRRCPA which, among other things, amended certain provisions of the Dodd-Frank Act. The EGRRCPA provides limited regulatory relief to certain financial institutions while preserving the existing framework under which U.S. financial institutions are regulated. The EGRRCPA relieves bank holding companies with less than \$100 billion in assets, such as the Company, from the enhanced prudential standards imposed under Section 165 of the Dodd-Frank Act (including, but not limited to, resolution planning and enhanced liquidity and risk management requirements). In addition to amending the Dodd-Frank Act, the EGRRCPA also includes certain additional banking-related provisions, consumer protection provisions and securities law-related provisions. While many of the EGRRCPA's changes have been implemented through rules adopted by federal agencies, the Company expects to continue to evaluate the potential impact of the EGRRCPA as it is further implemented.

Bank Holding Company Regulation

WAL is a bank holding company as defined under the BHCA. The BHCA generally limits the business of bank holding companies to banking, managing or controlling banks, and other activities that the FRB has determined to be so closely related to banking as to be a proper incident thereto. Business activities that have been determined to be related to banking, and therefore appropriate for bank holding companies and their affiliates to engage in, include securities brokerage services, investment advisory services, fiduciary services, and certain management advisory and data processing services, among others. Bank holding companies that have elected to become financial holding companies may engage in any activity, or acquire and retain the shares of a company engaged in any activity that is either: (i) financial in nature or incidental to such financial activity (as determined by the FRB in consultation with the Secretary of the Treasury) or (ii) complementary to a financial activity, and that does not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally (as solely determined by the FRB).

Activities that are financial in nature include securities underwriting and dealing, insurance underwriting, and making merchant banking investments.

Mergers and Acquisitions

The BHCA, the Bank Merger Act, and other federal and state statutes regulate the direct and indirect acquisition of depository institutions. The BHCA requires prior FRB approval for a bank holding company to acquire, directly or indirectly, 5% or more of any class of voting securities of a commercial bank or its parent holding company and for a company, other than a bank holding company, to acquire 25% or more of any class of voting securities of a bank or bank holding company. Under the Change in Bank Control Act, any person, including a company, may not acquire, directly or indirectly, control of a bank without providing 60 days' prior notice and receiving a non-objection from the appropriate federal banking agency.

Under the Bank Merger Act, the prior approval of the appropriate federal banking agency is required for insured depository institutions to merge or enter into purchase and assumption transactions. In reviewing applications seeking approval of merger and purchase and assumption transactions, the federal banking agencies will consider, among other things, the competitive effect and public benefits of the transactions, the capital position of the combined banking organization, the applicant's performance record under the CRA, and the effectiveness of the subject organizations in combating money laundering activities. For further information relating to the CRA, see the section titled "Community Reinvestment Act and Fair Lending Laws."

Under Section 6-142 of the Arizona Revised Statutes, no person may acquire control of a company that controls an Arizona bank without the prior approval of the Arizona Superintendent of Financial Institutions, or Arizona Superintendent. A person who has the power to vote 15% or more of the voting stock of a controlling company is presumed to control the company.

Enhanced Prudential Standards

Section 165 of the Dodd-Frank Act imposes enhanced prudential standards on larger banking organizations, with certain of these standards applicable to banking organizations over \$10 billion, including WAL and WAB, as of the quarter ending June 30, 2014. In October 2012, the FDIC, the OCC, and the FRB issued separate but similar rules requiring covered banks and bank holding companies with \$10 billion to \$50 billion in total consolidated assets to conduct an annual company-run stress test. WAL and WAB conducted a company-run capital stress test as required by the Dodd-Frank Act in 2017 and provided the results to the FRB. WAL found the Company would have sufficient capital to maintain regulatory capital levels throughout an economic downturn.

As a result of passage of the EGRRCPA, bank holding companies with less than \$100 billion in assets, such as the Company, are exempt from the enhanced prudential standards imposed under Section 165 of the Dodd-Frank Act (including, but not limited to, the resolution planning and enhanced liquidity and risk management requirements therein). Notwithstanding these changes, the capital planning and risk management practices of the Company and the Bank will continue to be reviewed through the regular supervisory processes of the FRB.

In February 2014, the FRB issued a rule further implementing the enhanced prudential standards required by the Dodd-Frank Act. Although most of the standards apply only to bank holding companies with more than \$50 billion in assets, as directed by the Dodd-Frank Act, the rule contains certain standards that apply to bank holding companies with more than \$10 billion in assets, including a requirement to establish a risk committee of the Company's BOD to manage enterprise-wide risk. The Company meets these requirements. The EGRRCPA increased the asset threshold for requiring a bank holding company to establish a separate risk committee of independent directors from \$10 billion to \$50 billion. Notwithstanding this change, the Company has retained its separate risk committee of independent directors.

Volcker Rule

Section 619 of the Dodd-Frank Act, commonly known as the Volcker Rule, restricts the ability of banking entities, such as the Company and WAB, from: (i) engaging in "proprietary trading" and (ii) investing in or sponsoring certain covered funds, subject to certain limited exceptions. Under the Volcker Rule, the term "covered funds" is defined as any issuer that would be an investment company under the Investment Company Act but for the exemption in Section 3(c)(1) or 3(c)(7) of that Act, which includes CLO and CDO securities. There are also several exemptions from the definition of covered fund, including, among other things, loan securitizations, joint ventures, certain types of foreign funds, entities issuing asset-backed commercial paper, and registered investment companies. Further, the final rules permit banking entities, subject to certain conditions and limitations, to invest in or sponsor a covered fund in connection with: (1) organizing and offering the covered fund; (2) certain risk-mitigating hedging activities; and (3) *de minimis* investments in covered funds. The EGRRCPA and subsequent promulgation of inter-agency final rules have aimed at simplifying and tailoring requirements related to the Volcker Rule, including by eliminating collection of certain metrics and reducing the compliance burdens associated with other metrics for banks with less than \$20 billion in average trading assets and liabilities. Compliance with the Volcker Rule was required by July 21, 2017 and the Company believes it is fully compliant.

Dividends

Historically, the Company has not declared or paid cash dividends on its common stock, electing instead to retain earnings for growth. On July 30, 2019, WAL's BOD authorized the payment of regular quarterly dividends, declaring the Company's first quarterly cash dividend of \$0.25 per share of common stock, which was paid on August 30, 2019. Whether the Company continues to pay quarterly dividends and the amount of any such dividends will be at the discretion of WAL's BOD and will depend on the Company's earnings, financial condition, results of operations, business prospects, capital requirements, regulatory restrictions, contractual restrictions, and other factors that the BOD may deem relevant.

The Company's ability to pay dividends is subject to the regulatory authority of the FRB. The supervisory concern of the FRB focuses on a bank holding company's capital position, its ability to meet its financial obligations as they come due, and its capacity to act as a source of financial strength to its insured depository institution subsidiaries. In addition, FRB policy discourages the payment of dividends by a bank holding company that is not supported by current operating earnings.

As a Delaware corporation, the Company is also subject to limitations under Delaware law on the payment of dividends. Under the Delaware General Corporation Law, dividends may only be paid out of surplus or out of net profits for the year in which the dividend is declared or the preceding year, and no dividends may be paid on common stock at any time during which the capital of outstanding preferred stock or preference stock exceeds the Company's net assets.

From time to time, the Company may become a party to financing agreements and other contractual obligations that have the effect of limiting or prohibiting the declaration or payment of dividends under certain circumstances. Holding company expenses and obligations with respect to its outstanding trust preferred securities and corresponding subordinated debt also may limit or impair the Company's ability to declare and pay dividends.

Since the Company has no significant assets other than the voting stock of its subsidiaries, it currently depends on dividends from WAB and, to a lesser extent, its non-bank subsidiaries, for a substantial portion of its revenue and as the primary sources of its cash flow. The ability of a state member bank, such as WAB, to pay cash dividends is restricted by the FRB and the State of Arizona. The FRB's Regulation H states that a member bank may not declare or pay a dividend if the total of all dividends declared during that calendar year exceed the bank's net income during that calendar year and the retained net income of the prior two years. Further, without receiving prior approval from both the FRB and two-thirds of its shareholders, a bank cannot declare or pay a dividend that would exceed its undivided profits or withdraw any portion of its permanent capital.

Under Section 6-187 of the Arizona Revised Statutes, WAB may pay dividends on the same basis as any other Arizona corporation, except that cash dividends paid out of capital surplus require the prior approval of the Arizona Superintendent. Under Section 10-640 of the Arizona Revised Statutes, a corporation may not make a distribution to stockholders if to do so would render the corporation insolvent or unable to pay its debts as they become due. However, an Arizona bank may not declare a non-stock dividend out of capital surplus without the approval of the Arizona Superintendent.

Federal Reserve System

As a member of the Federal Reserve System, WAB is required by law to maintain reserves against its transaction deposits. The reserves must be held in cash or with the FRB. Banks are permitted to meet this requirement by maintaining the specified amount as an average balance over a two-week period. The total of reserve balances was approximately \$164.1 million and \$145.9 million as of December 31, 2019 and 2018, respectively.

Source of Strength Doctrine

FRB policy requires bank holding companies to act as a source of financial and managerial strength to their subsidiary banks. Section 616 of the Dodd-Frank Act codified the requirement that bank holding companies act as a source of financial strength. As a result, the Company is expected to commit resources to support WAB, including at times when the Company may not be in a financial position to provide such resources. Any capital loans by a bank holding company to any of its subsidiary banks are subordinate in right of payment to deposits and to certain other indebtedness of such subsidiary banks. The U.S. Bankruptcy Code provides that, in the event of a bank holding company's bankruptcy, any commitment by the bank holding company to a federal banking agency to maintain the capital of a subsidiary bank will be assumed by the bankruptcy trustee and entitled to priority of payment.

Capital Adequacy and Prompt Corrective Action

The Capital Rules established a comprehensive capital framework for U.S. banking organizations. The Capital Rules generally implement the Basel Committee's Basel III final capital framework for strengthening international capital standards. The Capital Rules revise the definitions and the components of regulatory capital, as well as address other issues affecting the numerator in banking institutions' regulatory capital ratios. The Capital Rules also address asset risk weights and other matters affecting the denominator in banking institutions' regulatory capital ratios and replaced the existing general risk-weighting approach with a more risk-sensitive approach.

The Capital Rules: (i) include CET1 and the related regulatory capital ratio of CET1 to risk-weighted assets; (ii) specify that Tier 1 capital consists of CET1 and "Additional Tier 1 capital" instruments meeting certain revised requirements; (iii) mandate that most deductions/adjustments to regulatory capital measures be made to CET1 and not to the other components of capital; and (iv) expand the scope of the deductions from and adjustments to capital as compared to existing regulations. Under the Capital Rules, for most banking organizations, the most common form of Additional Tier 1 capital is non-cumulative perpetual preferred stock, and the most common forms of Tier 2 capital are subordinated notes and a portion of the allocation for loan and lease losses, in each case, subject to the Capital Rules' specific requirements.

Pursuant to the Capital Rules, the minimum capital ratios are as follows:

- 4.5% CET1 to risk-weighted assets;
- 6.0% Tier 1 capital (that is, CET1 plus Additional Tier 1 capital) to risk-weighted assets;
- 8.0% Total capital (that is, Tier 1 capital plus Tier 2 capital) to risk-weighted assets; and
- 4.0% Tier 1 capital to average consolidated assets as reported on consolidated financial statements (called "leverage ratio").

The Capital Rules also include a "capital conservation buffer," composed entirely of CET1, in addition to these 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 above the minimum but below the capital conservation buffer will face constraints on dividends, equity, and other capital instrument repurchases and compensation based on the amount of the shortfall. The Capital Rules became fully phased-in on January 1, 2019. Thus, the capital standards applicable to the Company include an additional capital conservation buffer of 2.5% of CET1, effectively resulting in minimum ratios inclusive of the capital conservation buffer 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 Capital Rules provide for a number of deductions from and adjustments to CET1. These include, for example, the requirement that mortgage servicing assets, deferred tax assets arising from temporary differences that could not be realized through net operating loss carrybacks, and significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category exceeds 10% of CET1 or all such items, in the aggregate, exceed 15% of CET1. The Capital Rules further prescribe that the effects of accumulated other comprehensive income or loss items reported as a component of stockholders' equity be included in CET1 capital; however, non-advanced approaches banking organizations may make a one-time permanent election to exclude these items. The Company, as a non-advanced approaches institution, has made this one-time election.

The Capital Rules also preclude certain hybrid securities, such as trust preferred securities, issued on or after May 19, 2010 from inclusion in bank holding companies' Tier 1 capital. The Company has used trust preferred securities in the past as a tool for raising additional Tier 1 capital and otherwise improving its regulatory capital ratios. Although the Company may continue to include its existing trust preferred securities as Tier 1 capital, the prohibition on the use of these securities as Tier 1 capital going forward may limit the Company's ability to raise capital in the future.

The risk-weighting categories in the Capital Rules are standardized and include a risk-sensitive number of categories, depending on the nature of the assets, generally ranging from 0% for U.S. government and agency securities, to 600% for certain equity exposures, and resulting in higher risk weights for a variety of asset classes.

In September 2017, the federal banking agencies proposed simplifying the Capital Rules. On July 9, 2019, the federal banking agencies adopted a final rule (replacing a substantially similar interim rule) to simplify several requirements of the regulatory capital rules for non-advanced approaches institutions, such as the Company. The final rule simplifies the capital treatment for mortgage servicing assets, certain deferred tax assets, investments in the capital instruments of unconsolidated financial institutions, and minority interest. The final rule will be effective as of April 1, 2020 for the amendments to simplify the capital rules.

Management believes the Company is in compliance, and will continue to be in compliance, with the targeted capital ratios.

Prompt Corrective Action and Safety and Soundness

Pursuant to Section 38 of the FDIA, federal banking agencies are required to take “prompt corrective action” should a depository institution fail to meet certain capital adequacy standards. At each successive lower capital category, an insured depository institution is subject to more restrictions and prohibitions, including restrictions on growth, restrictions on interest rates paid on deposits, restrictions or prohibitions on payment of dividends and restrictions on the acceptance of brokered deposits. Furthermore, if an insured depository institution is classified in one of the undercapitalized categories, it is required to submit a capital restoration plan to the appropriate federal banking agency, and the holding company must guarantee the performance of that plan. Based upon its capital levels, a bank that is classified as well-capitalized, adequately capitalized, or undercapitalized may be treated as though it were in the next lower capital category if the appropriate federal banking agency, after notice and opportunity for hearing, determines that an unsafe or unsound condition, or an unsafe or unsound practice, warrants such treatment.

For purposes of prompt corrective action, to be: (i) well-capitalized, a bank must have a total risk based capital ratio of at least 10%, a Tier 1 risk based capital ratio of at least 8%, a CET1 risk based capital ratio of at least 6.5%, and a Tier 1 leverage ratio of at least 5%; (ii) adequately capitalized, a bank must have a total risk based capital ratio of at least 8%, a Tier 1 risk based capital ratio of at least 6%, a CET1 risk based capital ratio of at least 4.5%, and a Tier 1 leverage ratio of at least 4%; (iii) undercapitalized, a bank would have a total risk based capital ratio of less than 8%, a Tier 1 risk based capital ratio of less than 6%, a CET1 risk based capital ratio of less than 4.5%, and a Tier 1 leverage ratio of less than 4%; (iv) significantly undercapitalized, a bank would have a total risk based capital ratio of less than 6%, a Tier 1 risk based capital ratio of less than 4%, a CET1 risk based capital ratio of less than 3%, and a Tier 1 leverage ratio of less than 3%; (v) critically undercapitalized, a bank would have a ratio of tangible equity to total assets that is less than or equal to 2%.

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

Transactions with Affiliates and Insiders

Under federal law, transactions between insured depository institutions and their affiliates are governed by Sections 23A and 23B of the FRA and implementing Regulation W. In a bank holding company context, at a minimum, the parent holding company of a bank, and any companies which are controlled by such parent holding company, are affiliates of the bank. Generally, Sections 23A and 23B of the FRA are intended to protect insured depository institutions from losses arising from transactions with non-insured affiliates by limiting the extent to which a bank or its subsidiaries may engage in covered transactions with any one affiliate and with all affiliates of the bank in the aggregate, and requiring that such transactions be on terms consistent with safe and sound banking practices.

Further, Section 22(h) of the FRA and its implementing Regulation O restricts loans to directors, executive officers, and principal stockholders (“insiders”). Under Section 22(h), loans to insiders and their related interests may not exceed, together with all other outstanding loans to such persons and affiliated entities, the institution's total capital and surplus. Loans to insiders above specified amounts must receive the prior approval of the BOD. Further, under Section 22(h) of the FRA, loans to directors, executive officers, and principal stockholders must be made on terms substantially the same as offered in comparable transactions to other persons, except that such insiders may receive preferential loans made under a benefit or compensation program that is widely available to the bank's employees and does not give preference to the insider over the employees. Section 22(g) of the FRA places additional limitations on loans to executive officers.

Lending Limits

In addition to the requirements set forth above, state banking law generally limits the amount of funds that a state-chartered bank may lend to a single borrower. Under Section 6-352 of the Arizona Revised Statutes, the obligations of one borrower to a bank may not exceed 20% of the bank’s capital, plus an additional 10% of its capital if the additional amounts are fully secured by readily marketable collateral.

Brokered Deposits

Section 29 of the FDIA and FDIC regulations generally limit the ability of any bank to accept, renew or roll over any brokered deposit unless it is “well capitalized” or, with the FDIC’s approval, “adequately capitalized.” However, as a result of the EGRRCPA, the FDIC has undertaken a comprehensive review of its regulatory approach to brokered deposits, including reciprocal deposits, and interest rate caps applicable to banks that are less than “well capitalized.” On December 12, 2019, the FDIC issued a notice of proposed rulemaking to modernize its brokered deposit regulations. At this time, it is difficult to predict what changes, if any, to the brokered deposit regulations will actually be implemented or the effect of such changes on the Bank.

Consumer Protection and CFPB Supervision

The Dodd-Frank Act centralized responsibility for consumer financial protection by creating the CFPB, an independent agency charged with responsibility for implementing, enforcing, and examining compliance with federal consumer financial protection laws. The Company is subject to a number of federal and state laws designed to protect borrowers and promote lending to various sectors of the economy and population. These laws include the Equal Credit Opportunity Act, the Fair Credit Reporting Act, the Fair Debt Collection Procedures Act, the Truth in Lending Act, the Home Mortgage Disclosure Act, the Real Estate Settlement Practices Act, various state law counterparts, and the Consumer Financial Protection Act of 2010, which is part of the Dodd-Frank Act. The Dodd-Frank Act does not prevent states from adopting stricter consumer protection standards. State regulation of financial products and potential enforcement actions could also adversely affect the Company’s business, financial condition, or operations.

Depositor Preference

The FDIA provides that, in the event of the “liquidation or other resolution” of an insured depository institution, the claims of depositors of the institution, including the claims of the FDIC as subrogee of insured depositors, and certain claims for administrative expenses of the FDIC as a receiver, will have priority over other general unsecured claims against the institution. If an insured depository institution fails, insured and uninsured depositors, along with the FDIC, will have priority in payment ahead of unsecured, non-deposit creditors, including the parent bank holding company, with respect to any extensions of credit they have made to such insured depository institution.

Federal Deposit Insurance

Substantially all of the deposits of WAB are insured up to applicable limits by the FDIC’s DIF. The basic limit on FDIC deposit insurance is \$250,000 per depositor. WAB is subject to deposit insurance assessments to maintain the DIF.

The FDIC uses a risk-based assessment system that imposes insurance premiums based upon a risk matrix that takes into account a bank’s CAMELS rating. The risk matrix utilizes different risk categories distinguished by capital levels and supervisory ratings. As a result of the Dodd-Frank Act, the base for insurance assessments is now consolidated average assets less average tangible equity. Assessment rates are calculated using formulas that take into account the risk of the institution being assessed. WAB is classified as, and subject to the scorecard for, a large and highly complex institution to determine its total base assessment rate.

The Dodd-Frank Act requires that the FDIC raise the minimum reserve ratio of the DIF from 1.15% to 1.35%, and that the FDIC offset the effect of this increase on insured depository institutions with total consolidated assets of less than \$10 billion. In March 2016, the FDIC finalized a rule to impose a surcharge of 4.5 cents per \$100 of their assessment base on deposit insurance assessment rates paid by insured depository institutions with total consolidated assets of more than \$10 billion. As of June 30, 2016, the minimum reserve ratio reached 1.17% and as such, WAB was subject to the surcharge beginning July 1, 2016. At September 30, 2018, the reserve ratio reached 1.36%, exceeding the statutorily required minimum. As a result, WAB was no longer subject to the surcharge as of September 30, 2018. The FDIC also has authority to further increase deposit insurance assessments. FDIC deposit insurance expense also includes FICO assessments related to outstanding FICO bonds. These assessments will continue until the FICO bonds mature, with such maturities beginning in 2017 and continuing through 2019.

Under the FDIA, the FDIC may terminate deposit insurance upon a finding that the institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations, or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC. The Company’s management is not aware of any practice, condition, or violation that might lead to the termination of its deposit insurance.

Financial Privacy and Data Security

The Company is subject to federal laws, including the GLBA, and certain state laws containing consumer privacy protection provisions. These provisions limit the ability of banks and other financial institutions to disclose non-public information about consumers to affiliated and non-affiliated third parties and limit the reuse of certain consumer information received from non-affiliated institutions. These provisions require notice of privacy policies to consumers and, in some circumstances, allow consumers to prevent disclosure of certain personal information to affiliates or non-affiliated third parties by means of “opt out” or “opt in” authorizations.

For example, in August 2018, the CFPB published its final rule to update Regulation P pursuant to the amended GLBA. Under this rule, certain qualifying financial institutions are not required to provide annual privacy notices to customers. To qualify, a financial institution must not share nonpublic personal information about customers except as described in certain statutory exceptions that do not trigger a customer’s statutory opt-out right. In addition, the financial institution must not have changed its disclosure policies and practices from those disclosed in its most recent privacy notice. The rule sets forth timing requirements for delivery of annual privacy notices in the event that a financial institution that qualified for the annual notice exemption later changes its policies or practices in such a way that it no longer qualifies for the exemption.

The GLBA also requires that financial institutions implement comprehensive written information security programs that include administrative, technical, and physical safeguards to protect consumer information. Further, pursuant to interpretive guidance issued under the GLBA and certain state laws, financial institutions are required to notify customers of security breaches that result in unauthorized access to their nonpublic personal information.

For example, under California law, every business that owns or licenses personal information about a California resident must maintain reasonable security procedures and policies to protect that information and comply with specific requirements relating to the destruction of records containing personal information and disclosure of breaches to customers, and restrictions on the use of customer information unless the customer “opts in.” Other states, including Arizona and Nevada where WAB has branches, may also have applicable laws requiring businesses that retain consumer personal information to develop reasonable security policies and procedures, notify consumers of a security breach, or provide disclosures about the use and sharing of consumer personal information.

The federal banking agencies, including the FRB, through the Federal Financial Institutions Examination Council, have adopted guidelines to encourage financial institutions to address cybersecurity risks and identify, assess, and mitigate these risks, both internally and at critical third-party services providers. In October 2016, the federal bank regulatory agencies issued proposed rules on enhanced cybersecurity risk management and resilience standards that would apply to very large financial institutions and to services provided by third parties to these institutions. The comment period for these proposed rules has closed and a final rule has not been published. Although the proposed rules would apply only to bank holding companies and banks with \$50 billion or more in total consolidated assets, these rules could influence the federal bank regulatory agencies’ expectations and supervisory requirements for information security standards and cybersecurity programs of financial institutions with less than \$50 billion in total consolidated assets.

These laws and regulations impose compliance costs and create obligations and, in some cases, reporting obligations, and compliance with these laws, regulations, and obligations require significant resources of WAL and WAB.

Community Reinvestment Act and Fair Lending Laws

WAB has a responsibility under the CRA to help meet the credit needs of its communities, including low and moderate income neighborhoods. The CRA does not establish specific lending requirements or programs for financial institutions nor does it limit an institution's discretion to develop the types of products and services that it believes are best suited to its particular community, consistent with the CRA. In addition, the Equal Credit Opportunity Act and the Fair Housing Act prohibit discrimination in lending practices on the basis of characteristics specified in those statutes. WAB’s failure to comply with the provisions of the CRA could, at a minimum, result in regulatory restrictions on its activities and the activities of the Company. WAB’s failure to comply with the Equal Credit Opportunity Act and the Fair Housing Act could result in enforcement actions. WAB received a rating of “Satisfactory” in its most recent CRA examination, in January 2019.

On December 17, 2019, the OCC and the FDIC issued a joint notice of proposed rulemaking to modernize the regulations implementing the CRA. While the proposed rule will not apply to WAB because its primary federal regulator is the FRB, it may impact the overall environment as it relates to CRA compliance and portend future changes by the FRB. Under the rulemaking, the federal banking agencies intend 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, record keeping, and reporting. WAL and WAB expect to monitor

developments with respect to this rulemaking and assess the impact, if any, of changes to the CRA regulations proposed by the federal banking agencies.

Federal Home Loan Bank of San Francisco

WAB is a member of the FHLB of San Francisco, which is one of 12 regional FHLBs that provide funding to their members to support residential lending, as well as affordable housing and community development loans. Each FHLB serves as a reserve, or central bank, for the members within its assigned region. Each FHLB makes loans to its members in accordance with policies and procedures established by the board of directors of the FHLB. As a member, WAB must purchase and maintain stock in the FHLB of San Francisco. At December 31, 2019, WAB's total investment in FHLB stock was \$17.3 million.

Incentive Compensation

The Dodd-Frank Act requires the federal banking agencies and the SEC to establish joint regulations or guidelines prohibiting incentive-based payment arrangements at specified regulated entities, including the Company and WAB, with at least \$1 billion in total consolidated assets, that encourage inappropriate risks by providing an executive officer, employee, director, or principal shareholder with excessive compensation, fees, or benefits that could lead to material financial loss to the entity. The federal banking agencies and the SEC most recently proposed such regulations in 2016, but the regulations have not yet been finalized. If the regulations are adopted in the form initially proposed, they will restrict the manner in which executive compensation is structured.

The Dodd-Frank Act also requires publicly traded companies to give stockholders a non-binding vote on executive compensation at least every three years and on so-called "golden parachute" payments in connection with approvals of mergers and acquisitions. WAL gives stockholders a non-binding vote on executive compensation annually.

Preventing Suspicious Activity

Under Title III of the USA PATRIOT Act, all financial institutions are required to take certain measures to identify their customers, prevent money laundering, monitor customer transactions, and report suspicious activity to U.S. law enforcement agencies. Financial institutions also are required to respond to requests for information from federal banking agencies and law enforcement agencies. Information sharing among financial institutions for the above purposes is encouraged by an exemption granted to complying financial institutions from the privacy provisions of the GLBA and other privacy laws. Financial institutions that hold correspondent accounts for foreign banks or provide private banking services to foreign individuals are required to take measures to avoid dealing with certain foreign individuals or entities, including foreign banks with profiles that raise money laundering concerns, and are prohibited from dealing with foreign "shell banks" and persons from jurisdictions of particular concern. The primary federal banking agencies and the Secretary of the Treasury have adopted regulations to implement several of these provisions. The new Customer Due Diligence Rule, that was effective beginning May 11, 2018, clarified and strengthened the existing obligations for identifying new and existing customers and explicitly included risk-based procedures for conducting ongoing customer due diligence. All financial institutions also are required to establish internal anti-money laundering programs. The effectiveness of a financial institution in combating money laundering activities is a factor to be considered in any application submitted by the financial institution under the Bank Merger Act. The Company has a Bank Secrecy Act and USA PATRIOT Act Board-approved compliance program and engages in relatively few transactions with foreign financial institutions or foreign persons.

The FCRA's Red Flags Rule requires financial institutions with covered accounts (e.g., consumer bank accounts and loans) to develop, implement, and administer an identity theft prevention program. This program must include reasonable policies and procedures to detect suspicious patterns or practices that indicate the possibility of identity theft, such as inconsistencies in personal information or changes in account activity.

Office of Foreign Assets Control Regulation

The United States has imposed economic sanctions that affect transactions with designated foreign countries, nationals, and others. These are typically known as the OFAC rules based on their administration by the OFAC. The OFAC-administered sanctions targeting countries take many different forms. Generally, they contain one or more of the following elements: (i) restrictions on trade with or investment in a sanctioned country, including prohibitions against direct or indirect imports from and exports to a sanctioned country and prohibitions on "U.S. persons" engaging in financial transactions relating to making investments in, or providing investment-related advice or assistance to, a sanctioned country; and (ii) a blocking of assets in which the government or specially designated nationals of the sanctioned country have an interest, by prohibiting transfers of property subject to U.S. jurisdiction (including property in the possession or control of U.S. persons). Blocked assets (property and bank deposits) cannot be paid out, withdrawn, set off, or transferred in any manner without a license from OFAC. Failure to comply with these sanctions could have serious legal and reputational consequences.

Future Legislative Initiatives

Federal and state legislatures may introduce legislation that will impact the financial services industry. In addition, federal banking agencies may introduce regulatory initiatives that are likely to impact the financial services industry, generally. However it is not clear whether such changes will be enacted or, if enacted, what their effect on the Company will be. New legislation could change banking statutes and the operating environment of the Company in substantial and unpredictable ways. If enacted, such legislation could increase or decrease the cost of doing business, limit or expand permissible activities, or affect the competitive balance among banks, savings associations, credit unions, and other financial institutions. The Company cannot predict whether any such legislation will be enacted, and, if enacted, the effect that it or any implementing regulations would have on the financial condition or results of operations of the Company. A change in statutes, regulations, or regulatory policies applicable to WAL or any of its subsidiaries could have a material effect on the business of the Company.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

Market risk is the risk of loss in a financial instrument arising from adverse changes in market prices, interest rates, foreign currency exchange rates, commodity prices, and equity prices. The Company's market risk arises primarily from interest rate risk inherent in its lending, investing, and deposit taking activities. To that end, management actively monitors and manages the Company's interest rate risk exposure. The Company generally manages its interest rate sensitivity by evaluating re-pricing opportunities on its earning assets to those on its funding liabilities.

Management uses various asset/liability strategies to manage the re-pricing characteristics of the Company's assets and liabilities, all of which are designed to ensure that exposure to interest rate fluctuations is limited to within the Company's guidelines of acceptable levels of risk-taking. Hedging strategies, including the terms and pricing of loans and deposits and management of the deployment of its securities, are used to reduce mismatches in interest rate re-pricing opportunities of portfolio assets and their funding sources.

Interest rate risk is addressed by the ALCO, which includes members of executive management, finance, and operations. ALCO monitors interest rate risk by analyzing the potential impact on the net EVE and net interest income from potential changes in interest rates and considers the impact of alternative strategies or changes in balance sheet structure. The Company manages its balance sheet in part to maintain the potential impact on EVE and net interest income within acceptable ranges despite changes in interest rates.

The Company's exposure to interest rate risk is reviewed at least quarterly by the ALCO. Interest rate risk exposure is measured using interest rate sensitivity analysis to determine its change in both EVE and net interest income in the event of hypothetical changes in interest rates. If potential changes to EVE and net interest income resulting from hypothetical interest rate changes are not within the limits established by the BOD, the BOD may direct management to adjust the asset and liability mix to bring interest rate risk within Board-approved limits.

Net Interest Income Simulation. In order to measure interest rate risk at December 31, 2019, the Company uses a simulation model to project changes in net interest income that result from forecasted changes in interest rates. This analysis calculates the difference between a baseline net interest income forecast using current yield curves that do not take into consideration any future anticipated rate hikes, compared to forecasted net income resulting from an immediate parallel shift in rates upward or downward, along with other scenarios directed by ALCO. The income simulation model includes various assumptions regarding the re-pricing relationships for each of the Company's products. Many of the Company's assets are floating rate loans, which are assumed to re-price immediately and, proportional to the change in market rates, depending on their contracted index, including the impact of caps or floors. Some loans and investments contain contractual prepayment features (embedded options) and, accordingly, the simulation model incorporates prepayment assumptions. The Company's non-term deposit products re-price concurrently with interest rate changes taken by the Federal Open Market Committee.

This analysis indicates the impact of changes in net interest income for the given set of rate changes and assumptions. It assumes the balance sheet remains static and that its structure does not change over the course of the year. It does not account for all factors that could impact the Company's results, including changes by management to mitigate interest rate changes or secondary factors, such as changes to the Company's credit risk profile as interest rates change.

Furthermore, loan prepayment rate estimates and spread relationships change regularly. Interest rate changes create changes in actual loan prepayment speeds that will differ from the market estimates incorporated in this analysis. Changes that vary significantly from the modeled assumptions may have significant effects on the Company's actual net interest income.

This simulation model assesses the changes in net interest income that would occur in response to an instantaneous and sustained increase or decrease (shock) in market interest rates. At December 31, 2019, the Company's net interest income exposure for the next 12 months related to these hypothetical changes in market interest rates was within the Company's current guidelines.

Sensitivity of Net Interest Income

Parallel Shift Rate Scenario (change in basis points from Base)

	Down 100	Base	Up 100	Up 200
	<i>(in thousands)</i>			
Interest Income	\$ 1,198,091	\$ 1,302,915	\$ 1,437,503	\$ 1,576,092
Interest Expense	96,043	157,552	222,366	287,172
Net Interest Income	1,102,048	1,145,363	1,215,137	1,288,920
% Change	(3.8)%		6.1%	12.5%

Interest Rate Ramp Scenario (change in basis points from Base)

	Down 100	Base	Up 100	Up 200
	<i>(in thousands)</i>			
Interest Income	\$ 1,253,569	\$ 1,302,915	\$ 1,359,077	\$ 1,421,736
Interest Expense	127,741	157,552	172,436	186,619
Net Interest Income	1,125,828	1,145,363	1,186,641	1,235,117
% Change	(1.7)%		3.6%	7.8%

Economic Value of Equity. The Company measures the impact of market interest rate changes on the NPV of estimated cash flows from its assets, liabilities, and off-balance sheet items, defined as EVE, using a simulation model. This simulation model assesses the changes in the market value of interest rate sensitive financial instruments that would occur in response to an instantaneous and sustained increase or decrease (shock) in market interest rates.

At December 31, 2019, the Company's EVE exposure related to these hypothetical changes in market interest rates was within the Company's current guidelines. The following table shows the Company's projected change in EVE for this set of rate shocks at December 31, 2019:

Economic Value of Equity

	Interest Rate Scenario (change in basis points from Base)					
	Down 100	Base	Up 100	Up 200	Up 300	Up 400
	<i>(in thousands)</i>					
Assets	\$ 27,618,706	\$ 27,087,840	\$ 26,546,699	\$ 26,026,259	\$ 25,542,390	\$ 25,085,162
Liabilities	22,634,719	22,035,566	21,519,248	21,072,481	20,685,165	20,346,458
Net Present Value	4,983,987	5,052,274	5,027,451	4,953,778	4,857,225	4,738,704
% Change	(1.4)%		(0.5)%	(1.9)%	(3.9)%	(6.2)%

The computation of prospective effects of hypothetical interest rate changes are based on numerous assumptions, including relative levels of market interest rates, asset prepayments, and deposit decay, and should not be relied upon as indicative of actual results. Further, the computations do not contemplate any actions the Company may undertake in response to changes in interest rates. Actual amounts may differ from the projections set forth above should market conditions vary from the underlying assumptions.

Derivative Contracts. In the normal course of business, the Company uses derivative instruments to meet the needs of its customers and manage exposure to fluctuations in interest rates. The following table summarizes the aggregate notional amounts, market values, and terms of the Company's derivative positions as of December 31, 2019 and 2018:

Outstanding Derivatives Positions

December 31,					
2019			2018		
Notional	Net Value	Weighted Average Term (Years)	Notional	Net Value	Weighted Average Term (Years)
<i>(dollars in thousands)</i>					
\$ 872,595	\$ (53,667)	16.1	\$ 1,017,773	\$ (42,477)	15.8

Item 8. Financial Statements and Supplementary Data

The Company's Consolidated Financial Statements and Supplementary Data included in this Annual Report is immediately following the Index to Consolidated Financial Statements page to this Annual Report.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
Western Alliance Bancorporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Western Alliance Bancorporation and Subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes to the consolidated financial statements (collectively, 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* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013, and our report, dated March 2, 2020, expressed an unqualified opinion on the effectiveness of 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 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 audits 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 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 Credit Losses

As described in Notes 1 and 3 of the consolidated financial statements, the Company's allowance for credit losses totaled \$168 million as of December 31, 2019. The allowance for credit losses represents an amount considered adequate to absorb estimated probable losses on existing loans that may become uncollectable, based on evaluation of the collectability of loans and prior credit loss experience, together with other factors.

The allowance for credit losses consists of two components: the specific allowance for impaired loans and the general allowance for non-impaired loans. The general allowance is comprised of a quantitative reserve based on the Company's historical charge-off experience and a qualitative reserve based on management's evaluation of several judgmental factors. The qualitative factors evaluated by management include levels of and trends in delinquencies and impaired loans; levels of and trends in charge-offs

and recoveries; trends in volume and terms of loans; changes in underwriting standards and lending policies; experience, ability and depth of lending staff; national and local economic trends and conditions; changes in credit concentrations; out-of-market exposures; changes in quality of loan review system; and changes in the value of underlying collateral. The evaluation and measurement of these qualitative factors requires management to apply a significant amount of judgment and involves a high degree of estimation.

We identified the qualitative reserve of the allowance for credit losses as a critical audit matter because auditing the underlying qualitative factors used in the qualitative reserve involved a high degree of auditor judgment given the high degree of subjectivity exercised by management in developing the qualitative adjustment, which resulted in high estimation uncertainty.

Our audit procedures related to management's evaluation and establishment of the qualitative reserve of the allowance for credit losses include the following, among others:

- We obtained an understanding of the relevant controls related to the evaluation and establishment of the qualitative reserve of the allowance for credit losses and tested such controls for design and operating effectiveness, including controls related to management's assessment and review of the qualitative factor changes and conclusions.
- We tested management's process and significant judgments in the evaluation and establishment of the qualitative reserve of the allowance for credit losses, which included:
 - Evaluating management's considerations and data utilized as a basis for the adjustments relating to qualitative reserve factors, as well as testing the completeness and accuracy of the underlying data.
 - Evaluating the reasonableness of management's judgments related to the qualitative and quantitative assessment of the considerations and data utilized in the determination of qualitative general reserve factors and the resulting qualitative component of the allowance for credit losses.

/s/ RSM US LLP

We have served as the Company's auditor since 1994.

Phoenix, Arizona
March 2, 2020

WESTERN ALLIANCE BANCORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2019	2018
	<i>(in thousands, except shares and per share amounts)</i>	
Assets:		
Cash and due from banks	\$ 185,977	\$ 180,053
Interest-bearing deposits in other financial institutions	248,619	318,519
Cash, cash equivalents, and restricted cash	434,596	498,572
Money market investments	—	7
Investment securities - AFS, at fair value; amortized cost of \$3,317,928 at December 31, 2019 and \$3,339,888 at December 31, 2018	3,346,310	3,276,988
Investment securities - HTM, at amortized cost; fair value of \$516,261 at December 31, 2019 and \$298,648 at December 31, 2018	485,107	302,905
Investment securities - equity	138,701	115,061
Investments in restricted stock, at cost	66,509	66,132
Loans - HFS	21,803	—
Loans, net of deferred loan fees and costs	21,101,493	17,710,629
Less: allowance for credit losses	(167,797)	(152,717)
Net loans held for investment	20,933,696	17,557,912
Premises and equipment, net	125,838	119,474
Operating lease right of use asset	72,558	—
Other assets acquired through foreclosure, net	13,850	17,924
Bank owned life insurance	174,046	170,145
Goodwill	289,895	289,895
Other intangible assets, net	7,713	9,260
Deferred tax assets, net	18,025	31,990
Investments in LIHTC and renewable energy	409,365	369,648
Other assets	283,936	283,573
Total assets	\$ 26,821,948	\$ 23,109,486
Liabilities:		
Deposits:		
Non-interest-bearing demand	\$ 8,537,905	\$ 7,456,141
Interest-bearing	14,258,588	11,721,306
Total deposits	22,796,493	19,177,447
Customer repurchase agreements	16,675	22,411
Other borrowings	—	491,000
Qualifying debt	393,563	360,458
Operating lease liability	78,112	—
Other liabilities	520,357	444,436
Total liabilities	23,805,200	20,495,752
Commitments and contingencies (Note 15)		
Stockholders' equity:		
Common stock - par value \$0.0001; 200,000,000 authorized; 104,527,544 shares issued at December 31, 2019 and 106,741,870 at December 31, 2018	10	10
Treasury stock, at cost (2,003,873 shares at December 31, 2019 and 1,793,231 shares at December 31, 2018)	(62,728)	(53,083)
Additional paid in capital	1,374,141	1,417,724
Accumulated other comprehensive income (loss)	25,008	(33,622)
Retained earnings	1,680,317	1,282,705
Total stockholders' equity	3,016,748	2,613,734
Total liabilities and stockholders' equity	\$ 26,821,948	\$ 23,109,486

See accompanying Notes to Consolidated Financial Statements.

WESTERN ALLIANCE BANCORPORATION AND SUBSIDIARIES

CONSOLIDATED INCOME STATEMENTS

Year Ended December 31,

	2019	2018	2017
	<i>(in thousands, except per share amounts)</i>		
Interest income:			
Loans, including fees	\$ 1,093,070	\$ 910,577	\$ 747,510
Investment securities	111,939	106,752	83,354
Dividends	6,133	7,915	7,740
Other	13,903	8,239	6,909
Total interest income	<u>1,225,045</u>	<u>1,033,483</u>	<u>845,513</u>
Interest expense:			
Deposits	158,405	90,464	41,965
Other borrowings	1,372	4,329	561
Qualifying debt	23,390	22,287	18,273
Other	1,466	524	50
Total interest expense	<u>184,633</u>	<u>117,604</u>	<u>60,849</u>
Net interest income	<u>1,040,412</u>	<u>915,879</u>	<u>784,664</u>
Provision for credit losses	18,500	23,000	17,250
Net interest income after provision for credit losses	<u>1,021,912</u>	<u>892,879</u>	<u>767,414</u>
Non-interest income:			
Service charges and fees	23,353	22,295	20,346
Income from equity investments	8,290	8,595	4,496
Card income	6,979	8,009	6,313
Foreign currency income	4,987	4,760	3,536
Income from bank owned life insurance	3,901	3,946	3,861
Lending related income and gains (losses) on sale of loans, net	3,158	4,340	2,212
Gain (loss) on sales of investment securities, net	3,152	(7,656)	2,343
Fair value gain (loss) adjustments on assets measured at fair value, net	5,119	(3,611)	(1)
Other income	6,156	2,438	2,238
Total non-interest income	<u>65,095</u>	<u>43,116</u>	<u>45,344</u>
Non-interest expense:			
Salaries and employee benefits	279,274	253,238	214,344
Legal, professional, and directors' fees	37,009	28,722	29,814
Occupancy	32,507	29,404	27,860
Deposit costs	31,719	18,900	9,731
Data processing	30,577	22,716	19,225
Insurance	11,924	14,005	14,042
Loan and repossessed asset expenses	7,571	4,578	4,617
Business development	7,043	5,960	6,128
Marketing	4,199	3,770	3,804
Card expense	2,346	4,301	3,413
Intangible amortization	1,547	1,594	2,074
Net loss (gain) on sales / valuations of repossessed and other assets	3,818	9	(80)
Other expense	33,247	38,470	25,969
Total non-interest expense	<u>482,781</u>	<u>425,667</u>	<u>360,941</u>
Income before provision for income taxes	<u>604,226</u>	<u>510,328</u>	<u>451,817</u>
Income tax expense	105,055	74,540	126,325
Net income	<u>\$ 499,171</u>	<u>\$ 435,788</u>	<u>\$ 325,492</u>

Year Ended December 31,

	2019		2018		2017
	<i>(in thousands, except per share amounts)</i>				
Earnings per share:					
Basic	\$ 4.86	\$	4.16	\$	3.12
Diluted	4.84		4.14		3.10
Weighted average number of common shares outstanding:					
Basic	102,667		104,669		104,179
Diluted	103,133		105,370		104,997

See accompanying Notes to Consolidated Financial Statements.

WESTERN ALLIANCE BANCORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Net income	\$ 499,171	\$ 435,788	\$ 325,492
Other comprehensive income (loss), net:			
Unrealized gain (loss) on AFS securities, net of tax effect of \$(23,205), \$13,354, and \$(3,973), respectively	71,222	(40,808)	6,334
Unrealized (loss) gain on SERP, net of tax effect of \$138, \$24, and \$(79), respectively	(412)	(77)	264
Unrealized (loss) gain on junior subordinated debt, net of tax effect of \$3,197, \$(1,857), and \$2,220, respectively	(9,804)	5,693	(3,604)
Realized (gain) loss on sale of AFS securities included in income, net of tax effect of \$776, \$(1,883), and \$899, respectively	(2,376)	5,773	(1,444)
Net other comprehensive income (loss)	58,630	(29,419)	1,550
Comprehensive income	\$ 557,801	\$ 406,369	\$ 327,042

See accompanying Notes to Consolidated Financial Statements.

WESTERN ALLIANCE BANCORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock		Additional Paid in Capital	Treasury Stock	Accumulated Other Comprehensive (Loss) Income	Retained Earnings	Total Stockholders' Equity
	Shares	Amount					
	<i>(in thousands)</i>						
Balance, December 31, 2016	105,071	\$ 10	\$ 1,400,140	\$ (26,362)	\$ (4,695)	\$ 522,436	\$ 1,891,529
Balance, January 1, 2017 (1)	105,071	10	1,400,140	(26,362)	(4,695)	522,974	1,892,067
Net income	—	—	—	—	—	325,492	325,492
Exercise of stock options	38	—	846	—	—	—	846
Restricted stock, performance stock units, and other grants, net	648	—	23,554	—	—	—	23,554
Restricted stock surrendered (2)	(270)	—	—	(13,811)	—	—	(13,811)
Other comprehensive income, net	—	—	—	—	1,550	—	1,550
Balance, December 31, 2017	105,487	\$ 10	\$ 1,424,540	\$ (40,173)	\$ (3,145)	\$ 848,466	\$ 2,229,698
Balance, January 1, 2018 (3)	105,487	10	1,424,540	(40,173)	(4,203)	849,524	2,229,698
Net income	—	—	—	—	—	435,788	435,788
Exercise of stock options	22	—	554	—	—	—	554
Restricted stock, performance stock units, and other grants, net	564	—	25,711	—	—	—	25,711
Restricted stock surrendered (2)	(223)	—	—	(12,910)	—	—	(12,910)
Stock repurchase	(901)	—	(33,081)	—	—	(2,607)	(35,688)
Other comprehensive loss, net	—	—	—	—	(29,419)	—	(29,419)
Balance, December 31, 2018	104,949	\$ 10	\$ 1,417,724	\$ (53,083)	\$ (33,622)	\$ 1,282,705	\$ 2,613,734
Net income	—	—	—	—	—	499,171	499,171
Exercise of stock options	3	—	80	—	—	—	80
Restricted stock, performance stock unit, and other grants, net	605	—	26,238	—	—	—	26,238
Restricted stock surrendered (2)	(211)	—	—	(9,645)	—	—	(9,645)
Stock repurchase	(2,822)	—	(69,901)	—	—	(50,230)	(120,131)
Dividends paid	—	—	—	—	—	(51,329)	(51,329)
Other comprehensive income, net	—	—	—	—	58,630	—	58,630
Balance, December 31, 2019	102,524	\$ 10	\$ 1,374,141	\$ (62,728)	\$ 25,008	\$ 1,680,317	\$ 3,016,748

- (1) As adjusted for adoption of ASU 2017-12. The cumulative effect of adoption of this guidance at January 1, 2017 resulted in an increase to retained earnings of \$0.5 million and a corresponding increase to loans for the fair market value adjustment on the swaps.
- (2) Share amounts represent Treasury Shares, see "Note 1. Summary of Significant Accounting Policies" for further discussion.
- (3) As adjusted for adoption of ASU 2016-01 and ASU 2018-02. The cumulative effect of adoption of this guidance at January 1, 2018 resulted in an increase to retained earnings of \$1.1 million and a corresponding decrease to accumulated other comprehensive income.

See accompanying Notes to Consolidated Financial Statements.

WESTERN ALLIANCE BANCORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Cash flows from operating activities:			
Net income	\$ 499,171	\$ 435,788	\$ 325,492
Adjustments to reconcile net income to cash provided by operating activities:			
Provision for credit losses	18,500	23,000	17,250
Depreciation and amortization	18,457	14,319	13,393
Stock-based compensation	26,238	25,711	23,554
Deferred income taxes	(5,129)	(16,709)	88,471
Amortization of net premiums for investment securities	17,095	14,247	16,938
Amortization of tax credit investments	41,501	35,898	25,355
Amortization of operating lease right of use asset	10,458	—	—
Accretion of fair market value adjustments on loans acquired from business combinations	(12,678)	(18,565)	(28,235)
Accretion and amortization of fair market value adjustments on other assets and liabilities acquired from business combinations	1,857	1,904	2,385
Income from bank owned life insurance	(3,901)	(3,946)	(3,861)
(Gains) / Losses on:			
Sales of investment securities	(3,152)	7,656	(2,343)
Assets measured at fair value, net	(5,119)	3,611	1
Sale of loans	(690)	(2,638)	(945)
Other assets acquired through foreclosure, net	(604)	(1,214)	(228)
Valuation adjustments of other repossessed assets, net	4,144	1,267	120
Sale of premises, equipment, and other assets, net	278	(44)	28
Changes in other assets and liabilities, net	111,346	20,687	(93,564)
Net cash provided by operating activities	717,772	540,972	383,811
Cash flows from investing activities:			
Investment securities - trading			
Proceeds from sales	—	—	994
Investment securities - AFS			
Purchases	(927,589)	(520,734)	(1,429,434)
Principal pay downs and maturities	785,659	425,151	430,934
Proceeds from sales	150,377	154,434	110,104
Investment securities - HTM			
Purchases	(131,384)	(56,575)	(169,400)
Principal pay downs and maturities	21,594	8,987	6,174
Proceeds from sales	10,000	—	—
Equity securities carried at fair value			
Purchases	(32,725)	(71,728)	—
Redemption of principal (reinvestment of dividends)	14,598	(577)	—
Proceeds from sales	—	48,639	—
Purchase of investment tax credits	(141,668)	(109,598)	(38,098)
Purchase of SBIC investments	(8,688)	(4,129)	(5,819)
Sale (purchase) of money market investments, net	7	(7)	—
Proceeds from bank owned life insurance	—	1,655	607
(Purchase) liquidation of restricted stock, net	(377)	(347)	(535)
Loan fundings and principal collections, net	(3,429,014)	(2,586,703)	(1,873,387)
Purchase of premises, equipment, and other assets, net	(35,148)	(11,313)	(8,862)
Proceeds from sale of other real estate owned and repossessed assets, net	1,325	9,412	21,195
Net cash used in investing activities	(3,723,033)	(2,713,433)	(2,955,527)

	December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Cash flows from financing activities:			
Net increase (decrease) in deposits	\$ 3,619,046	\$ 2,204,915	\$ 2,422,669
Net (decrease) increase in borrowings	(496,736)	97,394	294,289
Proceeds from exercise of common stock options	80	554	846
Cash paid for tax withholding on vested restricted stock	(9,645)	(12,910)	(13,811)
Common stock repurchases	(120,131)	(35,688)	—
Cash dividends paid on common stock	(51,329)	—	—
Net cash provided by financing activities	2,941,285	2,254,265	2,703,993
Net (decrease) increase in cash, cash equivalents, and restricted cash	(63,976)	81,804	132,277
Cash, cash equivalents, and restricted cash at beginning of period	498,572	416,768	284,491
Cash, cash equivalents, and restricted cash at end of period	\$ 434,596	\$ 498,572	\$ 416,768
Supplemental disclosure:			
Cash paid (received) during the period for:			
Interest	\$ 180,436	\$ 113,507	\$ 59,838
Income taxes, net of refunds	(23,403)	18,760	99,430
Non-cash operating, investing, and financing activity:			
Transfers to other assets acquired through foreclosure, net	898	5,744	1,812

See accompanying Notes to Consolidated Financial Statements.

WESTERN ALLIANCE BANCORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of operation

WAL is a bank holding company headquartered in Phoenix, Arizona, incorporated under the laws of the state of Delaware. WAL provides a full spectrum of deposit, lending, treasury management, international banking, and online banking products and services through its wholly-owned banking subsidiary, WAB.

WAB operates the following full-service banking divisions: ABA, BON, FIB, Bridge, and TPB. The Company also serves business customers through a national platform of specialized financial services. In addition, the Company has two non-bank subsidiaries, LVSP, which held and managed certain OREO properties, and CSI, a captive insurance company formed and licensed under the laws of the State of Arizona and established as part of the Company's overall enterprise risk management strategy.

Basis of presentation

The accounting and reporting policies of the Company are in accordance with GAAP and conform to practices within the financial services industry. The accounts of the Company and its consolidated subsidiaries are included in the Consolidated Financial Statements.

Use of estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Management's estimates and judgments are ongoing and are based on experience, current and expected future conditions, third-party evaluations and various other assumptions that management believes are reasonable under the circumstances. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities, as well as identifying and assessing the accounting treatment with respect to commitments and contingencies. Actual results may differ from those estimates and assumptions used in the Consolidated Financial Statements and related notes. Material estimates that are particularly susceptible to significant changes in the near term relate to: the determination of the allowance for credit losses; certain assets and liabilities carried at fair value; and accounting for income taxes.

Principles of consolidation

As of December 31, 2019, WAL has the following significant wholly-owned subsidiaries: WAB and eight unconsolidated subsidiaries used as business trusts in connection with the issuance of trust-preferred securities.

The Bank has the following significant wholly-owned subsidiaries: WABT, which holds certain investment securities, municipal and nonprofit loans, and leases; WA PWI, which holds certain limited partnerships invested primarily in low income housing tax credits and small business investment corporations; and BW Real Estate, Inc., which operates as a real estate investment trust and holds certain of WAB's real estate loans and related securities.

The Company does not have any other significant entities that should be consolidated. All significant intercompany balances and transactions have been eliminated in consolidation.

Reclassifications

Certain amounts reported in prior periods may 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.

Cash and cash equivalents

For purposes of reporting cash flows, cash and cash equivalents include cash on hand, amounts due from banks (including cash items in process of clearing), and federal funds sold. Cash flows from loans originated by the Company and customer deposit accounts are reported net.

The Company maintains deposit accounts with other banks, which at times may exceed federally insured limits. The Company has not experienced any losses in such accounts.

Cash reserve requirements

Depository institutions are required by law to maintain reserves against their transaction deposits. The reserves must be held in cash or with the FRB. Banks are permitted to meet this requirement by maintaining the specified amount as an average balance over a two-week period. The total of reserve balances was approximately \$164.1 million and \$145.9 million as of December 31, 2019 and 2018, respectively.

Investment securities

Investment securities include debt securities and equity securities. Debt securities may be classified as HTM, AFS, or trading. The appropriate classification is initially decided at the time of purchase. Securities classified as HTM are those debt securities that the Company has both the intent and ability to hold to maturity regardless of changes in market conditions, liquidity needs, or general economic conditions. These securities are carried at amortized cost. The sale of an HTM security within three months of its maturity date or after the majority of the principal outstanding has been collected is considered a maturity for purposes of classification and disclosure.

Securities classified as AFS or trading securities are reported as an asset on the Consolidated Balance Sheet at their estimated fair value. As the fair values of AFS debt securities change, the changes are reported net of income tax as an element of OCI, except for other-than-temporarily-impaired securities. When AFS debt securities are sold, the unrealized gains or losses are reclassified from OCI to non-interest income. The changes in the fair values of trading securities are reported in non-interest income. Securities classified as AFS are securities that the Company does not have the positive intent and ability to hold to maturity. Any decision to sell a security classified as AFS would be based on various factors, including significant movements in interest rates, changes in the maturity mix of the Company's assets and liabilities, liquidity needs, decline in credit quality, and regulatory capital considerations.

Equity securities are reported as an asset on the Consolidated Balance Sheet at their estimated fair value, with fair value changes recognized as part of non-interest income in the Consolidated Income Statement.

Interest income is recognized based on the coupon rate and increased by accretion of discounts earned or decreased by the amortization of premiums paid over the contractual life of the security, adjusted for prepayments estimates, using the interest method.

In estimating whether there are any OTTI losses on AFS securities, management considers the: 1) length of time and the extent to which the fair value has been less than amortized cost; 2) financial condition and near term prospects of the issuer; 3) impact of changes in market interest rates; and 4) intent and ability of the Company to retain its investment for a period of time sufficient to allow for any anticipated recovery in fair value and whether it is not more-likely-than-not the Company would be required to sell the security.

Declines in the fair value of individual AFS securities that are deemed to be other-than-temporary are reflected in earnings when identified. The fair value of the debt security then becomes the new cost basis. For individual debt securities where the Company does not intend to sell the security and it is not more-likely-than-not that the Company will be required to sell the security before recovery of its amortized cost basis, the other-than-temporary decline in fair value of the debt security related to: 1) credit loss is recognized in earnings; and 2) interest rate, market, or other factors is recognized in OCI.

For individual debt securities where the Company either intends to sell the security or when it is more-likely-than-not the Company will not recover all of its amortized cost, the OTTI is recognized in earnings equal to the entire difference between the security's cost basis and its fair value at the balance sheet date. For individual debt securities for which a credit loss has been recognized in earnings, interest accruals and amortization and accretion of premiums and discounts are suspended when the credit loss is recognized. Interest received after accruals have been suspended is recognized in income on a cash basis.

Restricted stock

WAB is a member of the Federal Reserve System and, as part of its membership, is required to maintain stock in the FRB in a specified ratio to its capital. In addition, WAB is a member of the FHLB system and, accordingly, maintains an investment in capital stock of the FHLB based on the borrowing capacity used. The Bank also maintains an investment in its primary correspondent bank. These investments are considered equity securities with no actively traded market. Therefore, the shares are considered restricted investment securities. These investments are carried at cost, which is equal to the value at which they may be redeemed. The dividend income received from the stock is reported in interest income. The Company conducts a periodic review and evaluation of its restricted stock to determine if any impairment exists. No impairment has been recorded to date.

Loans held for sale

Loans held for sale consist of loans that the Company originates (or acquires) and intends to sell. These loans are carried at the lower of aggregate cost or fair value. Fair value is determined based on available market data for similar assets, expected cash flows, and appraisals of underlying collateral or the credit quality of the borrower. Gains and losses on the sale of loans are recognized pursuant to ASC 860, *Transfers and Servicing*. Interest income on these loans is accrued daily and loan origination fees and costs are deferred and included in the cost basis of the loan. The Company issues various representations and warranties associated with these loan sales. The Company has not experienced any losses as a result of these representations and warranties.

Loans, held for investment

The Company generally holds loans for investment and has the intent and ability to hold loans until their maturity. Therefore, they are reported at book value. Net loans are stated at the amount of unpaid principal, adjusted for net deferred fees and costs, premiums and discounts, purchase accounting fair value adjustments, and an allowance for credit losses. In addition, the book values of loans subject to a fair value hedge are adjusted for changes in value attributable to the effective portion of the hedged benchmark interest rate risk.

The Company may also acquire loans through a business combination. These acquired loans are recorded at their estimated fair value on the date of purchase, which is comprised of unpaid principal adjusted for estimated credit losses and interest rate fair value adjustments. Loans are evaluated individually at the acquisition date to determine if there has been credit deterioration since origination. Such loans may then be aggregated and accounted for as a pool of loans based on common characteristics. When the Company acquires such loans, the yield that may be accreted (accretable yield) is limited to the excess of the Company's estimate of undiscounted cash flows expected to be collected over the Company's initial investment in the loan. The excess of contractual cash flows over the cash flows expected to be collected may not be recognized as an adjustment to yield, loss, or a valuation allowance. Subsequent increases in cash flows expected to be collected generally are recognized prospectively through adjustment of the loan's yield over the remaining life. Subsequent decreases to cash flows expected to be collected are recognized as impairment losses. The Company may not carry over or create a valuation allowance in the initial accounting for loans acquired under these circumstances. For purchased loans that are not deemed impaired at the acquisition date, fair value adjustments attributable to both credit and interest rates are accreted (or amortized) over the contractual life of the individual loan. For additional information, see "Note 3. Loans, Leases and Allowance for Credit Losses" of these Notes to Consolidated Financial Statements.

Deferred loan fees and costs, premiums and discounts, and certain purchase accounting fair value adjustments, are amortized over the contractual life of the loan through interest income. If a loan has scheduled payments, the amortization of the net deferred loan fee is calculated using the interest method over the contractual life of the loan. If a loan does not have scheduled payments, such as a line of credit, the net deferred loan fee is recognized as interest income on a straight-line basis over the contractual life of the loan commitment. Commitment fees based on a percentage of a customer's unused line of credit and fees related to standby letters of credit are recognized over the commitment period. When loans are repaid, any remaining unamortized balances of premiums, discounts, or net deferred fees are recognized as interest income.

Non-accrual loans: When a borrower discontinues making payments as contractually required by the note, the Company must determine whether it is appropriate to continue to accrue interest. The Company ceases accruing interest income when the loan has become delinquent by more than 90 days or when management determines that the full repayment of principal and collection of interest according to contractual terms is no longer likely. The Company may decide to continue to accrue interest on certain loans more than 90 days delinquent if the loans are well secured by collateral and in the process of collection.

For all loan types, when a loan is placed on non-accrual status, all interest accrued but uncollected is reversed against interest income in the period in which the status is changed, and the Company makes a loan-level decision to apply either the cash basis or cost recovery method. The Company recognizes income on a cash basis only for those non-accrual loans for which the collection of the remaining principal balance is not in doubt. Under the cost recovery method, subsequent payments received from the customer are applied to principal and generally no further interest income is recognized until the principal has been paid in full or until circumstances have changed such that payments are again consistently received as contractually required.

Impaired loans: A loan is identified as impaired when it is no longer probable that interest and principal will be collected according to the contractual terms of the original loan agreement. Impaired loans are measured for reserve requirements in accordance with ASC 310, *Receivables*, based on the present value of expected future cash flows discounted at the loan's effective interest rate or, as a practical expedient, at the loan's observable market price or the fair value of the collateral less applicable disposition costs if the loan is collateral dependent. The amount of an impairment reserve, if any, and any subsequent changes are recorded as a provision for credit losses. Losses are recorded as a charge-off when losses are confirmed. In addition to management's internal loan review process, regulators may from time to time direct the Company to modify loan grades, loan impairment calculations, or loan impairment methodology.

Troubled Debt Restructured Loans: A TDR loan is a loan in which the Company, for reasons related to a borrower's financial difficulties, grants a concession to the borrower that the Company would not otherwise consider. The loan terms that have been modified or restructured due to a borrower's financial situation include, but are not limited to, a reduction in the stated interest rate, an extension of the maturity or renewal of the loan at an interest rate below current market, a reduction in the face amount of the debt, a reduction in the accrued interest, or deferral of interest payments. A TDR loan is also considered impaired. A TDR loan may be returned to accrual status when the loan is brought current, has performed in accordance with the contractual restructured terms for a reasonable period of time (generally six months) and the ultimate collectability of the total contractual restructured principal and interest is no longer in doubt. However, such loans continue to be considered impaired. Consistent with regulatory guidance, a TDR loan that is subsequently modified in another restructuring agreement but has shown sustained performance and classification as a TDR, will be removed from TDR status provided that the modified terms were market-based at the time of modification.

Allowance for credit losses

Credit risk is inherent in the business of extending loans and leases to borrowers, for which the Company must maintain an adequate allowance for credit losses. The allowance for credit losses is established through a provision for credit losses recorded to expense. Loans are charged against the allowance for credit losses when management believes that the contractual principal or interest will not be collected. Subsequent recoveries, if any, are credited to the allowance. The allowance is an amount believed adequate to absorb estimated probable losses on existing loans that may become uncollectable, based on evaluation of the collectability of loans and prior credit loss experience, together with other factors. The Company formally re-evaluates and establishes the appropriate level of the allowance for credit losses on a quarterly basis.

The allowance consists of specific and general components. The specific allowance applies to impaired loans. For impaired collateral dependent loans, the reserve is calculated based on the collateral value, net of estimated disposition costs. Generally, the Company obtains an independent collateral valuation analysis for each loan over a specified dollar threshold every 12 months. Loans not collateral dependent are evaluated based on the expected future cash flows discounted at the original contractual interest rate.

The general allowance covers all non-impaired loans and incorporates several quantitative and qualitative factors, which are used for all of the Company's portfolio segments. Quantitative factors include company-specific, 10-year historical net charge-offs stratified by loans with similar characteristics. Qualitative factors include: 1) levels of and trends in delinquencies and impaired loans; 2) levels of and trends in charge-offs and recoveries; 3) trends in volume and terms of loans; 4) changes in underwriting standards or lending policies; 5) experience, ability, depth of lending staff; 6) national and local economic trends and conditions; 7) changes in credit concentrations; 8) out-of-market exposures; 9) changes in quality of loan review system; and 10) changes in the value of underlying collateral.

Due to the credit concentration of the Company's loan portfolio in real estate secured loans, the value of collateral is heavily dependent on real estate values in Arizona, Nevada, and California. While management uses the best information available to make its evaluation, future adjustments to the allowance may be necessary if there are significant changes in economic or other conditions. In addition, regulators, as an integral part of their examination processes, periodically review the Bank's allowance for credit losses, and may require the Bank to make adjustments to the allowance based on their judgment about information available to them at the time of their examination. Management regularly reviews the assumptions and formulae used in determining the allowance and makes adjustments if required to reflect the current risk profile of the portfolio.

Transfers of financial assets

Transfers of financial assets are accounted for as sales when control over the assets has been surrendered. Control over transferred assets is deemed surrendered when the: 1) assets have been isolated from the Company; 2) transferee obtains the right to pledge or exchange the transferred assets; and 3) Company no longer maintains effective control over the transferred assets through an agreement to repurchase the transferred assets before maturity.

Premises and equipment

Premises and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is computed principally by the straight-line method over the estimated useful lives of the assets. Leasehold improvements are amortized over the term of the lease or the estimated life of the improvement, whichever is shorter. Depreciation and amortization is computed using the following estimated lives:

	<u>Years</u>
Bank premises	31
Furniture, fixtures, and equipment	3 - 10
Leasehold improvements (1)	3 - 10

(1) Depreciation is recorded over the lesser of the relevant 3 to 10 year term or the remaining life of the lease.

Management periodically reviews premises and equipment in order to determine if facts and circumstances suggest that the value of an asset is not recoverable.

Leases (lessee)

At inception, contracts are evaluated to determine whether the contract constitutes a lease agreement. For contracts that are determined to be an operating lease, a corresponding ROU asset and operating lease liability are recorded in separate line items on the Consolidated Balance Sheet. A ROU asset represents the Company's right to use an underlying asset during the lease term and a lease liability represents the Company's commitment to make contractually obligated lease payments. Operating lease ROU assets and liabilities are recognized at the commencement date of the lease and are based on the present value of lease payments over the lease term. The measurement of the operating lease ROU asset includes any lease payments made and is reduced by lease incentives that are paid or are payable to the Company. Variable lease payments that depend on an index or rate such as the Consumer Price Index are included in lease payments based on the rate in effect at the commencement date of the lease. Lease payments are recognized on a straight-line basis as part of occupancy expense over the lease term.

As the rate implicit in the lease is not readily determinable, the Company's incremental collateralized borrowing rate is used to determine the present value of lease payments. This rate gives consideration to the applicable FHLB collateralized borrowing rates and is based on the information available at the commencement date. The Company has elected to apply the short-term lease measurement and recognition exemption to leases with an initial term of 12 months or less; therefore, these leases are not recorded on the Company's Consolidated Balance Sheet, but rather, lease expense is recognized over the lease term on a straight-line basis. The Company's lease agreements may include options to extend or terminate the lease. These options are included in the lease term when it is reasonably certain that the options will be exercised.

In addition to the package of practical expedients, the Company also elected the practical expedient that allows lessees to make an accounting policy election to not separate non-lease components from the associated lease component, and instead account for them all together as part of the applicable lease component. This practical expedient can be elected separately for each underlying class of asset. The majority of the Company's non-lease components such as common area maintenance, parking, and taxes are variable, and are expensed as incurred. Variable payment amounts are determined in arrears by the landlord depending on actual costs incurred.

Goodwill and other intangible assets

The Company records as goodwill the excess of the purchase price in a business combination over the fair value of the identifiable net assets acquired in accordance with applicable guidance. The Company performs its annual goodwill and intangibles impairment tests as of October 1 each year, or more often if events or circumstances indicate that the carrying value may not be recoverable. The Company can first elect to assess, through qualitative factors, whether it is more likely than not that goodwill is impaired. If the qualitative assessment indicates potential impairment, a quantitative impairment test is necessary. If, based on the quantitative test, a reporting unit's carrying amount exceeds its fair value, a goodwill impairment charge for this difference is recorded to current period earnings as non-interest expense.

The Company's intangible assets consist primarily of core deposit intangible assets that are amortized over periods ranging from five to 10 years. The Company considers the remaining useful lives of its core deposit intangible assets each reporting period, as required by ASC 350, *Intangibles—Goodwill and Other*, to determine whether events and circumstances warrant a revision to the remaining period of amortization. If the estimate of an intangible asset's remaining useful life has changed, the remaining carrying amount of the intangible asset is amortized prospectively over the revised remaining useful life. The Company has not revised its estimates of the useful lives of its core deposit intangibles during the years ended December 31, 2019, 2018, or 2017.

Low income housing and renewable energy tax credits

The Company holds ownership interests in limited partnerships and limited liability companies that invest in affordable housing and renewable energy projects. These investments are designed to generate a return primarily through the realization of federal tax credits and deductions, which may be subject to recapture by taxing authorities if compliance requirements are not met. The Company accounts for its low income housing investments using the proportional amortization method. Renewable energy projects are accounted for under the deferral method, whereby the investment tax credits are reflected as an immediate reduction in income taxes payable and the carrying value of the asset in the period that the investment tax credits are claimed. See "Note 14. Income Taxes" of these Notes to Consolidated Financial Statements for further discussion.

The Company evaluates its interests in these entities to determine if it has a variable interest and whether it is required to consolidate these entities. A variable interest is an investment or other interest that will absorb portions of an entity's expected losses or receive portions of the entity's expected residual returns. If the Company determines that it has a variable interest in an entity, it evaluates whether such interest is in a variable interest entity. A VIE is broadly defined as an entity where either: 1) the equity investors as a group, if any, lack the power through voting or similar rights to direct the activities of an entity that most significantly impact the entity's economic performance or 2) the equity investment at risk is insufficient to finance that entity's activities without additional subordinated financial support. The Company is required to consolidate any VIE when it is determined to be the primary beneficiary of the VIE's operations.

A variable interest holder is considered to be the primary beneficiary of a VIE if it has both the power to direct the activities of a VIE that most significantly impact the entity's economic performance and has the obligation to absorb losses of, or the right to receive benefits from, the entity that could potentially be significant to the VIE. The Company's assessment of whether it is the primary beneficiary of a VIE includes consideration of various factors such as: 1) the Company's ability to direct the activities that most significantly impact the entity's economic performance; 2) its form of ownership interest; 3) its representation on the entity's governing body; 4) the size and seniority of its investment; and 5) its ability and the rights of other investors to participate in policy making decisions and to replace the manager of and/or liquidate the entity. The Company is required to evaluate whether to consolidate a VIE both at inception and on an ongoing basis as changes in circumstances require reconsideration.

The Company's investments in qualified affordable housing and renewable energy projects meet the definition of a VIE as the entities are structured such that the limited partner investors lack substantive voting rights. The general partner or managing member has both the power to direct the activities that most significantly impact the economic performance of the entities and the obligation to absorb losses or the right to receive benefits that could be significant to the entities. Accordingly, as a limited partner, the Company is not the primary beneficiary and is not required to consolidate these entities.

Bank owned life insurance

BOLI is carried at its cash surrender value with changes recorded in other non-interest income in the Consolidated Income Statements. The face amount of the underlying policies including death benefits was \$359.0 million and \$358.7 million as of December 31, 2019 and 2018, respectively. There are no loans offset against cash surrender values, and there are no restrictions as to the use of proceeds.

Customer repurchase agreements

The Company enters into repurchase agreements with customers, whereby it pledges securities against overnight investments made from the customer's excess collected funds. The Company records these at the amount of cash received in connection with the transaction.

Stock compensation plans

The Company has the Incentive Plan, as amended, which is described more fully in "Note 10. Stockholders' Equity" of these Notes to Consolidated Financial Statements. Compensation expense for stock options and non-vested restricted stock awards is based on the fair value of the award on the measurement date which, for the Company, is the date of the grant and is recognized ratably over the service period of the award. Forfeitures are estimated at the time of the award grant and revised in subsequent periods if actual forfeitures differ from those estimates. The Company utilizes the Black-Scholes option-pricing model to calculate the fair value of stock options. The fair value of non-vested restricted stock awards is the market price of the Company's stock on the date of grant.

See "Note 10. Stockholders' Equity" of these Notes to Consolidated Financial Statements for further discussion of stock options and restricted stock awards.

Dividends

WAL is a legal entity separate and distinct from its subsidiaries. As a holding company with limited significant assets other than the capital stock of its subsidiaries, WAL's ability to pay dividends depends primarily upon the receipt of dividends or other capital distributions from its subsidiaries. The Company's subsidiaries' ability to pay dividends to WAL is subject to, among other things, their individual earnings, financial condition, and need for funds, as well as federal and state governmental policies and regulations applicable to WAL and each of those subsidiaries, which limit the amount that may be paid as dividends without prior approval. In addition, the terms and conditions of other securities the Company issues may restrict its ability to pay dividends to holders of the Company's common stock. For example, if any required payments on outstanding trust preferred securities are not made, WAL would be prohibited from paying cash dividends on its common stock.

Treasury shares

The Company separately presents treasury shares, which represent shares surrendered to the Company equal in value to the statutory payroll tax withholding obligations arising from the vesting of employee restricted stock awards. Treasury shares are carried at cost.

Common stock repurchases

On December 11, 2018, the Company adopted its common stock repurchase program, pursuant to which the Company was authorized to repurchase up to \$250.0 million of its shares of common stock through December 31, 2019. All shares repurchased under the plan are retired upon settlement. The Company has elected the method to allocate the excess of the repurchase price over the par value of its common stock between APIC and retained earnings, with the portion allocated to APIC limited to the amount of APIC that was recorded at the time that the shares were initially issued, which is calculated on a last-in, first-out basis. The Company's common stock repurchase program was renewed through December 2020, authorizing the Company to repurchase up to an additional \$250.0 million of its outstanding common stock.

Derivative financial instruments

The Company uses interest-rate swaps to mitigate interest-rate risk associated with changes to the fair value of certain fixed-rate financial instruments (fair value hedges).

The Company recognizes derivatives as assets or liabilities on the Consolidated Balance Sheet at their fair value in accordance with ASC 815, *Derivatives and Hedging*. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and further, on the type of hedging relationship. Derivative instruments designated in a hedge relationship to mitigate exposure to changes in the fair value of an asset or liability attributable to a particular risk, such as interest rate risk, are considered fair value hedges.

Changes in the fair value of a derivative that is designated and qualifies as a fair value hedge, along with changes in the fair value of the hedged asset or liability that are attributable to the hedged risk, are recorded in current-period earnings. Changes in the fair value of derivatives not considered to be highly effective in hedging the change in fair value of the hedged item are recognized in earnings as non-interest income during the period of the change.

The Company documents its hedge relationships, including identification of the hedging instruments and the hedged items, as well as its risk management objectives and strategies for undertaking the hedge transaction after the derivative contract is executed. At inception, the Company performs a quantitative assessment to determine whether the derivatives used in hedging transactions are highly effective (as defined in the guidance) in offsetting changes in the fair value of the hedged item. Retroactive effectiveness is assessed, as well as the continued expectation that the hedge will remain effective prospectively. After the initial quantitative assessment is performed, on a quarterly basis, the Company performs a qualitative hedge effectiveness assessment. This assessment takes into consideration any adverse developments related to the counterparty's risk of default and any negative events or circumstances that affect the factors that originally enabled the Company to assess that it could reasonably support, qualitatively, an expectation that the hedging relationship was and will continue to be highly effective. The Company discontinues hedge accounting prospectively when it is determined that a hedge is no longer highly effective. When hedge accounting is discontinued on a fair value hedge that no longer qualifies as an effective hedge, the derivative instrument continues to be reported at fair value on the Consolidated Balance Sheet, but the carrying amount of the hedged item is no longer adjusted for future changes in fair value. The adjustment to the carrying amount of the hedged item that existed at the date hedge accounting is discontinued is amortized over the remaining life of the hedged item into earnings.

Derivative instruments that are not designated as hedges, so called free-standing derivatives, are reported on the Consolidated Balance Sheet at fair value and the changes in fair value are recognized in earnings as non-interest income during the period of change.

The Company may in the normal course of business purchase a financial instrument or originate a loan that contains an embedded derivative instrument. Upon purchasing the instrument or originating the loan, the Company assesses whether the economic characteristics of the embedded derivative are clearly and closely related to the economic characteristics of the remaining component of the financial instrument (i.e., the host contract) and whether a separate instrument with the same terms as the embedded instrument would meet the definition of a derivative instrument. When it is determined that the embedded derivative possesses economic characteristics that are not clearly and closely related to the economic characteristics of the host contract and a separate instrument with the same terms would qualify as a derivative instrument, the embedded derivative is separated from the host contract and carried at fair value. However, in cases where the host contract is measured at fair value, with changes in fair value reported in current earnings, or the Company is unable to reliably identify and measure an embedded derivative for separation from its host contract, the entire contract is carried on the Consolidated Balance Sheet at fair value and is not designated as a hedging instrument.

Off-balance sheet instruments

In the ordinary course of business, the Company has entered into off-balance sheet financial instrument arrangements consisting of commitments to extend credit and standby letters of credit. Such financial instruments are recorded in the Consolidated Financial Statements when they are funded. They involve, to varying degrees, elements of credit risk in excess of amounts recognized on the Consolidated Balance Sheet. Losses could be experienced when the Company is contractually obligated to make a payment under these instruments and must seek repayment from the borrower, which may not be as financially sound in the current period as they were when the commitment was originally made. Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract and, in certain instances, may be unconditionally cancelable. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. The Company enters into credit arrangements that generally provide for the termination of advances in the event of a covenant violation or other event of default. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by the Company upon extension of credit, is based on management's credit evaluation of the party. The commitments are collateralized by the same types of assets used as loan collateral.

As with outstanding loans, the Company applies qualitative factors and utilization rates to its off-balance sheet obligations in determining an estimate of losses inherent in these contractual obligations. The estimate for credit losses on off-balance sheet instruments is included in other liabilities and the charge to income that establishes this liability is included in non-interest expense.

The Company also has off-balance sheet arrangements related to its derivative instruments. Derivative instruments are recognized in the Consolidated Financial Statements at fair value and their notional values are carried off-balance sheet. See "Note 12. Derivatives and Hedging Activities" of these Notes to Consolidated Financial Statements for further discussion.

Business combinations

Business combinations are accounted for under the acquisition method of accounting in accordance with ASC 805, *Business Combinations*. Under the acquisition method, the acquiring entity in a business combination recognizes all of the acquired assets and assumed liabilities at their estimated fair values as of the date of acquisition. Any excess of the purchase price over the fair value of net assets and other identifiable intangible assets acquired is recorded as goodwill. To the extent the fair value of net assets acquired, including identified intangible assets, exceeds the purchase price, a bargain purchase gain is recognized. Changes to estimated fair values from a business combination are recognized as an adjustment to goodwill during the measurement period and are recognized in the proper reporting period in which the adjustment amounts are determined. Results of operations of an acquired business are included in the Consolidated Income Statement from the date of acquisition. Acquisition-related costs, including conversion and restructuring charges, are expensed as incurred.

Fair values of financial instruments

The Company uses fair value measurements to record fair value adjustments to certain assets and liabilities. ASC 820, *Fair Value Measurement*, establishes a framework for measuring fair value and a three-level valuation hierarchy for disclosure of fair value measurement, as well as enhances disclosure requirements for fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The Company uses various valuation approaches, including market, income, and/or cost approaches. ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the factors market participants would consider in pricing the asset or liability developed based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the reliability of inputs, as follows:

- Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.
- Level 2 - Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, prepayment speeds, volatilities, etc.) or model-based valuation techniques where all significant assumptions are observable, either directly or indirectly, in the market.
- Level 3 - Valuation is generated from model-based techniques where one or more significant inputs are not observable, either directly or indirectly, in the market. These unobservable assumptions reflect the Company's own estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques may include use of matrix pricing, discounted cash flow models, and similar techniques.

The availability of observable inputs varies based on the nature of the specific financial instrument. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the level in the fair value hierarchy within which the fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Fair value is a market-based measure considered from the perspective of a market participant who may purchase the asset or assume the liability, rather than an entity-specific measure. When market assumptions are available, ASC 820 requires the Company to make assumptions regarding the assumptions that market participants would use to estimate the fair value of the financial instrument at the measurement date.

ASC 825, *Financial Instruments*, requires disclosure of fair value information about financial instruments, whether or not recognized in the balance sheet, for which it is practicable to estimate that value.

Management uses its best judgment in estimating the fair value of the Company's financial instruments; however, there are inherent limitations in any estimation technique. Therefore, for substantially all financial instruments, the fair value estimates presented herein are not necessarily indicative of the amounts the Company could have realized in a sales transaction at December 31, 2019 and 2018. The estimated fair value amounts for December 31, 2019 and 2018 have been measured as of period-end, and have not been re-evaluated or updated for purposes of these Consolidated Financial Statements subsequent to those dates. As such, the estimated fair values of these financial instruments subsequent to the reporting date may be different than the amounts reported at period-end.

The information in "Note 16. Fair Value Accounting" of these Notes to Consolidated Financial Statements should not be interpreted as an estimate of the fair value of the entire Company since a fair value calculation is only required for a limited portion of the Company's assets and liabilities.

Due to the wide range of valuation techniques and the degree of subjectivity used in making the estimate, comparisons between the Company's disclosures and those of other companies or banks may not be meaningful.

The following methods and assumptions were used by the Company in estimating the fair value of its financial instruments:

Cash, cash equivalents, and restricted cash

The carrying amounts reported on the Consolidated Balance Sheet for cash and due from banks approximate their fair value.

Money market investments

The carrying amounts reported on the Consolidated Balance Sheet for money market investments approximate their fair value.

Investment securities

The fair values of CRA investments, exchange-listed preferred stock, trust preferred securities, and certain corporate debt securities are based on quoted market prices and are categorized as Level 1 in the fair value hierarchy.

The fair values of debt securities are primarily determined based on matrix pricing. Matrix pricing is a mathematical technique that utilizes observable market inputs including, for example, yield curves, credit ratings, and prepayment speeds. Fair values determined using matrix pricing are generally categorized as Level 2 in the fair value hierarchy. For a small subset of securities, other pricing sources are used, including observed prices on publicly-traded securities and dealer quotes.

Restricted stock

WAB is a member of the Federal Reserve System and the FHLB and, accordingly, maintains investments in the capital stock of the FRB and the FHLB. WAB also maintains an investment in its primary correspondent bank. These investments are carried at cost since no ready market exists for them, and they have no quoted market value. The Company conducts a periodic review and evaluation of its restricted stock to determine if any impairment exists. The fair values of these investments have been categorized as Level 2 in the fair value hierarchy.

Loans

The fair value of loans is estimated based on discounted cash flows using interest rates currently being offered for loans with similar terms to borrowers with similar credit quality and adjustments that the Company believes a market participant would consider in determining fair value based on a third party independent valuation. As a result, the fair value for loans is categorized as Level 2 in the fair value hierarchy, excluding impaired loans, which are categorized as Level 3.

Accrued interest receivable and payable

The carrying amounts reported on the Consolidated Balance Sheet for accrued interest receivable and payable approximate their fair value.

Derivative financial instruments

All derivatives are recognized on the Consolidated Balance Sheets at their fair value. The fair value for derivatives is determined based on market prices, broker-dealer quotations on similar products, or other related input parameters. As a result, the fair values have been categorized as Level 2 in the fair value hierarchy.

Deposits

The fair value disclosed for demand and savings deposits is by definition equal to the amount payable on demand at their reporting date (that is, their carrying amount), which the Company believes a market participant would consider in determining fair value. The carrying amount for variable-rate deposit accounts approximates their fair value. Fair values for fixed-rate certificates of deposit are estimated using a discounted cash flow calculation that applies interest rates currently being offered on certificates to a schedule of aggregated expected monthly maturities on these deposits. The fair value measurement of the deposit liabilities is categorized as Level 2 in the fair value hierarchy.

FHLB advances and customer repurchase agreements

The fair values of the Company's borrowings are estimated using discounted cash flow analyses, based on the market rates for similar types of borrowing arrangements. The FHLB advances and customer repurchase agreements have been categorized as Level 2 in the fair value hierarchy due to their short durations.

Subordinated debt

The fair value of subordinated debt is based on the market rate for the respective subordinated debt security. Subordinated debt has been categorized as Level 2 in the fair value hierarchy.

Junior subordinated debt

Junior subordinated debt is valued based on a discounted cash flow model which uses as inputs Treasury Bond rates and the 'BB' rated financial index. Junior subordinated debt has been categorized as Level 3 in the fair value hierarchy.

Off-balance sheet instruments

The fair value of the Company's off-balance sheet instruments (lending commitments and letters of credit) is based on quoted fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements, and the counterparties' credit standing.

Income taxes

The Company is subject to income taxes in the United States and files a consolidated federal income tax return with all of its subsidiaries, with the exception of BW Real Estate, Inc. Deferred income taxes are recorded to reflect the effects of temporary differences between the financial reporting carrying amounts of assets and liabilities and their income tax bases using enacted tax rates that are expected to be in effect when the taxes are actually paid or recovered. As changes in tax laws or rates are enacted, deferred tax assets and liabilities are adjusted through the provision for income taxes.

Net deferred tax assets are recorded to the extent that these assets will more-likely-than-not be realized. In making these determinations, all available positive and negative evidence is considered, including scheduled reversals of deferred tax liabilities, tax planning strategies, projected future taxable income, and recent operating results. If it is determined that deferred income tax assets to be realized in the future are in excess of their net recorded amount, an adjustment to the valuation allowance will be recorded, which will reduce the Company's provision for income taxes.

A tax benefit from an unrecognized tax benefit may be recognized when it is more-likely-than-not that the position will be sustained upon examination, including related appeals or litigation, based on technical merits. Income tax benefits must meet a more-likely-than-not recognition threshold at the effective date to be recognized.

Interest and penalties related to unrecognized tax benefits are recognized as part of the provision for income taxes in the Consolidated Income Statement. Accrued interest and penalties are included in the related tax liability line with other liabilities on the Consolidated Balance Sheets. See "Note 14. Income Taxes" of these Notes to Consolidated Financial Statements for further discussion on income taxes.

Non-interest income

Non-interest income includes service charges and fees, income from equity investments, card income, foreign currency income, income from bank owned life insurance, lending related income, net gain or loss on sales of investment securities, net unrealized gains or losses on assets measured at fair value, and other income. Service charges and fees consist of fees earned from performance of account analysis, general account services, and other deposit account services. These fees are recognized as the related services are provided in accordance with ASC 606, *Revenue from Contracts with Customers*. Income from equity investments includes gains on equity warrant assets, SBIC equity income, and success fees. Card income includes fees earned from customer use of debit and credit cards, interchange income from merchants, and international charges. Card income is generally within the scope of ASC 310, *Receivables*; however, certain processing transactions for merchants, such as interchange fees, are within the scope of ASC 606. Foreign currency income represents fees earned on the differential between purchases and sales of foreign currency on behalf of the Company's clients. Income from bank owned life insurance is accounted for in accordance with ASC 325, *Investments - Other*. Lending related income includes fees earned from gains or losses on the sale of loans, SBA income, and letter of credit fees. Gains and losses on the sale of loans and SBA income are recognized pursuant to ASC 860, *Transfers and Servicing*. Net unrealized gains or losses on assets measured at fair value represent fair value changes in equity securities and are accounted for in accordance with ASC 321, *Investments - Equity Securities*. Fees related to standby letters of credit are accounted for in accordance with ASC 440, *Commitments*. Other income includes operating lease income, which is recognized on a straight-line basis over the lease term in accordance with ASC 840, *Leases*. Net gain or loss on sales / valuations of repossessed and other assets is presented as a component of non-interest expense, but may also be presented as a component of non-interest income in the event that a net gain is recognized. Net gain or loss on sales of repossessed and other assets are accounted for in accordance with ASC 610, *Other Income - Gains and Losses from the Derecognition of Nonfinancial Assets*. See "Note 22. Revenue from Contracts with Customers" of these Notes to Consolidated Financial Statements for further details related to the nature and timing of revenue recognition for non-interest income revenue streams within the scope of the new standard.

Recent accounting pronouncements

In June 2016, the FASB issued guidance within ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*. The new standard significantly changes the impairment model for most financial assets that are measured at amortized cost, including off-balance sheet credit exposures, from an incurred loss model to an expected loss model. The amendments in ASU 2016-13 to Topic 326, *Financial Instruments - Credit Losses*, require that an organization measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. The ASU also requires enhanced disclosures, including qualitative and quantitative disclosures that provide additional information about the amounts recorded in the financial statements. Additionally, the ASU amends the accounting for credit losses on AFS debt securities and purchased financial assets with credit deterioration. The amendments in this ASU are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company has completed its implementation of the new CECL standard, in all material respects, as model findings have been addressed, the Company's internal control CECL framework has been implemented, and accounting policies and governance processes have been finalized.

The following table summarizes the estimated allowance for credit losses related to financial assets and off-balance sheet credit exposures upon adoption of ASC 326:

	January 1, 2020		
	Pre-ASC 326 Adoption	Post-ASC 326 Adoption	Impact of ASC 326 Adoption
	<i>(in millions)</i>		
Assets:			
Allowance for credit losses on HTM securities			
Tax-exempt	\$ —	\$ 3	\$ 3
Allowance for credit losses on loans	\$ 168	\$ 187	\$ 19
Liabilities:			
Off-balance sheet credit exposures	\$ 9	\$ 24	\$ 15

As the impact to the Company was not significant, management elected to take the full charge to regulatory capital at the adoption date.

In August 2018, the FASB issued guidance within ASU 2018-13, *Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*. The amendments within ASU 2018-13 remove, modify, and supplement the disclosure requirements for fair value measurements. Disclosure requirements that were removed include: the amount and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, the policy for timing of transfers between levels, and the valuation processes for Level 3 fair value measurements. The amendments clarify that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date. Additional disclosure requirements include: the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period, and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. With the exception of the above additional disclosure requirements, which will be applied prospectively, all other amendments should be applied retrospectively to all periods presented upon their effective date. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The adoption of this guidance is not expected to have a significant impact on the Company's Consolidated Financial Statements.

In August 2018, the FASB issued guidance within ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40)*. 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 (and hosting arrangements that include an internal-use software license). Accordingly, the amendments in this Update require an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. The amendments in this Update also require that the capitalized implementation costs of a hosting arrangement that is a service contract be expensed over the term of the hosting arrangement. Presentation requirements include: expense related to the capitalized implementation costs should be presented in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement, payments for capitalized implementation costs in the statement of cash flows should be classified in the same manner as payments made for fees associated with the hosting element, and capitalized implementation costs in the statement of financial position should be presented in the same line item that a prepayment for the fees of the associated

hosting arrangement would be presented. The amendments in this ASU should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The amendments in this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The adoption of this guidance is not expected to have a significant impact on the Company's Consolidated Financial Statements.

In April 2019, the FASB issued guidance within 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 ASU 2019-04 clarify or correct the guidance in these Topics. With respect to Topic 326, ASU 2019-04 addresses a number of issues as it relates to the CECL standard including consideration of accrued interest, recoveries, variable-rate financial instruments, prepayments, and extension and renewal options, among other things, in the measurement of expected credit losses. The amendments to Topic 326 have the same effective dates as ASU 2016-13 and are not expected to have a significant impact on the Company's Consolidated Financial Statements. With respect to Topic 815, *Derivatives and Hedging*, ASU 2019-04 clarifies issues related to partial-term hedges, hedged debt securities, and transitioning from a quantitative method of assessing hedge effectiveness to a more simplified method. The Company does not have partial-term hedges or any hedged debt securities and the transition issues discussed in the ASU 2019-04 are not applicable to the Company. Accordingly, the amendments to Topic 815 will not have an impact on the Company's Consolidated Financial Statements. With respect to Topic 825, *Financial Instruments*, on recognizing and measuring financial instruments, ASU 2019-04 addresses: 1) the scope of the guidance; 2) the requirement for remeasurement under ASC 820 when using the measurement alternative; 3) certain disclosure requirements; and 4) which equity securities have to be remeasured at historical exchange rates. The amendments to Topic 825 are effective for interim and annual reporting periods beginning after December 15, 2019 and are not expected to have a material impact on the Company's Consolidated Financial Statements.

In May 2019, the FASB issued guidance within ASU 2019-05, *Financial Instruments - Credit Losses*, to provide entities with an option to irrevocably elect the fair value option for eligible financial assets measured at amortized cost. The election is to be applied on an instrument-by-instrument basis upon adoption of Topic 326 and is not available for either AFS or HTM debt securities. The amendments in ASU 2019-05 should be applied on a modified-retrospective basis through a cumulative-effect adjustment to the opening balance of retained earnings as of the date that an entity adopts the amendments in ASU 2016-13. The Company did not elect this fair value option as part of its adoption of ASU 2016-13 on January 1, 2020.

In November 2019, the FASB issued guidance within ASU 2019-11, *Codification Improvements to Topic 326, Financial Instruments - Credit Losses*. The amendments in ASU 2019-11 clarify or address specific issues about certain aspects of the amendments in ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*. These issues include measurement and reporting requirements related to: 1) the allowance for credit losses for purchased assets with credit deterioration; 2) prepayment assumptions on existing troubled debt restructurings; 3) extension of disclosure relief for accrued interest receivable balances; and 4) expected credit losses on collateralized financial assets. The adoption of ASU 2019-11 is concurrent with ASU 2016-13 and, adoption of these amendments on January 1, 2020, did not have a significant impact on the Company's Consolidated Financial Statements.

In December 2019, the FASB issued guidance within ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. The amendments in ASU 2019-12 are intended to reduce the cost and complexity of applying ASC 740. The amendments that are applicable to the Company address: 1) franchise and other taxes partially based on income; 2) step-up in basis of goodwill in a business combination; 3) allocation of tax expense in separate entity financial statements; and 4) interim recognition of enactment of tax laws or rate changes. The amendments to Topic 740 are effective for interim and annual reporting periods beginning after December 15, 2020 and are not expected to have a material impact on the Company's Consolidated Financial Statements.

Recently adopted accounting guidance

In February 2016, the FASB issued guidance within ASU 2016-02, *Leases*. The amendments in ASU 2016-02 to Topic 842, *Leases*, require lessees to recognize the lease assets and lease liabilities arising from operating leases in the statement of financial position. The accounting applied by a lessor is largely unchanged from that applied under previous GAAP. The Company adopted the amendments to Topic 842 on January 1, 2019 using the modified retrospective approach. The Company elected the transition option issued under ASU 2018-11, *Leases (Topic 842) Targeted Improvements*, which allows entities to continue to apply the legacy guidance in ASC 840, *Leases*, to prior periods, including disclosure requirements. Accordingly, prior period financial results and disclosures have not been adjusted. The Company also elected to apply the package of practical expedients permitting entities to forgo reassessment of: 1) expired or existing contracts that may contain leases; 2) lease classification of expired or existing leases; and 3) initial direct costs for any existing leases. The Company established internal controls and implemented lease accounting software to facilitate the preparation of financial information and disclosures related to leases. The most significant impact of the new standard on the Company's Consolidated Financial Statements was the recognition of a ROU asset and lease liability for operating leases for which the Company is the lessee. The accounting for finance and operating leases for which the Company is the lessor remains substantially unchanged. Upon adoption of this guidance on January 1, 2019, the Company recorded

a ROU asset and corresponding lease liability of \$42.5 million and \$46.1 million, respectively, on the Consolidated Balance Sheet. No cumulative effect adjustment to retained earnings resulted from adoption of this guidance. The new standard did not have a material impact on the Company's results of operations or cash flows.

In March 2017, the FASB issued guidance within ASU 2017-08, *Premium Amortization on Purchased Callable Debt Securities*. The amendments in ASU 2017-08 to Subtopic 310-20, *Receivables-Nonrefundable Fees and Other Costs*, shorten the amortization period for certain purchased callable debt securities held at a premium to the earliest call date, which more closely align the amortization period of premiums and discounts to expectations incorporated in market pricing on the underlying securities. Under current GAAP, entities generally amortize the premium as an adjustment of yield over the contractual life of the instrument. The amendments do not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity. The amendments in this ASU should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. As of December 31, 2019, the Company does not hold these types of securities; therefore, adoption of this guidance did not have an impact on the Company's Consolidated Financial Statements.

In June 2018, the FASB issued guidance within ASU 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting*. The amendments in ASU 2018-07 to Topic 718, *Compensation-Stock Compensation*, are intended to align the accounting for share-based payment awards issued to employees and nonemployees. Changes to the accounting for nonemployee awards include: 1) equity classified share-based payment awards issued to nonemployees will now be measured on the grant date, instead of the previous requirement to remeasure the awards through the performance completion date; 2) for performance conditions, compensation cost associated with the award will be recognized when achievement of the performance condition is probable, rather than upon achievement of the performance condition; and 3) the current requirement to reassess the classification (equity or liability) for nonemployee awards upon vesting will be eliminated, except for awards in the form of convertible instruments. The new guidance also clarifies that any share-based payment awards issued to customers should be evaluated under ASC 606, *Revenue from Contracts with Customers*. The Company's share-based payment awards to nonemployees consist only of grants made to the Company's BOD as compensation solely related to the individual's role as a Director. As such, in accordance with ASC 718, the Company accounts for these share-based payment awards to its Directors in the same manner as share-based payment awards for its employees. Accordingly, the adoption of this guidance did not have an impact on the accounting for the Company's share-based payment awards to its Directors.

In July 2018, the FASB issued guidance within ASU 2018-09, *Codification Improvements*. The amendments in ASU 2018-09 are intended to clarify or correct unintended guidance in the FASB Codification and affect a wide variety of Topics in the Codification. The topics that are applicable to the Company include: 1) debt modifications and extinguishments; 2) stock compensation; and 3) derivatives and hedging. For debt modifications and extinguishments, the amendment clarifies that, in an early extinguishment of debt for which the fair value option has been elected, the net carrying amount of the extinguished debt is equal to its fair value at the reacquisition date, and upon extinguishment, the cumulative amount of the gain or loss on the extinguished debt that resulted from changes in instrument-specific credit risk should be presented in net income. The Company has junior subordinated debt that is recorded at fair value at each reporting period due to election of the FVO. Accordingly, if, in the future, the Company chooses to repay this debt prior to its contractual maturity, this amendment would be applicable. For stock compensation, the amendment clarifies that excess tax benefits or tax deficiencies should be recognized in the period in which the amount of the tax deduction is determined, which is typically when an award is exercised (in the case of share options) or vests (in the case of non-vested stock awards). The Company already records excess tax benefits or tax deficiencies in the periods in which the tax deduction is determined. Therefore, adoption of this amendment did not have an effect on the Company's accounting for excess tax benefits or tax deficiencies. For derivatives and hedging, previous guidance permits derivatives to be offset only when all four conditions (including the intent to set off) are met. This amendment clarifies that the intent to set off is not required to offset fair value amounts recognized for derivative instruments that are executed with the same counterparty under a master netting agreement. This amendment did not have an effect on the offsetting of the Company's derivative assets and liabilities.

2. INVESTMENT SECURITIES

The carrying amounts and fair values of investment securities at December 31, 2019 and 2018 are summarized as follows:

	December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Fair Value
	<i>(in thousands)</i>			
<i>Held-to-maturity</i>				
Tax-exempt	\$ 485,107	\$ 31,303	\$ (149)	\$ 516,261
<i>Available-for-sale debt securities</i>				
CDO	\$ 50	\$ 10,092	\$ —	\$ 10,142
Commercial MBS issued by GSEs	95,062	366	(1,175)	94,253
Corporate debt securities	105,015	112	(5,166)	99,961
Municipal securities	7,494	279	—	7,773
Private label residential MBS	1,129,985	3,572	(4,330)	1,129,227
Residential MBS issued by GSEs	1,406,594	9,283	(3,817)	1,412,060
Tax-exempt	530,729	24,548	(422)	554,855
Trust preferred securities	32,000	—	(4,960)	27,040
U.S. government sponsored agency securities	10,000	—	—	10,000
U.S. treasury securities	999	—	—	999
Total AFS debt securities	<u>\$ 3,317,928</u>	<u>\$ 48,252</u>	<u>\$ (19,870)</u>	<u>\$ 3,346,310</u>
<i>Equity securities</i>				
CRA investments	\$ 52,805	\$ —	\$ (301)	\$ 52,504
Preferred stock	82,514	3,881	(198)	86,197
Total equity securities	<u>\$ 135,319</u>	<u>\$ 3,881</u>	<u>\$ (499)</u>	<u>\$ 138,701</u>
December 31, 2018				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Fair Value
	<i>(in thousands)</i>			
<i>Held-to-maturity</i>				
Tax-exempt	\$ 302,905	\$ 3,163	\$ (7,420)	\$ 298,648
<i>Available-for-sale debt securities</i>				
CDO	\$ 50	\$ 15,277	\$ —	\$ 15,327
Commercial MBS issued by GSEs	106,385	82	(6,361)	100,106
Corporate debt securities	105,029	—	(5,649)	99,380
Private label residential MBS	948,161	945	(24,512)	924,594
Residential MBS issued by GSEs	1,564,181	1,415	(35,472)	1,530,124
Tax-exempt	542,086	4,335	(7,753)	538,668
Trust preferred securities	32,000	—	(3,383)	28,617
U.S. government sponsored agency securities	40,000	—	(1,812)	38,188
U.S. treasury securities	1,996	—	(12)	1,984
Total AFS debt securities	<u>\$ 3,339,888</u>	<u>\$ 22,054</u>	<u>\$ (84,954)</u>	<u>\$ 3,276,988</u>
<i>Equity securities</i>				
CRA investments	\$ 52,210	\$ —	\$ (1,068)	\$ 51,142
Preferred stock	65,954	148	(2,183)	63,919
Total equity securities	<u>\$ 118,164</u>	<u>\$ 148</u>	<u>\$ (3,251)</u>	<u>\$ 115,061</u>

The Company conducts an OTTI analysis on a quarterly basis. The initial indication of OTTI is a decline in the market value below the amount recorded for an investment, and taking into account the severity and duration of the decline. Another potential indication of OTTI is a downgrade below investment grade. In determining whether an impairment is OTTI, the Company considers the length of time and the extent to which the market value has been below cost, recent events specific to the issuer, including investment downgrades by rating agencies and economic conditions of its industry, and the Company's ability and intent to hold the investment for a period of time sufficient to allow for any anticipated recovery.

For debt securities, for the purpose of an OTTI analysis, the Company also considers the cause of the price decline (general level of interest rates, credit spreads, and industry and issuer-specific factors), whether downgrades by bond rating agencies have occurred, the issuer's financial condition, near-term prospects, and current ability to make future payments in a timely manner, as well as the issuer's ability to service debt, and any change in agencies' ratings at the evaluation date from the acquisition date and any likely imminent action.

At December 31, 2019 and 2018, the Company's unrealized losses relate primarily to market interest rate increases since the securities' original purchase date. The total number of AFS securities in an unrealized loss position at December 31, 2019 is 158, compared to 373 at December 31, 2018. The Company has reviewed securities for which there is an unrealized loss in accordance with its accounting policy for OTTI described above and determined that there are no impairment charges for the years ended December 31, 2019, 2018, and 2017. The Company does not consider any securities to be other-than-temporarily impaired as of December 31, 2019 and 2018. No assurance can be made that OTTI will not occur in future periods.

Information pertaining to securities with gross unrealized losses at December 31, 2019 and 2018, aggregated by investment category and length of time that individual securities have been in a continuous loss position follows:

	December 31, 2019					
	Less Than Twelve Months		More Than Twelve Months		Total	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
	<i>(in thousands)</i>					
<i>Held-to-maturity</i>						
Tax-exempt	\$ 149	\$ 24,325	\$ —	\$ —	\$ 149	\$ 24,325
<i>Available-for-sale debt securities</i>						
Commercial MBS issued by GSEs	\$ 85	\$ 9,035	\$ 1,090	\$ 54,604	\$ 1,175	\$ 63,639
Corporate debt securities	—	—	5,166	94,834	5,166	94,834
Private label residential MBS	1,776	337,285	2,554	258,791	4,330	596,076
Residential MBS issued by GSEs	1,740	385,643	2,077	150,419	3,817	536,062
Tax-exempt	422	67,150	—	—	422	67,150
Trust preferred securities	—	—	4,960	27,040	4,960	27,040
Total AFS securities	\$ 4,023	\$ 799,113	\$ 15,847	\$ 585,688	\$ 19,870	\$ 1,384,801

	December 31, 2018					
	Less Than Twelve Months		More Than Twelve Months		Total	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
	<i>(in thousands)</i>					
<i>Held-to-maturity debt securities</i>						
<i>Tax-exempt</i>	\$ 3,868	\$ 91,095	\$ 3,552	\$ 69,991	\$ 7,420	\$ 161,086
<i>Available-for-sale debt securities</i>						
Commercial MBS issued by GSEs	\$ —	\$ —	\$ 6,361	\$ 98,275	\$ 6,361	\$ 98,275
Corporate debt securities	16	5,013	5,633	94,367	5,649	99,380
Private label residential MBS	5,173	217,982	19,339	537,316	24,512	755,298
Residential MBS issued by GSEs	1,363	141,493	34,109	1,215,490	35,472	1,356,983
Tax-exempt	3,562	209,767	4,191	72,382	7,753	282,149
Trust preferred securities	—	—	3,383	28,617	3,383	28,617
U.S. government sponsored agency securities	—	—	1,812	38,188	1,812	38,188
U.S. treasury securities	—	—	12	1,984	12	1,984
Total AFS securities	\$ 10,114	\$ 574,255	\$ 74,840	\$ 2,086,619	\$ 84,954	\$ 2,660,874

The amortized cost and fair value of securities as of December 31, 2019, by contractual maturities, are shown below. MBS are shown separately as individual MBS are comprised of pools of loans with varying maturities. Therefore, these securities are listed separately in the maturity summary.

	December 31, 2019	
	Amortized Cost	Estimated Fair Value
	<i>(in thousands)</i>	
<i>Held-to-maturity</i>		
Due in one year or less	\$ 7,330	\$ 7,384
After one year through five years	17,414	17,947
After ten years	460,363	490,930
Total HTM securities	\$ 485,107	\$ 516,261
<i>Available-for-sale</i>		
Due in one year or less	\$ 999	\$ 999
After one year through five years	14,765	14,971
After five years through ten years	149,236	144,996
After ten years	521,287	549,804
Mortgage-backed securities	2,631,641	2,635,540
Total AFS securities	\$ 3,317,928	\$ 3,346,310

The following tables summarize the carrying amount of the Company's investment ratings position as of December 31, 2019 and 2018:

December 31, 2019							
AAA	Split-rated AAA/AA+	AA+ to AA-	A+ to A-	BBB+ to BBB-	BB+ and below	Unrated	Totals
<i>(in thousands)</i>							
<i>Held-to-maturity debt securities</i>							
Tax-exempt	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 485,107	\$ 485,107
<i>Available-for-sale debt securities</i>							
CDO	\$ —	\$ —	\$ —	\$ —	\$ 10,142	\$ —	\$ 10,142
Commercial MBS issued by GSEs	—	94,253	—	—	—	—	94,253
Corporate debt securities	—	—	—	66,530	33,431	—	99,961
Municipal securities	—	—	—	—	—	7,773	7,773
Private label residential MBS	1,096,909	—	30,675	181	288	1,174	1,129,227
Residential MBS issued by GSEs	—	1,412,060	—	—	—	—	1,412,060
Tax-exempt	52,610	2,856	327,657	171,732	—	—	554,855
Trust preferred securities	—	—	—	—	27,040	—	27,040
U.S. government sponsored agency securities	—	10,000	—	—	—	—	10,000
U.S. treasury securities	—	999	—	—	—	—	999
Total AFS securities (1)	\$ 1,149,519	\$ 1,520,168	\$ 358,332	\$ 238,443	\$ 60,759	\$ 11,316	\$ 3,346,310
<i>Equity securities</i>							
CRA investments	\$ —	\$ 25,375	\$ —	\$ —	\$ —	\$ 27,129	\$ 52,504
Preferred stock	—	—	—	—	82,851	2,105	86,197
Total equity securities (1)	\$ —	\$ 25,375	\$ —	\$ —	\$ 82,851	\$ 2,105	\$ 138,701

(1) Where ratings differ, the Company uses an average of the available ratings by major credit agencies.

December 31, 2018							
AAA	Split-rated AAA/AA+	AA+ to AA-	A+ to A-	BBB+ to BBB-	BB+ and below	Unrated	Totals
<i>(in thousands)</i>							
<i>Held-to-maturity debt securities</i>							
Tax-exempt	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 302,905	\$ 302,905
<i>Available-for-sale debt securities</i>							
CDO	\$ —	\$ —	\$ —	\$ —	\$ 15,327	\$ —	\$ 15,327
Commercial MBS issued by GSEs	—	100,106	—	—	—	—	100,106
Corporate debt securities	—	—	—	66,515	32,865	—	99,380
Private label residential MBS	887,520	—	34,342	343	947	1,442	924,594
Residential MBS issued by GSEs	—	1,530,124	—	—	—	—	1,530,124
Tax-exempt	66,160	12,146	306,409	152,330	—	1,623	538,668
Trust preferred securities	—	—	—	—	28,617	—	28,617
U.S. government sponsored agency securities	—	38,188	—	—	—	—	38,188
U.S. treasury securities	—	1,984	—	—	—	—	1,984
Total AFS securities (1)	\$ 953,680	\$ 1,682,548	\$ 340,751	\$ 219,188	\$ 62,429	\$ 1,623	\$ 3,276,988
<i>Equity securities</i>							
CRA investments	\$ —	\$ 25,375	\$ —	\$ —	\$ —	\$ 25,767	\$ 51,142
Preferred stock	—	—	—	—	45,771	3,693	63,919
Total equity securities (1)	\$ —	\$ 25,375	\$ —	\$ —	\$ 45,771	\$ 3,693	\$ 115,061

(1) Where ratings differ, the Company uses an average of the available ratings by major credit agencies.

Securities with carrying amounts of approximately \$962.5 million and \$788.4 million at December 31, 2019 and 2018, respectively, were pledged for various purposes as required or permitted by law.

The following table presents gross gains and losses on sales of investment securities:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
<i>Available-for-sale securities</i>			
Gross gains	\$ 3,152	\$ 8,074	\$ 3,204
Gross losses	—	(7,738)	(861)
Net gains (losses) on AFS securities	<u>\$ 3,152</u>	<u>\$ 336</u>	<u>\$ 2,343</u>
<i>Equity securities</i>			
Gross gains	\$ —	\$ —	\$ —
Gross losses	—	(7,992)	—
Net gains (losses) on equity securities	<u>\$ —</u>	<u>\$ (7,992)</u>	<u>\$ —</u>

During the year ended December 31, 2019, the Company sold certain AFS securities as part of a portfolio re-balancing initiative. These securities had a carrying value of \$147.2 million and a net gain of \$3.2 million was recognized on the sale of these securities. During the year ended December 31, 2019, the Company also sold one of its securities classified as HTM. The security had a par value of \$10.0 million and no gain or loss was realized upon the sale. The sale of this HTM security was made as a result of significant deterioration in the issuer's creditworthiness, representative of a change in circumstance contemplated in ASC 320-10-25 that would not call into question the Company's intent to hold other debt securities to maturity in the future. Accordingly, management concluded that the Company's remaining HTM securities continue to be appropriately classified as such.

During the year ended December 31, 2018, the Company sold certain available-for-sale securities with a carrying value of \$119.8 million and recognized a loss on sale of these securities of \$7.7 million. The sales resulted from management's review of its investment portfolio, which led to its decision to sell lower yielding securities and reinvest in securities with higher yields and shorter durations.

3. LOANS, LEASES AND ALLOWANCE FOR CREDIT LOSSES

The composition of the Company's held for investment loan portfolio is as follows:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Commercial and industrial	\$ 9,382,043	\$ 7,762,642
Commercial real estate - non-owner occupied	5,245,634	4,213,428
Commercial real estate - owner occupied	2,316,913	2,325,380
Construction and land development	1,952,156	2,134,753
Residential real estate	2,147,664	1,204,355
Consumer	57,083	70,071
Loans, net of deferred loan fees and costs	<u>21,101,493</u>	<u>17,710,629</u>
Allowance for credit losses	<u>(167,797)</u>	<u>(152,717)</u>
Total loans HFI	<u>\$ 20,933,696</u>	<u>\$ 17,557,912</u>

Loans that are held for investment are stated at the amount of unpaid principal, adjusted for net deferred fees and costs, premiums and discounts, purchase accounting fair value adjustments, and an allowance for credit losses. Net deferred loan fees as of December 31, 2019 and 2018 total \$47.7 million and \$36.3 million, respectively, which is a reduction in the carrying value of loans. Net unamortized purchase premiums on secondary market loan purchases total \$29.9 million and \$2.0 million as of December 31, 2019 and 2018, respectively. Total loans held for investment are also net of interest rate and credit marks on acquired loans, which are a net reduction in the carrying value of loans. Interest rate marks were \$3.8 million and \$7.1 million as of December 31, 2019 and 2018, respectively. Credit marks were \$6.5 million and \$14.6 million as of December 31, 2019 and 2018, respectively.

As of December 31, 2019, the Company also had \$21.8 million of HFS loans. There were no HFS loans as of December 31, 2018.

The following table presents the contractual aging of the recorded investment in past due loans held for investment by class of loans:

	December 31, 2019					Total
	Current	30-59 Days Past Due	60-89 Days Past Due	Over 90 Days Past Due	Total Past Due	
	<i>(in thousands)</i>					
Commercial and industrial	\$ 9,376,377	\$ 2,501	\$ 637	\$ 2,528	\$ 5,666	\$ 9,382,043
Commercial real estate						
Owner occupied	2,316,165	624	—	124	748	2,316,913
Non-owner occupied	5,007,644	4,661	—	11,913	16,574	5,024,218
Multi-family	221,416	—	—	—	—	221,416
Construction and land development						
Construction	1,176,908	—	—	—	—	1,176,908
Land	775,248	—	—	—	—	775,248
Residential real estate	2,134,346	7,627	1,721	3,970	13,318	2,147,664
Consumer	57,083	—	—	—	—	57,083
Total loans	<u>\$ 21,065,187</u>	<u>\$ 15,413</u>	<u>\$ 2,358</u>	<u>\$ 18,535</u>	<u>\$ 36,306</u>	<u>\$ 21,101,493</u>

	December 31, 2018					
	Current	30-59 Days Past Due	60-89 Days Past Due	Over 90 days Past Due	Total Past Due	Total
	<i>(in thousands)</i>					
Commercial and industrial	\$ 7,753,111	\$ 3,187	\$ 416	\$ 5,928	\$ 9,531	\$ 7,762,642
Commercial real estate						
Owner occupied	2,320,321	4,441	—	618	5,059	2,325,380
Non-owner occupied	4,051,837	—	—	—	—	4,051,837
Multi-family	161,591	—	—	—	—	161,591
Construction and land development						
Construction	1,382,664	—	—	—	—	1,382,664
Land	751,613	—	476	—	476	752,089
Residential real estate	1,182,933	9,316	4,010	8,096	21,422	1,204,355
Consumer	69,830	—	—	241	241	70,071
Total loans	<u>\$ 17,673,900</u>	<u>\$ 16,944</u>	<u>\$ 4,902</u>	<u>\$ 14,883</u>	<u>\$ 36,729</u>	<u>\$ 17,710,629</u>

The following table presents the recorded investment in non-accrual loans and loans past due ninety days or more and still accruing interest by class of loans:

	December 31, 2019				December 31, 2018			
	Non-accrual loans			Loans past due 90 days or more and still accruing	Non-accrual loans			Loans past due 90 days or more and still accruing
Current	Past Due/Delinquent	Total Non-accrual	Current		Past Due/Delinquent	Total Non-accrual		
	<i>(in thousands)</i>							
Commercial and industrial	\$ 19,080	\$ 5,421	\$ 24,501	\$ —	\$ 7,639	\$ 7,451	\$ 15,090	\$ —
Commercial real estate								
Owner occupied	4,418	124	4,542	—	—	—	—	594
Non-owner occupied	7,265	11,913	19,178	—	—	—	—	—
Multi-family	—	—	—	—	—	—	—	—
Construction and land development								
Construction	2,147	—	2,147	—	—	476	476	—
Land	—	—	—	—	—	—	—	—
Residential real estate	1,231	4,369	5,600	—	552	11,387	11,939	—
Consumer	—	—	—	—	—	241	241	—
Total	<u>\$ 34,141</u>	<u>\$ 21,827</u>	<u>\$ 55,968</u>	<u>\$ —</u>	<u>\$ 8,191</u>	<u>\$ 19,555</u>	<u>\$ 27,746</u>	<u>\$ 594</u>

The reduction in interest income associated with loans on non-accrual status was approximately \$2.2 million, \$2.3 million, and \$2.4 million for the years ended December 31, 2019, 2018, and 2017, respectively.

The Company utilizes an internal asset classification system as a means of reporting problem and potential problem loans. Under the Company's risk rating system, the Company classifies problem and potential problem loans as Special Mention, Substandard, Doubtful, and Loss. Substandard loans include those characterized by well-defined weaknesses and carry the distinct possibility that the Company will sustain some loss if the deficiencies are not corrected. Loans classified as Doubtful, or risk rated eight, have all the weaknesses inherent in those classified as Substandard with the added characteristic that the weaknesses present make collection or liquidation in full, on the basis of currently existing facts, conditions and values, highly questionable and improbable. The final rating of Loss covers loans considered uncollectible and having such little recoverable value that it is not practical to defer writing off the asset. Loans that do not currently expose the Company to sufficient risk to warrant classification in one of the aforementioned categories, but possess weaknesses that warrant management's close attention, are deemed to be Special Mention. Risk ratings are updated, at a minimum, quarterly.

The following tables present loans held for investment by risk rating:

December 31, 2019

	Pass	Special Mention	Substandard	Doubtful	Loss	Total
	<i>(in thousands)</i>					
Commercial and industrial	\$ 9,265,823	\$ 65,893	\$ 49,878	\$ 449	\$ —	\$ 9,382,043
Commercial real estate						
Owner occupied	2,265,566	9,579	41,768	—	—	2,316,913
Non-owner occupied	4,913,007	64,161	47,050	—	—	5,024,218
Multi-family	221,416	—	—	—	—	221,416
Construction and land development						
Construction	1,157,169	17,592	2,147	—	—	1,176,908
Land	773,868	1,380	—	—	—	775,248
Residential real estate	2,141,336	366	5,962	—	—	2,147,664
Consumer	57,073	10	—	—	—	57,083
Total	<u>\$ 20,795,258</u>	<u>\$ 158,981</u>	<u>\$ 146,805</u>	<u>\$ 449</u>	<u>\$ —</u>	<u>\$ 21,101,493</u>

December 31, 2019

	Pass	Special Mention	Substandard	Doubtful	Loss	Total
	<i>(in thousands)</i>					
Current (up to 29 days past due)	\$ 20,785,118	\$ 158,907	\$ 120,897	\$ 265	\$ —	\$ 21,065,187
Past due 30 - 59 days	8,263	58	7,092	—	—	15,413
Past due 60 - 89 days	1,481	16	861	—	—	2,358
Past due 90 days or more	396	—	17,955	184	—	18,535
Total	<u>\$ 20,795,258</u>	<u>\$ 158,981</u>	<u>\$ 146,805</u>	<u>\$ 449</u>	<u>\$ —</u>	<u>\$ 21,101,493</u>

December 31, 2018

	Pass	Special Mention	Substandard	Doubtful	Loss	Total
	<i>(in thousands)</i>					
Commercial and industrial	\$ 7,574,506	\$ 61,202	\$ 126,356	\$ 578	\$ —	\$ 7,762,642
Commercial real estate						
Owner occupied	2,255,513	12,860	57,007	—	—	2,325,380
Non-owner occupied	4,030,350	12,982	8,505	—	—	4,051,837
Multi-family	161,591	—	—	—	—	161,591
Construction and land development						
Construction	1,378,624	1,210	2,830	—	—	1,382,664
Land	751,012	—	1,077	—	—	752,089
Residential real estate	1,191,571	527	12,257	—	—	1,204,355
Consumer	69,755	75	241	—	—	70,071
Total	<u>\$ 17,412,922</u>	<u>\$ 88,856</u>	<u>\$ 208,273</u>	<u>\$ 578</u>	<u>\$ —</u>	<u>\$ 17,710,629</u>

December 31, 2018

	Pass	Special Mention	Substandard	Doubtful	Loss	Total
	<i>(in thousands)</i>					
Current (up to 29 days past due)	\$ 17,400,616	\$ 87,264	\$ 186,020	\$ —	\$ —	\$ 17,673,900
Past due 30 - 59 days	11,255	1,580	4,109	—	—	16,944
Past due 60 - 89 days	719	12	3,767	404	—	4,902
Past due 90 days or more	332	—	14,377	174	—	14,883
Total	<u>\$ 17,412,922</u>	<u>\$ 88,856</u>	<u>\$ 208,273</u>	<u>\$ 578</u>	<u>\$ —</u>	<u>\$ 17,710,629</u>

The table below reflects the recorded investment in loans classified as impaired:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Impaired loans with a specific valuation allowance under ASC 310 (1)	\$ 20,979	\$ 986
Impaired loans without a specific valuation allowance under ASC 310 (2)	95,324	111,266
Total impaired loans	<u>\$ 116,303</u>	<u>\$ 112,252</u>
Valuation allowance related to impaired loans	<u>\$ (2,776)</u>	<u>\$ (681)</u>

(1) Includes no TDR loans at December 31, 2019 and 2018.

(2) Includes TDR loans of \$38.9 million and \$44.5 million at December 31, 2019 and 2018, respectively.

The following table presents impaired loans by class:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Commercial and industrial	\$ 48,984	\$ 63,896
Commercial real estate		
Owner occupied	17,736	6,530
Non-owner occupied	35,538	12,407
Multi-family	—	—
Construction and land development		
Construction	2,147	—
Land	6,274	9,403
Residential real estate	5,600	19,744
Consumer	24	272
Total	<u>\$ 116,303</u>	<u>\$ 112,252</u>

A valuation allowance is established for an impaired loan when the fair value of the loan is less than the recorded investment. In certain cases, portions of impaired loans are written down to realizable value instead of establishing a valuation allowance and are included, when applicable, in the table above as “Impaired loans without a specific valuation allowance under ASC 310.” However, before concluding that an impaired loan needs no associated valuation allowance, an assessment is made to consider all available and relevant information for the method used to evaluate impairment and the type of loan being assessed. The valuation allowance disclosed above is included in the allowance for credit losses reported on the Consolidated Balance Sheets as of December 31, 2019 and 2018.

The following table presents average investment in impaired loans by loan class:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Commercial and industrial	\$ 45,223	\$ 52,496	\$ 33,519
Commercial real estate			
Owner occupied	15,829	7,682	18,692
Non-owner occupied	25,163	15,375	22,000
Multi-family	—	—	—
Construction and land development			
Construction	13,315	—	—
Land	7,716	9,547	13,558
Residential real estate	13,882	19,425	16,893
Consumer	159	300	204
Total	<u>\$ 121,287</u>	<u>\$ 104,825</u>	<u>\$ 104,866</u>

The average investment in TDR loans for the years ended December 31, 2019, 2018, and 2017 was \$52.9 million, \$51.2 million, and \$55.5 million, respectively.

The following table presents interest income on impaired loans by class:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Commercial and industrial	\$ 1,857	\$ 2,113	\$ 1,077
Commercial real estate			
Owner occupied	815	491	677
Non-owner occupied	821	937	1,074
Multi-family	—	—	—
Construction and land development			
Construction	715	—	—
Land	474	566	699
Residential real estate	329	381	516
Consumer	1	2	3
Total	<u>\$ 5,012</u>	<u>\$ 4,490</u>	<u>\$ 4,046</u>

The Company is not committed to lend significant additional funds on these impaired loans.

The following table summarizes nonperforming assets:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Non-accrual loans (1)	\$ 55,968	\$ 27,746
Loans past due 90 days or more on accrual status	—	594
Accruing troubled debt restructured loans	28,356	36,458
Total nonperforming loans	<u>84,324</u>	64,798
Other assets acquired through foreclosure, net	13,850	17,924
Total nonperforming assets	<u>\$ 98,174</u>	<u>\$ 82,722</u>

(1) Includes non-accrual TDR loans of \$10.6 million and \$8.0 million at December 31, 2019 and 2018, respectively.

Loans Acquired with Deteriorated Credit Quality

Changes in the accretable yield for loans acquired with deteriorated credit quality are as follows:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Balance, at beginning of period	\$ 3,767	\$ 9,324	\$ 15,177
Additions due to acquisition	—	—	—
Reclassifications from non-accretable to accretable yield (1)	—	683	2,086
Accretion to interest income	(570)	(1,018)	(2,797)
Reversal of fair value adjustments upon disposition of loans	(923)	(5,222)	(5,142)
Balance, at end of period	<u>\$ 2,274</u>	<u>\$ 3,767</u>	<u>\$ 9,324</u>

(1) The primary drivers of reclassification from non-accretable to accretable yield resulted from changes in estimated cash flows.

Allowance for Credit Losses

The following table summarizes the changes in the allowance for credit losses by portfolio type:

	Year Ended December 31,					
	Construction and Land Development	Commercial Real Estate	Residential Real Estate	Commercial and Industrial	Consumer	Total
	<i>(in thousands)</i>					
2019						
Beginning Balance	\$ 22,513	\$ 34,829	\$ 11,276	\$ 83,118	\$ 981	\$ 152,717
Charge-offs	141	139	594	8,120	128	9,122
Recoveries	(91)	(909)	(412)	(4,265)	(25)	(5,702)
Provision	1,431	11,674	2,620	3,039	(264)	18,500
Ending balance	<u>\$ 23,894</u>	<u>\$ 47,273</u>	<u>\$ 13,714</u>	<u>\$ 82,302</u>	<u>\$ 614</u>	<u>\$ 167,797</u>
2018						
Beginning Balance	\$ 19,599	\$ 31,648	\$ 5,500	\$ 82,527	\$ 776	\$ 140,050
Charge-offs	1	233	1,038	15,034	114	16,420
Recoveries	(1,433)	(1,237)	(947)	(2,427)	(43)	(6,087)
Provision	1,482	2,177	5,867	13,198	276	23,000
Ending balance	<u>\$ 22,513</u>	<u>\$ 34,829</u>	<u>\$ 11,276</u>	<u>\$ 83,118</u>	<u>\$ 981</u>	<u>\$ 152,717</u>
2017						
Beginning Balance	\$ 21,175	\$ 25,673	\$ 3,851	\$ 73,333	\$ 672	\$ 124,704
Charge-offs	—	2,269	447	8,186	102	11,004
Recoveries	(1,229)	(2,897)	(1,778)	(3,112)	(84)	(9,100)
Provision	(2,805)	5,347	318	14,268	122	17,250
Ending balance	<u>\$ 19,599</u>	<u>\$ 31,648</u>	<u>\$ 5,500</u>	<u>\$ 82,527</u>	<u>\$ 776</u>	<u>\$ 140,050</u>

The following table presents impairment method information related to loans and allowance for credit losses by loan portfolio segment:

	Commercial Real Estate- Owner Occupied	Commercial Real Estate- Non-Owner Occupied	Commercial and Industrial	Residential Real Estate	Construction and Land Development	Consumer	Total Loans
	<i>(in thousands)</i>						
Loans as of December 31, 2019;							
Recorded Investment							
Impaired loans with an allowance recorded	\$ —	\$ 11,913	\$ 6,919	\$ —	\$ 2,147	\$ —	\$ 20,979
Impaired loans with no allowance recorded	17,736	23,625	42,065	5,600	6,274	24	95,324
Total loans individually evaluated for impairment	17,736	35,538	48,984	5,600	8,421	24	116,303
Loans collectively evaluated for impairment	2,296,342	5,159,921	9,333,059	2,142,045	1,943,735	57,059	20,932,161
Loans acquired with deteriorated credit quality	2,835	50,175	—	19	—	—	53,029
Total recorded investment	<u>\$ 2,316,913</u>	<u>\$ 5,245,634</u>	<u>\$ 9,382,043</u>	<u>\$ 2,147,664</u>	<u>\$ 1,952,156</u>	<u>\$ 57,083</u>	<u>\$ 21,101,493</u>
Unpaid Principal Balance							
Impaired loans with an allowance recorded	\$ —	\$ 11,949	\$ 9,844	\$ —	\$ 2,262	\$ —	\$ 24,055
Impaired loans with no allowance recorded	18,681	24,738	43,848	5,708	6,413	52	99,440
Total loans individually evaluated for impairment	18,681	36,687	53,692	5,708	8,675	52	123,495
Loans collectively evaluated for impairment	2,297,168	5,177,477	9,312,100	2,113,893	1,963,116	57,383	20,921,137
Loans acquired with deteriorated credit quality	3,577	60,191	—	72	—	—	63,840
Total unpaid principal balance	<u>\$ 2,319,426</u>	<u>\$ 5,274,355</u>	<u>\$ 9,365,792</u>	<u>\$ 2,119,673</u>	<u>\$ 1,971,791</u>	<u>\$ 57,435</u>	<u>\$ 21,108,472</u>
Related Allowance for Credit Losses							
Impaired loans with an allowance recorded	\$ —	\$ 1,219	\$ 1,050	\$ —	\$ 507	\$ —	\$ 2,776
Impaired loans with no allowance recorded	—	—	—	—	—	—	—
Total loans individually evaluated for impairment	—	1,219	1,050	—	507	—	2,776
Loans collectively evaluated for impairment	13,842	32,114	81,252	13,714	23,387	614	164,923
Loans acquired with deteriorated credit quality	—	98	—	—	—	—	98
Total allowance for credit losses	<u>\$ 13,842</u>	<u>\$ 33,431</u>	<u>\$ 82,302</u>	<u>\$ 13,714</u>	<u>\$ 23,894</u>	<u>\$ 614</u>	<u>\$ 167,797</u>

	Commercial Real Estate- Owner Occupied	Commercial Real Estate- Non-Owner Occupied	Commercial and Industrial	Residential Real Estate	Construction and Land Development	Consumer	Total Loans
	<i>(in thousands)</i>						
Loans as of December 31, 2018;							
Recorded Investment							
Impaired loans with an allowance recorded	\$ —	\$ —	\$ 623	\$ 363	\$ —	\$ —	\$ 986
Impaired loans with no allowance recorded	6,530	12,407	63,273	19,381	9,403	272	111,266
Total loans individually evaluated for impairment	6,530	12,407	63,896	19,744	9,403	272	112,252
Loans collectively evaluated for impairment	2,314,871	4,121,464	7,698,746	1,184,592	2,125,350	69,799	17,514,822
Loans acquired with deteriorated credit quality	3,979	79,557	—	19	—	—	83,555
Total recorded investment	<u>\$ 2,325,380</u>	<u>\$ 4,213,428</u>	<u>\$ 7,762,642</u>	<u>\$ 1,204,355</u>	<u>\$ 2,134,753</u>	<u>\$ 70,071</u>	<u>\$ 17,710,629</u>
Unpaid Principal Balance							
Impaired loans with an allowance recorded	\$ —	\$ —	\$ 1,482	\$ 363	\$ —	\$ —	\$ 1,845
Impaired loans with no allowance recorded	11,852	18,155	103,992	27,979	25,624	10,632	198,234
Total loans individually evaluated for impairment	11,852	18,155	105,474	28,342	25,624	10,632	200,079
Loans collectively evaluated for impairment	2,314,871	4,121,464	7,698,746	1,184,592	2,125,350	69,799	17,514,822
Loans acquired with deteriorated credit quality	5,315	95,680	4,352	72	—	—	105,419
Total unpaid principal balance	<u>\$ 2,332,038</u>	<u>\$ 4,235,299</u>	<u>\$ 7,808,572</u>	<u>\$ 1,213,006</u>	<u>\$ 2,150,974</u>	<u>\$ 80,431</u>	<u>\$ 17,820,320</u>
Related Allowance for Credit Losses							
Impaired loans with an allowance recorded	\$ —	\$ —	\$ 621	\$ 60	\$ —	\$ —	\$ 681
Impaired loans with no allowance recorded	—	—	—	—	—	—	—
Total loans individually evaluated for impairment	—	—	621	60	—	—	681
Loans collectively evaluated for impairment	14,286	20,456	82,488	11,216	22,513	981	151,940
Loans acquired with deteriorated credit quality	—	87	9	—	—	—	96
Total allowance for credit losses	<u>\$ 14,286</u>	<u>\$ 20,543</u>	<u>\$ 83,118</u>	<u>\$ 11,276</u>	<u>\$ 22,513</u>	<u>\$ 981</u>	<u>\$ 152,717</u>

Troubled Debt Restructurings

A TDR loan is a loan on which the Company, for reasons related to a borrower's financial difficulties, grants a concession to the borrower that the Company would not otherwise consider. The loan terms that have been modified or restructured due to a borrower's financial situation include, but are not limited to, a reduction in the stated interest rate, an extension of the maturity or renewal of the loan at an interest rate below current market, a reduction in the face amount of the debt, a reduction in the accrued interest, or deferral of interest payments. The majority of the Company's modifications are extensions in terms or deferral of payments which result in no lost principal or interest followed by reductions in interest rates or accrued interest. A TDR loan is also considered impaired. Consistent with regulatory guidance, a TDR loan that is subsequently modified in another restructuring agreement but has shown sustained performance and classification as a TDR, will be removed from TDR status provided that the modified terms were market-based at the time of modification.

The following table presents information on the financial effects of TDR loans by class for the periods presented:

Year Ended December 31, 2019						
Number of Loans	Pre-Modification Outstanding Recorded Investment	Forgiven Principal Balance	Lost Interest Income	Post-Modification Outstanding Recorded Investment	Waived Fees and Other Expenses	
<i>(dollars in thousands)</i>						
Commercial and industrial	4	\$ 11,451	\$ —	\$ —	\$ 11,451	\$ —
Commercial real estate						
Owner occupied	2	2,026	—	—	2,026	—
Non-owner occupied	2	11,546	—	—	11,546	—
Multi-family	—	—	—	—	—	—
Construction and land development						
Construction	1	17,022	—	—	17,022	—
Land	—	—	—	—	—	—
Residential real estate	—	—	—	—	—	—
Consumer	—	—	—	—	—	—
Total	9	\$ 42,045	\$ —	\$ —	\$ 42,045	\$ —
Year Ended December 31, 2018						
Number of Loans	Pre-Modification Outstanding Recorded Investment	Forgiven Principal Balance	Lost Interest Income	Post-Modification Outstanding Recorded Investment	Waived Fees and Other Expenses	
<i>(dollars in thousands)</i>						
Commercial and industrial	11	\$ 35,132	\$ —	\$ —	\$ 35,132	\$ —
Commercial real estate						
Owner occupied	—	—	—	—	—	—
Non-owner occupied	—	—	—	—	—	—
Multi-family	—	—	—	—	—	—
Construction and land development						
Construction	—	—	—	—	—	—
Land	—	—	—	—	—	—
Residential real estate	1	294	—	—	294	—
Consumer	—	—	—	—	—	—
Total	12	\$ 35,426	\$ —	\$ —	\$ 35,426	\$ —

Year Ended December 31, 2017

	Number of Loans	Pre- Modification Outstanding Recorded Investment	Forgiven Principal Balance	Lost Interest Income	Post- Modification Outstanding Recorded Investment	Waived Fees and Other Expenses
<i>(dollars in thousands)</i>						
Commercial and industrial	11	\$ 3,513	\$ —	\$ —	\$ 3,513	\$ —
Commercial real estate						
Owner occupied	—	—	—	—	—	—
Non-owner occupied	3	2,993	—	—	2,993	—
Multi-family	—	—	—	—	—	—
Construction and land development						
Construction	—	—	—	—	—	—
Land	—	—	—	—	—	—
Residential real estate	1	122	—	—	122	—
Consumer	—	—	—	—	—	—
Total	15	\$ 6,628	\$ —	\$ —	\$ 6,628	\$ —

The following table presents TDR loans by class for which there was a payment default during the period:

	Year Ended December 31,					
	2019		2018		2017	
	Number of Loans	Recorded Investment	Number of Loans	Recorded Investment	Number of Loans	Recorded Investment
<i>(dollars in thousands)</i>						
Commercial and industrial	—	\$ —	—	\$ —	1	\$ 87
Commercial real estate						
Owner occupied	—	—	—	—	1	135
Non-owner occupied	—	—	—	—	1	308
Multi-family	—	—	—	—	—	—
Construction and land development						
Construction	—	—	—	—	2	1,119
Land	—	—	—	—	—	—
Residential real estate	2	371	—	—	1	48
Consumer	—	—	—	—	—	—
Total	2	\$ 371	—	\$ —	6	\$ 1,697

A TDR loan is deemed to have a payment default when it becomes past due 90 days, goes on non-accrual, or is restructured again. Payment defaults, along with other qualitative indicators, are considered by management in the determination of the allowance for credit losses.

At December 31, 2019 and 2018, commitments outstanding on TDR loans totaled \$0.2 million and \$1.5 million, respectively.

Loan Purchases and Sales

The Company has a residential mortgage acquisition program, in which it partners with strategic third parties to execute flow and bulk residential loan purchases that meet the Company's goals and underwriting criteria. The following table presents these residential and other secondary market loan purchases and sales by loan portfolio segment:

	Year Ended December 31,	
	2019	2018
	<i>(in thousands)</i>	
Loan purchases		
Commercial and industrial	\$ 1,014,894	\$ 690,122
Commercial real estate - non-owner occupied	49,211	—
Construction and land development	34,490	27,517
Residential real estate	1,434,812	883,179
Total	<u>\$ 2,533,407</u>	<u>\$ 1,600,818</u>
Loan sales		
Carrying value	\$ 98,963	\$ 66,477
Gain on sale	690	2,638

4. PREMISES AND EQUIPMENT

The following is a summary of the major categories of premises and equipment:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Bank premises	\$ 91,574	\$ 89,930
Land and improvements	32,954	32,954
Furniture, fixtures, and equipment	53,621	42,729
Leasehold improvements	28,477	25,919
Construction in progress	10,449	6,302
Total	<u>217,075</u>	<u>197,834</u>
Accumulated depreciation and amortization	<u>(91,237)</u>	<u>(78,360)</u>
Premises and equipment, net	<u>\$ 125,838</u>	<u>\$ 119,474</u>

5. LEASES

Adoption of ASU 2016-02, Leases

On January 1, 2019, the Company adopted the amendments to ASC 842, *Leases*, which requires lessees to recognize lease assets and liabilities arising from operating leases on the balance sheet. The Company adopted the new lease guidance using the modified retrospective approach and elected the transition option issued under ASU 2018-11, *Leases (Topic 842) Targeted Improvements*, allowing entities to continue to apply the legacy guidance in ASC 840, *Leases*, to prior periods, including disclosure requirements. Accordingly, prior period financial results and disclosures have not been adjusted.

The Company has operating leases under which it leases its branch offices, corporate headquarters, other offices, and data facility centers. Upon adoption of the new lease guidance, on January 1, 2019, the Company recorded a ROU asset and corresponding lease liability of \$42.5 million and \$46.1 million, respectively, on the Consolidated Balance Sheet. As of December 31, 2019, the Company's operating lease ROU asset and operating lease liability totaled \$72.6 million and \$78.1 million, respectively. The increase in the operating lease ROU asset and the operating lease liability from the adoption date is due to execution of multiple office lease extensions and new office lease agreements subsequent to the adoption date. A weighted average discount rate of 3.08% was used in the measurement of the ROU asset and lease liability as of December 31, 2019.

The Company's leases have remaining lease terms of one to 11 years, with a weighted average lease term of 8.4 years at December 31, 2019. Some leases include multiple five-year renewal options. The Company's decision to exercise these renewal options is based on an assessment of its current business needs and market factors at the time of the renewal. Currently, the Company has

no leases for which the option to renew is reasonably certain and therefore, options to renew were not factored into the calculation of its ROU asset and lease liability as of December 31, 2019.

The following is a schedule of the Company's operating lease liabilities by contractual maturity as of December 31, 2019:

	<i>(in thousands)</i>
2020	\$ 12,369
2021	10,413
2022	9,224
2023	9,060
2024	9,007
Thereafter	40,072
Total lease payments	<u>\$ 90,145</u>
Less: imputed interest	12,033
Total present value of lease liabilities	<u>\$ 78,112</u>

The Company also has additional operating leases for its corporate headquarters and a branch location that have not yet commenced as of December 31, 2019. The aggregate future commitment related to the additional leases total \$3.1 million. These operating leases will commence within the next 12 months and will have lease terms of five and 11 years.

Total operating lease costs of \$12.9 million and other lease costs of \$4.0 million, which include common area maintenance, parking, and taxes during the year ended December 31, 2019, were included as part of occupancy expense. Short-term lease costs were not material for the year ended December 31, 2019. For the years ended December 31, 2018 and 2017, rent expense associated with the Company's operating leases totaled \$11.0 million and \$10.4 million, respectively.

The below table shows the supplemental cash flow information related to the Company's operating leases for the year ended December 31, 2019:

	<i>(in thousands)</i>
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 12,435
Right-of-use assets obtained in exchange for new operating lease liabilities	43,681

6. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill represents the excess consideration paid for net assets acquired in a business combination over their fair value. Goodwill and other intangible assets acquired in a business combination that are determined to have an indefinite useful life are not subject to amortization, but are subsequently evaluated for impairment at least annually. The Company has goodwill of \$289.9 million as of December 31, 2019, which has been allocated to the Nevada, Northern California, Technology & Innovation, and HFF operating segments.

The Company performs its annual goodwill and intangibles impairment tests as of October 1 of each year, or more often if events or circumstances indicate that the carrying value may not be recoverable. During the years ended December 31, 2019, 2018, and 2017, there were no events or circumstances that indicated an interim impairment test of goodwill or other intangible assets was necessary and, based on the Company's annual goodwill and intangibles impairment tests as of October 1 of each of these years, it was determined that goodwill and intangible assets are not impaired.

The following is a summary of the Company's acquired intangible assets:

	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
	<i>(in thousands)</i>					
Subject to amortization						
Core deposit intangibles	\$ 14,647	\$ 7,284	\$ 7,363	\$ 14,647	\$ 5,737	\$ 8,910

	December 31, 2019			December 31, 2018		
	Gross Carrying Amount	Impairment	Net Carrying Amount	Gross Carrying Amount	Impairment	Net Carrying Amount
	<i>(in thousands)</i>					
Not subject to amortization						
Trade name	\$ 350	\$ —	\$ 350	\$ 350	\$ —	\$ 350

As of December 31, 2019, the Company's core deposit intangible assets had a weighted average estimated useful life of 5.5 years. The Company's remaining core deposit intangible assets consist of those acquired in the acquisition of Bridge and are being amortized using an accelerated amortization method over a period of 10 years. Amortization expense recognized on amortizable intangibles totaled \$1.5 million, \$1.6 million, and \$2.1 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Below is a summary of future estimated aggregate amortization expense:

	December 31, 2019
	<i>(in thousands)</i>
2020	\$ 1,494
2021	1,433
2022	1,364
2023	1,289
2024	1,206
Thereafter	577
Total	<u>\$ 7,363</u>

7. DEPOSITS

The table below summarizes deposits by type:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Non-interest-bearing demand deposits	\$ 8,537,905	\$ 7,456,141
Interest-bearing transaction accounts	2,760,865	2,555,609
Savings and money market accounts	9,120,747	7,330,709
Time certificates of deposit (\$250,000 or more)	1,426,133	1,009,900
Other time deposits	950,843	825,088
Total deposits	<u>\$ 22,796,493</u>	<u>\$ 19,177,447</u>

The summary of the contractual maturities for all time deposits as of December 31, 2019 is as follows:

	December 31,
	<i>(in thousands)</i>
2020	\$ 2,259,182
2021	105,237
2022	7,953
2023	3,502
2024	1,102
Total	<u>\$ 2,376,976</u>

WAB is a participant in the Promontory Interfinancial Network, a network that offers deposit placement services such as CDARS and ICS, which offer products that qualify large deposits for FDIC insurance. Federal banking law and regulation places restrictions on depository institutions regarding brokered deposits because of the general concern that these deposits are not relationship-based and are at a greater risk of being withdrawn, thus posing liquidity risk for institutions that gather brokered deposits in significant amounts. At December 31, 2019 and 2018, the Company had \$407.7 million and \$322.9 million, respectively, of reciprocal CDARS deposits and \$661.8 million and \$706.9 million, respectively, of ICS deposits. At December 31, 2019 and 2018, the Company had \$1.1 billion and \$718.2 million, respectively, of wholesale brokered deposits. In addition, non-interest-bearing deposits for which the Company provides account holders with earnings credits or referral fees totaled \$3.1 billion and \$2.3 billion at December 31, 2019 and 2018, respectively. The Company incurred \$30.5 million and \$18.0 million in deposit related costs on these deposits during the years ended December 31, 2019 and 2018, respectively.

8. OTHER BORROWINGS

The following table summarizes the Company's borrowings as of December 31, 2019 and 2018:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Short-Term:		
Federal funds purchased	\$ —	\$ 256,000
FHLB advances	—	235,000
Total short-term borrowings	<u>\$ —</u>	<u>\$ 491,000</u>

The Company maintains federal fund lines of credit totaling \$1.2 billion as of December 31, 2019, which have rates comparable to the federal funds effective rate plus 0.10% to 0.20%. As of December 31, 2019, there were no outstanding balances on the Company's lines of credit. As of December 31, 2018, outstanding balances on these federal fund lines of credit totaled \$256.0 million.

The Company also maintains secured lines of credit with the FHLB and the FRB. The Company's borrowing capacity is determined based on collateral pledged, generally consisting of investment securities and loans, at the time of the borrowing. At December 31, 2019, the Company had no short-term FHLB overnight advances. At December 31, 2018, short-term FHLB advances of \$235.0 million had an interest rate of 2.56%.

Other short-term borrowing sources available to the Company include customer repurchase agreements, which have a weighted average rate of 0.15% and totaled \$16.7 million and \$22.4 million as of December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, the Company had additional available credit with the FHLB of approximately \$4.5 billion and \$2.5 billion, respectively, and with the FRB of approximately \$1.1 billion and \$1.3 billion, respectively.

9. QUALIFYING DEBT

Subordinated Debt

The Parent has \$175.0 million of subordinated debentures, which were recorded net of issuance costs of \$5.5 million, and mature July 1, 2056. Beginning on or after July 1, 2021, the Company may redeem the debentures, in whole or in part, at their principal amount plus any accrued and unpaid interest. The debentures have a fixed interest rate of 6.25% per annum.

WAB has \$150.0 million of subordinated debt, which was recorded net of debt issuance costs of \$1.8 million, and matures July 15, 2025. The subordinated debt has a fixed interest rate of 5.00% through June 30, 2020 and then converts to a variable rate of 3.20% plus three-month LIBOR through maturity.

To hedge the interest rate risk on the Company's subordinated debt issuances, the Company entered into fair value interest rate hedges with receive fixed/pay variable swaps.

The carrying value of all subordinated debt issuances, which includes the fair value of the related hedges, totals \$319.2 million and \$299.4 million at December 31, 2019 and 2018, respectively.

Junior Subordinated Debt

The Company has formed or acquired through acquisition eight statutory business trusts, which exist for the exclusive purpose of issuing Cumulative Trust Preferred Securities.

The Company's junior subordinated debt has contractual balances and maturity dates as follows:

Name of Trust	Maturity	December 31,	
		2019	2018
At fair value		<i>(in thousands)</i>	
BankWest Nevada Capital Trust II	2033	\$ 15,464	\$ 15,464
Intermountain First Statutory Trust I	2034	10,310	10,310
First Independent Statutory Trust I	2035	7,217	7,217
WAL Trust No. 1	2036	20,619	20,619
WAL Statutory Trust No. 2	2037	5,155	5,155
WAL Statutory Trust No. 3	2037	7,732	7,732
Total contractual balance		66,497	66,497
FVO on junior subordinated debt		(4,812)	(17,812)
Junior subordinated debt, at fair value		\$ 61,685	\$ 48,685
At amortized cost			
Bridge Capital Holdings Trust I	2035	\$ 12,372	\$ 12,372
Bridge Capital Holdings Trust II	2036	5,155	5,155
Total contractual balance		17,527	17,527
Purchase accounting adjustment, net of accretion (1)		(4,845)	(5,155)
Junior subordinated debt, at amortized cost		\$ 12,682	\$ 12,372
Total junior subordinated debt		\$ 74,367	\$ 61,057

(1) The purchase accounting adjustment is being accreted over the remaining life of the trusts, pursuant to accounting guidance.

With the exception of debt issued by Bridge Capital Trust I and Bridge Capital Trust II, junior subordinated debt is recorded at fair value at each reporting date due to the FVO election made by the Company under ASC 825. The Company did not make the FVO election for the junior subordinated debt acquired as part of the Bridge acquisition. Accordingly, the carrying value of these trusts does not reflect the current fair value of the debt and includes a fair market value adjustment established at acquisition that is being accreted over the remaining life of the trusts.

The weighted average interest rate of all junior subordinated debt as of December 31, 2019 was 4.25%, which is three-month LIBOR plus the contractual spread of 2.34%, compared to a weighted average interest rate of 5.15% at December 31, 2018.

In the event of certain changes or amendments to regulatory requirements or federal tax rules, the debt is redeemable in whole. The obligations under these instruments are fully and unconditionally guaranteed by the Company and rank subordinate and junior in right of payment to all other liabilities of the Company. Based on guidance issued by the FRB, the Company's securities continue to qualify as Tier 1 Capital.

10. STOCKHOLDERS' EQUITY

Stock-Based Compensation

Restricted Stock Awards

The Incentive Plan, as amended, gives the BOD the authority to grant up to 10.5 million in stock awards consisting of unrestricted stock, stock units, dividend equivalent rights, stock options (incentive and non-qualified), stock appreciation rights, restricted stock, and performance and annual incentive awards. The Incentive Plan limits the maximum number of shares of common stock that may be awarded to any person eligible for an award to 300,000 per calendar year and also limits the total compensation (cash and stock) that can be awarded to a non-employee director to \$600,000 in any calendar year. Stock awards available for grant at December 31, 2019 were 2.9 million.

Restricted stock awards granted to employees generally vest over a three-year period. Stock grants made to non-employee WAL directors in 2019 became fully vested on July 1, 2019. The Company estimates the compensation cost for stock grants based upon the grant date fair value. Stock compensation expense is recognized on a straight-line basis over the requisite service period for the entire award. Stock compensation expense related to restricted stock awards and stock options granted to employees are included in Salaries and employee benefits in the Consolidated Income Statement. For restricted stock awards granted to WAL directors, related stock compensation expense is included in Legal, professional, and directors' fees. For the year ended December 31, 2019, the Company recognized \$17.4 million in stock-based compensation expense related to these stock grants, compared to \$16.6 million in 2018, and \$14.3 million in 2017.

In addition, the Company previously granted shares of restricted stock to certain members of executive management that had both performance and service conditions that affect vesting. There were no such grants made during the years ended December 31, 2019 and 2018; however, expense is still being recognized for the grants made in 2017 as they also have a three-year vesting period. For the year ended December 31, 2019, the Company recognized \$1.9 million in stock-based compensation expense related to these performance-based restricted stock grants, compared to \$2.5 million in 2018, and \$2.3 million in 2017.

A summary of the status of the Company's unvested shares of restricted stock and changes during the years then ended is presented below:

	December 31,				
	2019		2018		
Shares	Weighted Average Grant Date Fair Value		Shares	Weighted Average Grant Date Fair Value	
<i>(in thousands, except per share amounts)</i>					
Balance, beginning of period	1,027	\$ 47.53	1,142	\$	36.96
Granted	516	46.04	425		58.02
Vested	(469)	39.60	(477)		32.31
Forfeited	(114)	50.80	(63)		43.62
Balance, end of period	<u>960</u>	<u>\$ 49.98</u>	<u>1,027</u>	<u>\$</u>	<u>47.53</u>

The total weighted average grant date fair value of all stock awards, including the performance-based restricted stock awards, granted during the years ended December 31, 2019, 2018, and 2017 was \$23.7 million, \$24.7 million, and \$26.1 million, respectively. The total fair value of restricted stock that vested during the years ended December 31, 2019, 2018, and 2017 was \$21.3 million, \$27.4 million, and \$29.1 million, respectively.

As of December 31, 2019, there was \$23.0 million of total unrecognized compensation cost related to unvested share-based compensation arrangements granted under the Incentive Plan. That cost is expected to be recognized over a weighted average period of 1.62 years.

Performance Stock Units

The Company grants to members of its executive management performance stock units that do not vest unless the Company achieves a specified cumulative EPS target and a TSR performance measure over a three-year performance period. The number of shares issued will vary based on the cumulative EPS target and relative TSR performance factor that is achieved. The Company estimates the cost of performance stock units based upon the grant date fair value and expected vesting percentage over the three-year performance period. For the year ended December 31, 2019, the Company recognized \$6.9 million in stock-based compensation expense related to these performance stock units, compared to \$6.4 million and \$6.5 million in stock-based compensation expense for such units in 2018 and 2017, respectively.

The three-year performance period for the 2016 grant ended on December 31, 2018, and the Company's cumulative EPS for the performance period exceeded the level required for a maximum award under the terms of the grant. As a result, executive management members were entitled to the maximum award of 202,776 shares, which was paid out in the first quarter of 2019.

The three-year performance period for the 2017 grant ended on December 31, 2019, and the Company's cumulative EPS and TSR performance measure for the performance period exceeded the level required for a maximum award under the terms of the grant. As a result, 163,901 shares will become fully vested and distributed to executive management in the first quarter of 2020.

Common Stock Repurchase

On December 12, 2018, the Company announced that it had adopted a common stock repurchase plan, pursuant to which the Company was authorized to repurchase up to \$250 million of its shares of common stock through December 31, 2019. During the year ended December 31, 2019, the Company repurchased 2,822,402 shares of its common stock, pursuant to the repurchase plan. The shares were repurchased at a weighted average price of \$42.53, for a total payment of \$120.1 million. The Company's common stock repurchase program was renewed through December 2020, authorizing the Company to repurchase up to an additional \$250.0 million of its outstanding common stock.

Cash Dividend

During the year ended December 31, 2019, the Company's Board of Directors declared two quarterly cash dividends of \$0.25 per share of common stock, totaling \$51.3 million.

Treasury Shares

Treasury share purchases represent shares surrendered to the Company equal in value to the statutory payroll tax withholding obligations arising from the vesting of employee restricted stock awards. During the year ended December 31, 2019, the Company purchased treasury shares of 210,657 at a weighted average price of \$45.80 per share, compared to 223,125 shares at a weighted average price per share of \$57.88 in 2018, and 269,865 shares at a weighted average price per share of \$51.16 in 2017.

11. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table summarizes the changes in accumulated other comprehensive income (loss) by component, net of tax, for the periods indicated:

	Unrealized holding gains (losses) on AFS	Unrealized holding gains (losses) on SERP	Unrealized holding gains (losses) on junior subordinated debt <i>(in thousands)</i>	Impairment loss on securities	Total
Balance, December 31, 2016	\$ (14,916)	\$ 121	\$ 9,956	\$ 144	\$ (4,695)
Other comprehensive income (loss) before reclassifications	6,334	264	(3,604)	—	2,994
Amounts reclassified from AOCI	(1,444)	—	—	—	(1,444)
Net current-period other comprehensive income (loss)	4,890	264	(3,604)	—	1,550
Balance, December 31, 2017	\$ (10,026)	\$ 385	\$ 6,352	\$ 144	\$ (3,145)
Balance, January 1, 2018 (1)	(12,556)	469	7,740	144	(4,203)
Other comprehensive (loss) income before reclassifications	(40,808)	(77)	5,693	—	(35,192)
Amounts reclassified from accumulated other comprehensive income	5,773	—	—	—	5,773
Net current-period other comprehensive (loss) income	(35,035)	(77)	5,693	—	(29,419)
Balance, December 31, 2018	\$ (47,591)	\$ 392	\$ 13,433	\$ 144	\$ (33,622)
Other comprehensive income (loss) before reclassifications	71,222	(412)	(9,804)	—	61,006
Amounts reclassified from AOCI	(2,232)	—	—	(144)	(2,376)
Net current-period other comprehensive income (loss)	68,990	(412)	(9,804)	(144)	58,630
Balance, December 31, 2019	\$ 21,399	\$ (20)	\$ 3,629	\$ —	\$ 25,008

(1) As adjusted for adoption of ASU 2016-01 and ASU 2018-02. The cumulative effect of adoption of this guidance at January 1, 2018 resulted in an increase to retained earnings of \$1.1 million and a corresponding decrease to accumulated other comprehensive income.

The following table presents reclassifications out of accumulated other comprehensive income:

Income Statement Classification	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Gain (loss) on sales of investment securities, net	\$ 3,152	\$ (7,656)	\$ 2,343
Income tax (expense) benefit	(776)	1,883	(899)
Net of tax	\$ 2,376	\$ (5,773)	\$ 1,444

12. DERIVATIVES AND HEDGING ACTIVITIES

The Company is a party to various derivative instruments. Derivative instruments are contracts between two or more parties that have a notional amount and an underlying variable, require a small or no initial investment, and allow for the net settlement of positions. A derivative's notional amount serves as the basis for the payment provision of the contract and takes the form of units, such as shares or dollars. A derivative's underlying variable is a specified interest rate, security price, commodity price, foreign exchange rate, index, or other variable. The interaction between the notional amount and the underlying variable determines the number of units to be exchanged between the parties and influences the fair value of the derivative contract.

The primary type of derivatives that the Company uses are interest rate swaps. Generally, these instruments are used to help manage the Company's exposure to interest rate risk and meet client financing and hedging needs.

Derivatives are recorded at fair value on the Consolidated Balance Sheets, after taking into account the effects of bilateral collateral and master netting agreements. These agreements allow the Company to settle all derivative contracts held with the same counterparty on a net basis, and to offset net derivative positions with related cash collateral, where applicable.

As of December 31, 2019, 2018, and 2017, the Company does not have any outstanding cash flow hedges.

Derivatives Designated in Hedge Relationships

The Company utilizes derivatives that have been designated as part of a hedge relationship in accordance with the applicable accounting guidance to minimize the exposure to changes in benchmark interest rates and volatility of net interest income and EVE to interest rate fluctuations. The primary derivative instruments used to manage interest rate risk are interest rate swaps, which convert the contractual interest rate index of agreed-upon amounts of assets and liabilities (i.e., notional amounts) to another interest rate index.

The Company has entered into pay fixed/receive variable interest rate swaps designated as fair value hedges of certain fixed rate loans. As a result, the Company receives variable-rate interest payments in exchange for making fixed-rate payments over the lives of the contracts without exchanging the notional amounts.

The Company has also entered into receive fixed/pay variable interest rate swaps, designated as fair value hedges on its fixed rate subordinated debt offerings. As a result, the Company is paying a floating rate of three month LIBOR plus 3.16% and is receiving semi-annual fixed payments of 5.00% to match the payments on the \$150.0 million subordinated debt. For the fair value hedge on the Parent's \$175.0 million subordinated debentures issued on June 16, 2016, the Company is paying a floating rate of three-month LIBOR plus 3.25% and is receiving quarterly fixed payments at 6.25% to match the payments on the debt.

Derivatives Not Designated in Hedge Relationships

Management also enters into certain foreign exchange derivative contracts and back-to-back interest rate swaps that are not designated as accounting hedges. Foreign exchange derivative contracts include spot, forward, and forward window contracts. The purpose of these derivative contracts is to mitigate foreign currency risk on transactions entered into or on behalf of customers. Contracts with customers, along with the related derivative trades the Company places, are both remeasured at fair value, and are referred to as economic hedges since they economically offset the Company's exposure. The Company's back-to-back interest rate swaps are used to manage long-term interest rate risk.

As of December 31, 2019 and 2018, the following amounts are reflected on the Consolidated Balance Sheet related to cumulative basis adjustments for fair value hedges:

	December 31, 2019		December 31, 2018	
	Carrying Value of Hedged Assets/ (Liabilities)	Cumulative Fair Value Hedging Adjustment (1)	Carrying Value of Hedged Assets/ (Liabilities)	Cumulative Fair Value Hedging Adjustment (1)
	<i>(in thousands)</i>			
Loans - HFI, net of deferred loan fees and costs	\$ 578,063	\$ 53,292	\$ 650,428	\$ 23,039
Qualifying debt	(319,197)	401	(299,401)	19,691

(1) Included in the carrying value of the hedged assets/(liabilities)

For the Company's derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative instrument as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in current earnings in the same line item as the offsetting loss or gain on the related interest rate swaps. For loans, the gain or loss on the hedged item is included in interest income and for subordinated debt, the gain or loss on the hedged item is included in interest expense.

Fair Values, Volume of Activity, and Gain/Loss Information Related to Derivative Instruments

The following table summarizes the fair values of the Company's derivative instruments on a gross and net basis as of December 31, 2019, 2018, and 2017. The change in the notional amounts of these derivatives from December 31, 2017 to December 31, 2019 indicates the volume of the Company's derivative transaction activity during these periods. The derivative asset and liability balances are presented on a gross basis, prior to the application of bilateral collateral and master netting agreements. Total derivative assets and liabilities are adjusted to take into account the impact of legally enforceable master netting agreements that allow the Company to settle all derivative contracts with the same counterparty on a net basis and to offset the net derivative position with the related collateral. Where master netting agreements are not in effect or are not enforceable under bankruptcy laws, the Company does not adjust those derivative amounts with counterparties. The fair value of derivative contracts, after taking into account the effects of master netting agreements, is included in other assets or other liabilities on the Consolidated Balance Sheets, as indicated in the following table:

	December 31, 2019			December 31, 2018			December 31, 2017		
	Notional Amount	Fair Value		Notional Amount	Fair Value		Notional Amount	Fair Value	
		Derivative Assets	Derivative Liabilities		Derivative Assets	Derivative Liabilities		Derivative Assets	Derivative Liabilities
	<i>(in thousands)</i>								
Derivatives designated as hedging instruments:									
Fair value hedges									
Interest rate swaps	\$ 862,952	\$ 1,778	\$ 55,471	\$ 965,705	\$ 2,162	\$ 44,892	\$ 993,432	\$ 1,703	\$ 53,581
Total	862,952	1,778	55,471	965,705	2,162	44,892	993,432	1,703	53,581
Netting adjustments (1)	—	21	21	—	2,162	2,162	—	896	896
Net derivatives in the balance sheet	\$ 862,952	\$ 1,757	\$ 55,450	\$ 965,705	\$ —	\$ 42,730	\$ 993,432	\$ 807	\$ 52,685
Derivatives not designated as hedging instruments:									
Foreign currency contracts	\$ 6,711	\$ 44	\$ 18	\$ 49,690	\$ 454	\$ 201	\$ 85,335	\$ 1,232	\$ 983
Interest rate swaps	2,932	81	81	2,378	27	27	36,969	776	776
Total	\$ 9,643	\$ 125	\$ 99	\$ 52,068	\$ 481	\$ 228	\$ 122,304	\$ 2,008	\$ 1,759

(1) Netting adjustments represent the amounts recorded to convert the Company's derivative balances from a gross basis to a net basis in accordance with the applicable accounting guidance.

Counterparty Credit Risk

Like other financial instruments, derivatives contain an element of credit risk. This risk is measured as the expected positive replacement value of the contracts. Management generally enters into bilateral collateral and master netting agreements that provide for the net settlement of all contracts with the same counterparty. Additionally, management monitors counterparty credit risk exposure on each contract to determine appropriate limits on the Company's total credit exposure across all product types. In general, the Company has a zero credit threshold with regard to derivative exposure with counterparties. Management reviews the Company's collateral positions on a daily basis and exchanges collateral with counterparties in accordance with standard ISDA documentation and other related agreements. The Company generally holds collateral in the form of cash deposits or highly rated securities issued by the U.S. Treasury or government-sponsored enterprises, such as GNMA, FNMA, and FHLMC. The total collateral netted against net derivative liabilities totaled \$55.5 million at December 31, 2019, \$44.9 million at December 31, 2018, and \$53.6 million at December 31, 2017.

The following table summarizes the Company's largest exposure to an individual counterparty at the dates indicated:

	December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Largest gross exposure (derivative asset) to an individual counterparty	\$ 1,757	\$ 1,411	\$ 893
Collateral posted by this counterparty	1,610	—	—
Derivative liability with this counterparty	—	23,906	40,340
Collateral pledged to this counterparty	—	25,761	60,476
Net exposure after netting adjustments and collateral	<u>\$ 147</u>	<u>\$ —</u>	<u>\$ —</u>

Credit Risk Contingent Features

Management has entered into certain derivative contracts that require the Company to post collateral to the counterparties when these contracts are in a net liability position. Conversely, the counterparties may be required to post collateral when these contracts are in a net asset position. The amount of collateral to be posted is based on the amount of the net liability and exposure thresholds. As of December 31, 2019, 2018, and 2017, the aggregate fair value of all derivative contracts with credit risk contingent features (i.e., those containing collateral posting provisions) held by the Company that were in a net liability position totaled \$55.5 million, \$44.9 million, and \$53.6 million, respectively. As of December 31, 2019, the Company was in an over-collateralized net position of \$29.2 million after considering \$84.7 million of collateral held in the form of cash and securities. As of December 31, 2018 and 2017, the Company was in an over-collateralized position of \$7.6 million and \$25.0 million, respectively.

13. EARNINGS PER SHARE

Diluted EPS is based on the weighted average outstanding common shares during the period, including common stock equivalents. Basic EPS is based on the weighted average outstanding common shares during the period.

The following table presents the calculation of basic and diluted EPS:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands, except per share amounts)</i>		
Weighted average shares - basic	102,667	104,669	104,179
Dilutive effect of stock awards	466	701	818
Weighted average shares - diluted	<u>103,133</u>	<u>105,370</u>	<u>104,997</u>
Net income	\$ 499,171	\$ 435,788	\$ 325,492
Earnings per share - basic	4.86	4.16	3.12
Earnings per share - diluted	4.84	4.14	3.10

The Company had no anti-dilutive stock options outstanding as of December 31, 2019 and 2018.

14. INCOME TAXES

The provision for income taxes charged to operations consists of the following:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Current	\$ 110,184	\$ 91,249	\$ 37,854
Deferred	(5,129)	(16,709)	88,471
Total tax provision	<u>\$ 105,055</u>	<u>\$ 74,540</u>	<u>\$ 126,325</u>

The reconciliation between the statutory federal income tax rate and the Company's effective tax rate is summarized as follows:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Income tax at statutory rate	\$ 126,888	\$ 107,169	\$ 158,136
Increase (decrease) resulting from:			
State income taxes, net of federal benefits	11,004	9,015	9,765
Tax-exempt income	(19,527)	(18,322)	(26,403)
Change in federal rate applied to deferred items	—	—	(10,411)
Federal NOL and other carryback items	—	(15,341)	—
Excise tax	—	(137)	9,689
Investment tax credits	(15,000)	(6,673)	(7,361)
Other, net	1,690	(1,171)	(7,090)
Total tax provision	<u>\$ 105,055</u>	<u>\$ 74,540</u>	<u>\$ 126,325</u>

For the years ended December 31, 2019, 2018, and 2017 the Company's effective tax rate was 17.39%, 14.61%, and 27.96%, respectively. The increase in the effective tax rate from 2018 to 2019 is due primarily to management's decision during the third quarter of 2018 to carryback its 2017 federal NOLs. The decrease in the effective tax rate from 2017 to 2018 is due primarily to the decrease in the federal statutory rate effective in 2018, a reduction in excise taxes, and management's decision to carryback its 2017 federal NOLs. The reduction in excise taxes from 2017 to 2018 resulted from not deferring WAB's 2018 dividend from BW Real Estate as was the case in 2017. The Company's 2017 federal NOLs resulted from the acceleration of deductions into and deferral of revenue from 2017. As the federal income tax rate was higher in the years to which the carryback is applicable, a larger tax benefit results from the decision to carryback the 2017 federal NOLs, rather than carry forward these losses to future taxable years.

The cumulative tax effects of the primary temporary differences are shown in the following table:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Deferred tax assets:		
Allowance for credit losses	\$ 44,809	\$ 42,833
Lease liability (1)	20,264	—
Stock-based compensation	7,351	8,718
Net operating loss carryovers	5,619	6,255
Unrealized loss on AFS securities	—	16,047
Other	19,361	20,687
Total gross deferred tax assets	<u>97,404</u>	<u>94,540</u>
Deferred tax asset valuation allowance	—	(2,373)
Total deferred tax assets	<u>97,404</u>	<u>92,167</u>
Deferred tax liabilities:		
Right of use asset (1)	(18,823)	—
Unrealized gain on AFS securities	(7,264)	—
Unrealized gain on junior subordinated debt	(1,229)	(5,833)
Deferred loan costs	(10,789)	(9,528)
Insurance premiums	(4,514)	(6,527)
Premises and equipment	(8,372)	(1,201)
Estimated loss reserve	(14,890)	(31,592)
50(d) income	(6,792)	(1,624)
Other	(6,706)	(3,872)
Total deferred tax liabilities	<u>(79,379)</u>	<u>(60,177)</u>
Deferred tax assets, net	<u>\$ 18,025</u>	<u>\$ 31,990</u>

- (1) Upon adoption of ASC 842 on January 1, 2019, a lease liability DTA and a right of use asset DTL were established and totaled \$9.7 million and \$9.1 million, respectively. While there may be significant changes in the separate DTA and DTL balances of these two items, the aggregate effect of these two changes will generally offset and therefore are not discussed as significant changes to the net deferred balance.

Deferred tax assets and liabilities are included in the Consolidated Financial Statements at currently enacted income tax rates applicable to the period in which the deferred tax assets or liabilities are expected to be reversed. As changes in tax laws or rates are enacted, deferred tax assets and liabilities are adjusted through the provision for income taxes.

Net deferred tax assets decreased \$14.0 million to \$18.0 million from December 31, 2018. This overall decrease in net deferred tax assets was primarily the result of the increases in the fair market value of AFS securities. In addition, there was a large decrease to the overall estimated loss reserve, which was largely offset by increases to DTLs related to premises and equipment and income associated with tax credits for lease pass-through transactions (50(d) income).

Although realization is not assured, the Company believes that the realization of the recognized net deferred tax asset of \$18.0 million at December 31, 2019 is more-likely-than-not based on expectations as to future taxable income and based on available tax planning strategies that could be implemented if necessary to prevent a carryover from expiring.

As of December 31, 2019, the Company has no deferred tax valuation allowance. As of December 31, 2018, the Company had a deferred tax valuation allowance of \$2.4 million related to net capital loss carryovers.

As of December 31, 2019, the Company's gross federal NOL carryovers, all of which are subject to limitations under Section 382 of the IRC, totaled \$45.8 million, for which a deferred tax asset of \$5.5 million has been recorded, reflecting the expected benefit of these federal NOL carryovers remaining after application of the Section 382 limitation. The Company also has varying gross amounts of state NOL carryovers, primarily in Arizona. The gross Arizona NOL carryovers totaled approximately \$2.2 million. A deferred tax asset of \$0.2 million has been recorded to reflect the expected benefit of all state NOL carryovers remaining. If not utilized, a portion of the federal and state NOL carryovers will begin to expire in 2024. As of December 31, 2019, the Company had no federal tax credit carryovers and \$1.4 million of state tax credit carryovers. If not utilized, a portion of the state tax credit carryovers will begin to expire in 2023. In management's opinion, it is more-likely-than-not that the results of future operations will generate sufficient taxable income to realize all of the deferred tax benefits related to these NOL and tax credit carryovers.

The Company files income tax returns in the U.S. federal jurisdiction and in various states. With few exceptions, the Company is no longer subject to U.S. federal, state, or local income tax examinations by tax authorities for years before 2015.

When tax returns are filed, it is highly certain that most positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the position taken or the amount of the position that would be ultimately sustained. The benefit of a tax position is recognized in the Consolidated Financial Statements in the period in which, based on all available evidence, management believes it is more-likely-than-not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions taken are not offset or aggregated with other positions. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50% likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above is reflected as a liability for unrecognized tax benefits on the accompanying Consolidated Balance Sheets along with any associated interest and penalties payable to the taxing authorities upon examination.

The total gross activity of unrecognized tax benefits related to the Company's uncertain tax positions are shown in the following table:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Beginning balance	\$ 484	\$ 1,038
Gross increases		
Tax positions in prior periods	—	—
Current period tax positions	1,255	—
Gross decreases		
Tax positions in prior periods	—	(247)
Settlements	—	(307)
Lapse of statute of limitations	—	—
Ending balance	<u>\$ 1,739</u>	<u>\$ 484</u>

During the year ended December 31, 2019, the Company added a new current year position, which resulted in a tax detriment of \$0.8 million, inclusive of interest and penalties.

As of December 31, 2019 and 2018, the total amount of unrecognized tax benefits, net of associated deferred tax benefits, that would impact the effective tax rate, if recognized, is \$1.1 million and \$0.3 million, respectively. The Company anticipates that \$0.1 million of the unrecognized tax benefits will be resolved within the next 12 months.

During the years ended December 31, 2019, 2018, and 2017, the Company recognized no additional amounts for interest and penalties. As of December 31, 2019 and 2018, the Company has accrued total liabilities of \$0.1 million for penalties and no amounts for interest.

LIHTC and renewable energy projects

As discussed in "Note 1. Summary of Significant Accounting Policies," the Company holds ownership interests in limited partnerships and limited liability companies that invest in affordable housing and renewable energy projects. These investments are designed to generate a return primarily through the realization of federal tax credits and deductions. The limited liability entities are considered to be VIEs; however, as a limited partner, the Company is not the primary beneficiary and is not required to consolidate these entities.

At December 31, 2019, the Company's exposure to loss as a result of its involvement in these entities was limited to \$487.3 million, which reflects the Company's recorded investment in these projects, net of certain unfunded capital commitments, and previously recorded tax credits which remain subject to recapture by taxing authorities. During the years ended December 31, 2019, 2018, and 2017, the Company did not provide financial or other support to these entities that was not contractually required.

Investments in LIHTC and renewable energy total \$409.4 million and \$369.6 million as of December 31, 2019 and 2018, respectively. Unfunded LIHTC and renewable energy obligations are included as part of other liabilities on the Consolidated Balance Sheet and total \$191.0 million and \$196.3 million as of December 31, 2019 and 2018, respectively. For the years ended December 31, 2019, 2018, and 2017, \$41.5 million, \$35.9 million, and \$25.4 million of amortization related to LIHTC investments was recognized as a component of income tax expense, respectively.

15. COMMITMENTS AND CONTINGENCIES

Unfunded Commitments and Letters of Credit

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

Lines of credit are obligations to lend money to a borrower. Credit risk arises when the borrower's current financial condition may indicate less ability to pay than when the commitment was originally made. In the case of letters of credit, the risk arises from the potential failure of the customer to perform according to the terms of a contract. In such a situation, the third party might draw on the letter of credit to pay for completion of the contract and the Company would look to its customer to repay these funds with interest. To minimize the risk, the Company uses the same credit policies in making commitments and conditional obligations as it would for a loan to that customer.

Letters of credit and financial guarantees are commitments issued by the Company to guarantee the performance of a customer to a third party in borrowing arrangements. The Company generally has recourse to recover from the customer any amounts paid under the guarantees. Typically, letters of credit issued have expiration dates within one year.

A summary of the contractual amounts for unfunded commitments and letters of credit are as follows:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Commitments to extend credit, including unsecured loan commitments of \$895,175 at December 31, 2019 and \$770,114 at December 31, 2018	\$ 8,348,421	\$ 7,556,741
Credit card commitments and financial guarantees	302,909	237,312
Letters of credit, including unsecured letters of credit of \$5,850 at December 31, 2019 and \$21,879 at December 31, 2018	175,778	390,161
Total	\$ 8,827,108	\$ 8,184,214

The following table represents the contractual commitments for lines and letters of credit by maturity at December 31, 2019:

	Total Amounts Committed	Amount of Commitment Expiration per Period			
		Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
		<i>(in thousands)</i>			
Commitments to extend credit	\$ 8,348,421	\$ 2,873,303	\$ 3,170,848	\$ 1,299,506	\$ 1,004,764
Credit card commitments and financial guarantees	302,909	302,909	—	—	—
Letters of credit	175,778	156,375	18,786	617	—
Total	\$ 8,827,108	\$ 3,332,587	\$ 3,189,634	\$ 1,300,123	\$ 1,004,764

Commitments to extend credit are agreements to lend to a customer provided that 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. The Company enters into credit arrangements that generally provide for the termination of advances in the event of a covenant violation or other event of default. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by the Company upon extension of credit, is based on management's credit evaluation of the party. The commitments are collateralized by the same types of assets used as loan collateral.

The Company has exposure to credit losses from unfunded commitments and letters of credit. As funds have not been disbursed on these commitments, they are not reported as loans outstanding. Credit losses related to these commitments are included in other liabilities as a separate loss contingency and are not included in the allowance for credit losses reported in "Note 3. Loans, Leases and Allowance for Credit Losses" of these Consolidated Financial Statements. This loss contingency for unfunded loan commitments and letters of credit was \$9.0 million and \$8.2 million as of December 31, 2019 and 2018, respectively. Changes to this liability are adjusted through other expense in the Consolidated Income Statements.

Concentrations of Lending Activities

The Company's lending activities are driven in large part by the customers served in the market areas where the Company has branch offices in the states of Arizona, Nevada, and California. Despite the geographic concentration of lending activities, the Company does not have a single external customer from which it derives 10% or more of its revenues. The Company monitors concentrations within four broad categories: geography, industry, product, and collateral. The Company's loan portfolio includes significant credit exposure to the CRE market. As of December 31, 2019 and 2018, CRE related loans accounted for approximately 45% and 49% of total loans, respectively. Substantially all of these loans are secured by first liens with an initial loan-to-value ratio of generally not more than 75%. Approximately 31% and 36% of these CRE loans, excluding construction and land loans, were owner occupied as of December 31, 2019 and 2018, respectively.

Contingencies

The Company is involved in various lawsuits of a routine nature that are being handled and defended in the ordinary course of the Company's business. Expenses are being incurred in connection with these lawsuits, but in the opinion of management, based in part on consultation with outside legal counsel, the resolution of these lawsuits and associated defense costs will not have a material impact on the Company's financial position, results of operations, or cash flows.

16. FAIR VALUE ACCOUNTING

The fair value of an asset or liability is the price that would be received to sell that asset or paid to transfer that liability in an orderly transaction occurring in the principal market (or most advantageous market in the absence of a principal market) for such asset or liability. In estimating fair value, the Company utilizes valuation techniques that are consistent with the market approach, the income approach, and/or the cost approach. Such valuation techniques are consistently applied. Inputs to valuation techniques include the assumptions that market participants would use in pricing an asset or liability. ASC 825 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under ASC 825 are described in "Note 1. Summary of Significant Accounting Policies" of these Notes to Consolidated Financial Statements.

In general, fair value is based upon quoted market prices, where available. If such quoted market prices are not available, fair value is based upon internally-developed models that primarily use, as inputs, observable market-based parameters. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value. These adjustments may include amounts to reflect counterparty credit quality and the Company's creditworthiness, among other things, as well as unobservable parameters. Any such valuation adjustments are applied consistently over time. The Company's valuation methodologies may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. While management believes the Company's valuation methodologies are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. Furthermore, the reported fair value amounts have not been comprehensively revalued since the presentation dates, and therefore, estimates of fair value after the balance sheet date may differ significantly from the amounts presented herein. A more detailed description of the valuation methodologies used for assets and liabilities measured at fair value is set forth below. Transfers between levels in the fair value hierarchy are recognized as of the end of the month following the event or change in circumstances that caused the transfer.

Under ASC 825, the Company elected the FVO treatment for junior subordinated debt issued by WAL. This election is irrevocable and results in the recognition of unrealized gains and losses on these items at each reporting date. These unrealized gains and losses are recognized as part of other comprehensive income rather than earnings. The Company did not elect FVO treatment for the junior subordinated debt assumed in the Bridge Capital Holdings acquisition.

For the years ended December 31, 2019, 2018, and 2017, unrealized gains and losses from fair value changes on junior subordinated debt were as follows:

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Unrealized gains/(losses)	\$ (13,001)	\$ 7,550	\$ (5,824)
Changes included in OCI, net of tax	(9,804)	5,693	(3,604)

Fair value on a recurring basis

Financial assets and financial liabilities measured at fair value on a recurring basis include the following:

AFS securities: Securities classified as AFS are reported at fair value utilizing Level 1 and Level 2 inputs. For these securities, the Company obtains fair value measurements from an independent pricing service. The fair value measurements consider observable data that may include quoted prices in active markets, dealer quotes, market spreads, cash flows, the U.S. Treasury yield curve, live trading levels, trade execution data, market consensus prepayment speeds, credit information, and the bond's terms and conditions, among other things.

Equity securities: Preferred stock and CRA investments are reported at fair value utilizing Level 1 inputs.

Independent pricing service: The Company's independent pricing service provides pricing information on the majority of the Company's Level 1 and 2 AFS securities. For a small subset of securities, other pricing sources are used, including observed prices on publicly-traded securities and dealer quotes. Management independently evaluates the fair value measurements received from the Company's third-party pricing service through multiple review steps. First, management reviews what has transpired in the marketplace with respect to interest rates, credit spreads, volatility, and mortgage rates, among other things, and develops an expectation of changes to the securities' valuations from the previous quarter. Then, management selects a sample of investment securities and compares the values provided by its primary third-party pricing service to the market values obtained from secondary sources, including other pricing services and safekeeping statements, and evaluates those with notable variances. In instances where there are discrepancies in pricing from various sources and management expectations, management may manually price securities using currently observed market data to determine whether they can develop similar prices or may utilize bid information from broker dealers. Any remaining discrepancies between management's review and the prices provided by the vendor are discussed with the vendor and/or the Company's other valuation advisors.

Interest rate swaps: Interest rate swaps are reported at fair value utilizing Level 2 inputs. The Company obtains dealer quotations to value its interest rate swaps.

Junior subordinated debt: The Company estimates the fair value of its junior subordinated debt using a discounted cash flow model which incorporates the effect of the Company's own credit risk in the fair value of the liabilities (Level 3). The Company's cash flow assumptions are based on contractual cash flows as the Company anticipates that it will pay the debt according to its contractual terms.

The fair value of assets and liabilities measured at fair value on a recurring basis was determined using the following inputs as of the periods presented:

Fair Value Measurements at the End of the Reporting Period Using:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value
	<i>(in thousands)</i>			
December 31, 2019				
Assets:				
Available-for-sale debt securities				
CDO	\$ —	\$ 10,142	\$ —	\$ 10,142
Commercial MBS issued by GSEs	—	94,253	—	94,253
Corporate debt securities	5,127	94,834	—	99,961
Municipal securities	—	7,773	—	7,773
Private label residential MBS	—	1,129,227	—	1,129,227
Residential MBS issued by GSEs	—	1,412,060	—	1,412,060
Tax-exempt	—	554,855	—	554,855
Trust preferred securities	27,040	—	—	27,040
U.S. government sponsored agency securities	—	10,000	—	10,000
U.S. treasury securities	—	999	—	999
Total AFS debt securities	<u>\$ 32,167</u>	<u>\$ 3,314,143</u>	<u>\$ —</u>	<u>\$ 3,346,310</u>
Equity securities				
CRA investments	\$ 52,504	\$ —	\$ —	\$ 52,504
Preferred stock	86,197	—	—	86,197
Total equity securities	<u>\$ 138,701</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 138,701</u>
Loans - HFS	<u>\$ —</u>	<u>\$ 21,803</u>	<u>\$ —</u>	<u>\$ 21,803</u>
Derivative assets (1)	—	1,903	—	1,903
Liabilities:				
Junior subordinated debt (2)	\$ —	\$ —	\$ 61,685	\$ 61,685
Derivative liabilities (1)	—	55,570	—	55,570

- (1) Derivative assets and liabilities relate to interest rate swaps, see "Note 12. Derivatives and Hedging Activities." In addition, the carrying value of loans is increased by \$53,292 and the net carrying value of subordinated debt is decreased by \$401 as of December 31, 2019 for the effective portion of the hedge, which relates to the fair value of the hedges put in place to mitigate against fluctuations in interest rates.
- (2) Includes only the portion of junior subordinated debt that is recorded at fair value at each reporting period pursuant to the election of FVO treatment.

Fair Value Measurements at the End of the Reporting Period Using:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value
<i>(in thousands)</i>				
December 31, 2018				
<u>Assets:</u>				
Available-for-sale debt securities				
CDO	\$ —	\$ 15,327	\$ —	\$ 15,327
Commercial MBS issued by GSEs	—	100,106	—	100,106
Corporate debt securities	—	99,380	—	99,380
Private label residential MBS	—	924,594	—	924,594
Residential MBS issued by GSEs	—	1,530,124	—	1,530,124
Tax-exempt	—	538,668	—	538,668
Trust preferred securities	—	28,617	—	28,617
U.S. government sponsored agency securities	—	38,188	—	38,188
U.S. treasury securities	—	1,984	—	1,984
Total AFS debt securities	<u>\$ —</u>	<u>\$ 3,276,988</u>	<u>\$ —</u>	<u>\$ 3,276,988</u>
Equity securities				
CRA investments	\$ 51,142	\$ —	\$ —	\$ 51,142
Preferred stock	63,919	—	—	63,919
Total equity securities	<u>\$ 115,061</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 115,061</u>
Derivative assets (1)	\$ —	\$ 2,643	\$ —	\$ 2,643
<u>Liabilities:</u>				
Junior subordinated debt (2)	\$ —	\$ —	\$ 48,684	\$ 48,684
Derivative liabilities (1)	—	45,120	—	45,120

- (1) Derivative assets and liabilities relate to interest rate swaps, see "Note 12. Derivatives and Hedging Activities." In addition, the carrying value of loans is increased by \$23,039 and the net carrying value of subordinated debt is decreased by \$19,691 as of December 31, 2018, which relates to the effective portion of the hedges put in place to mitigate against fluctuations in interest rates.
- (2) Includes only the portion of junior subordinated debt that is recorded at fair value at each reporting period pursuant to the election of FVO treatment.

For the years ended December 31, 2019, 2018, and 2017, the change in Level 3 liabilities measured at fair value on a recurring basis was as follows:

	Junior Subordinated Debt		
	Year Ended December 31,		
	2019	2018	2017
<i>(in thousands)</i>			
Beginning balance	\$ (48,684)	\$ (56,234)	\$ (50,410)
Change in fair value (1)	(13,001)	7,550	(5,824)
Ending balance	<u>\$ (61,685)</u>	<u>\$ (48,684)</u>	<u>\$ (56,234)</u>

- (1) Unrealized gains/(losses) attributable to changes in the fair value of junior subordinated debt are recorded as part of OCI, net of tax, and totaled \$(9.8) million, \$5.7 million, and \$(3.6) million for the years ended December 31, 2019, 2018, and 2017, respectively.

For Level 3 liabilities measured at fair value on a recurring basis as of December 31, 2019 and 2018, the significant unobservable inputs used in the fair value measurements were as follows:

	December 31, 2019 <i>(in thousands)</i>	Valuation Technique	Significant Unobservable Inputs	Input Value
Junior subordinated debt	\$ 61,685	Discounted cash flow	Implied credit rating of the Company	5.09%
	December 31, 2018 <i>(in thousands)</i>	Valuation Technique	Significant Unobservable Inputs	Input Value
Junior subordinated debt	\$ 48,684	Discounted cash flow	Implied credit rating of the Company	7.82%

The significant unobservable input used in the fair value measurement of the Company's junior subordinated debt as of December 31, 2019 and 2018 was the implied credit risk for the Company, calculated as the difference between the 15-year 'BB' rated financial index over the corresponding swap index.

As of December 31, 2019, the Company estimates the discount rate at 5.09%, which represents an implied credit spread of 3.18% plus three-month LIBOR (1.91%). As of December 31, 2018, the Company estimated the discount rate at 7.82%, which was a 5.01% credit spread plus three-month LIBOR (2.81%).

Fair value on a nonrecurring basis

Certain assets are measured at fair value on a nonrecurring basis. That is, the assets are not measured at fair value on an ongoing basis, but are subject to fair value adjustments in certain circumstances (for example, when there is evidence of impairment). The following table presents such assets carried on the balance sheet by caption and by level within the ASC 825 hierarchy:

	Fair Value Measurements at the End of the Reporting Period Using			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Active Markets for Similar Assets (Level 2)	Unobservable Inputs (Level 3)
	<i>(in thousands)</i>			
As of December 31, 2019				
Impaired loans with specific valuation allowance	\$ 18,203	\$ —	\$ —	\$ 18,203
Impaired loans without specific valuation allowance (1)	92,069	—	—	92,069
Other assets acquired through foreclosure	13,850	—	—	13,850
As of December 31, 2018				
Impaired loans with specific valuation allowance	\$ 305	\$ —	\$ —	\$ 305
Impaired loans without specific valuation allowance (1)	91,821	—	—	91,821
Other assets acquired through foreclosure	17,924	—	—	17,924

(1) Net of loan balances with charge-offs of \$3.3 million and \$19.4 million as of December 31, 2019 and 2018, respectively.

For Level 3 assets measured at fair value on a nonrecurring basis as of December 31, 2019 and 2018, the significant unobservable inputs used in the fair value measurements were as follows:

	December 31, 2019 <i>(in thousands)</i>	Valuation Technique(s)		Significant Unobservable Inputs	Range
		Collateral method	Third party appraisal	Costs to sell	4.0% to 10.0%
			Discount rate	Contractual loan rate	4.0% to 7.0%
Impaired loans	\$ 110,272	Discounted cash flow method	Scheduled cash collections	Probability of default	0% to 20.0%
			Proceeds from non-real estate collateral	Loss given default	0% to 70.0%
Other assets acquired through foreclosure	13,850	Collateral method	Third party appraisal	Costs to sell	4.0% to 10.0%

	December 31, 2018	Valuation Technique(s)		Significant Unobservable Inputs	Range
	(in thousands)				
Impaired loans	\$ 92,126	Collateral method	Third party appraisal	Costs to sell	4.0% to 10.0%
			Discount rate	Contractual loan rate	4.0% to 7.0%
		Discounted cash flow method	Scheduled cash collections	Probability of default	0% to 20.0%
			Proceeds from non-real estate collateral	Loss given default	0% to 70.0%
Other assets acquired through foreclosure	17,924	Collateral method	Third party appraisal	Costs to sell	4.0% to 10.0%

Impaired loans: The specific reserves for collateral dependent impaired loans are based on collateral value, net of estimated disposition costs and other identified quantitative inputs. Collateral value is determined based on independent third-party appraisals or internally-developed discounted cash flow analyses. Appraisals may utilize a single valuation approach or a combination of approaches, including comparable sales and the income approach. Fair value is determined, where possible, using market prices derived from an appraisal or evaluation, which are considered to be Level 2. However, certain assumptions and unobservable inputs are often used by the appraiser, therefore qualifying the assets as Level 3 in the fair value hierarchy. In addition, when adjustments are made to an appraised value to reflect various factors such as the age of the appraisal or known changes in the market or the collateral, such valuation inputs are considered unobservable and the fair value measurement is categorized as a Level 3 measurement. Internal discounted cash flow analyses are also utilized to estimate the fair value of impaired loans, which considers internally-developed, unobservable inputs such as discount rates, default rates, and loss severity.

Total Level 3 impaired loans had an estimated fair value of \$110.3 million and \$92.1 million at December 31, 2019 and 2018, respectively. Impaired loans with a specific valuation allowance had a gross estimated fair value of \$21.0 million and \$1.0 million at December 31, 2019 and 2018, respectively, which was reduced by a specific valuation allowance of \$2.8 million and \$0.7 million, respectively.

Other assets acquired through foreclosure: Other assets acquired through foreclosure consist of properties acquired as a result of, or in-lieu-of, foreclosure. These assets are initially reported at the fair value determined by independent appraisals using appraised value less estimated cost to sell. Such properties are generally re-appraised every 12 months. There is risk for subsequent volatility. Costs relating to the development or improvement of the assets are capitalized and costs relating to holding the assets are charged to expense.

Fair value is determined, where possible, using market prices derived from an appraisal or evaluation, which are considered to be Level 2. However, certain assumptions and unobservable inputs are often used by the appraiser, therefore qualifying the assets as Level 3 in the fair value hierarchy. When significant adjustments are based on unobservable inputs, such as when a current appraised value is not available or management determines the fair value of the collateral is further impaired below the appraised value and there is no observable market price, the resulting fair value measurement has been categorized as a Level 3 measurement. The Company had \$13.9 million and \$17.9 million of such assets at December 31, 2019 and 2018, respectively.

Credit vs. non-credit losses

Under the provisions of ASC 320, *Investments-Debt and Equity Securities*, OTTI is separated into the amount of total impairment related to the credit loss and the amount of the total impairment related to all other factors. The amount of the total OTTI related to the credit loss is recognized in earnings. The amount of the total impairment related to all other factors is recognized in OCI.

For the years ended December 31, 2019, 2018, and 2017, the Company determined that there were no securities that experienced credit losses.

There is no OTTI balance recognized in comprehensive income as of December 31, 2019 and 2018.

FAIR VALUE OF FINANCIAL INSTRUMENTS

The estimated fair value of the Company's financial instruments is as follows:

	December 31, 2019				
	Carrying Amount	Fair Value			Total
		Level 1	Level 2	Level 3	
	<i>(in thousands)</i>				
Financial assets:					
Investment securities:					
HTM	\$ 485,107	\$ —	\$ 516,261	\$ —	\$ 516,261
AFS	3,346,310	32,167	3,314,143	—	3,346,310
Equity securities	138,701	138,701	—	—	138,701
Derivative assets	1,903	—	1,903	—	1,903
Loans, net	20,955,499	—	—	21,256,462	21,256,462
Accrued interest receivable	108,694	—	108,694	—	108,694
Financial liabilities:					
Deposits	\$ 22,796,493	\$ —	\$ 22,813,265	\$ —	\$ 22,813,265
Customer repurchase agreements	16,675	—	16,675	—	16,675
Qualifying debt	393,563	—	332,635	74,155	406,790
Derivative liabilities	55,570	—	55,570	—	55,570
Accrued interest payable	24,661	—	24,661	—	24,661

	December 31, 2018				
	Carrying Amount	Fair Value			Total
		Level 1	Level 2	Level 3	
	<i>(in thousands)</i>				
Financial assets:					
Investment securities:					
HTM	\$ 302,905	\$ —	\$ 298,648	\$ —	\$ 298,648
AFS	3,276,988	—	3,276,988	—	3,276,988
Equity securities	115,061	115,061	—	—	115,061
Derivative assets	2,643	—	2,643	—	2,643
Loans, net	17,557,912	—	16,857,852	92,126	16,949,978
Accrued interest receivable	101,275	—	101,275	—	101,275
Financial liabilities:					
Deposits	\$ 19,177,447	\$ —	\$ 19,188,216	\$ —	\$ 19,188,216
Customer repurchase agreements	22,411	—	22,411	—	22,411
Other borrowings	491,000	—	491,000	—	491,000
Qualifying debt	360,458	—	323,572	57,924	381,496
Derivative liabilities	45,120	—	45,120	—	45,120
Accrued interest payable	20,463	—	20,463	—	20,463

Interest rate risk

The Company assumes interest rate risk (the risk to the Company's earnings and capital from changes in interest rate levels) as a result of its normal operations. As a result, the fair values of the Company's financial instruments, as well as its future net interest income will change when interest rate levels change and that change may be either favorable or unfavorable to the Company.

Interest rate risk exposure is measured using interest rate sensitivity analysis to determine the Company's change in EVE and net interest income resulting from hypothetical changes in interest rates. If potential changes to EVE and net interest income resulting from hypothetical interest rate changes are not within the limits established by the BOD, the BOD may direct management to adjust the asset and liability mix to bring interest rate risk within BOD-approved limits.

WAB has an ALCO charged with managing interest rate risk within the BOD-approved limits. Limits are structured to preclude an interest rate risk profile that does not conform to both management and BOD risk tolerances without ALCO approval. There

is also ALCO reporting at the Parent level for reviewing interest rate risk for the Company, which gets reported to the BOD and its Finance and Investment Committee.

Fair value of commitments

The estimated fair value of standby letters of credit outstanding at December 31, 2019 and 2018 is insignificant. Loan commitments on which the committed interest rates are less than the current market rate are also insignificant at December 31, 2019 and 2018.

17. REGULATORY CAPITAL REQUIREMENTS

The Company and the Bank are subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements could trigger certain mandatory or discretionary actions that, if undertaken, could have a direct material effect on the Company's business and financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and the Bank must meet specific capital guidelines that involve quantitative measures of their 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.

As of December 31, 2019 and 2018, the Company and the Bank's capital ratios exceeded the well-capitalized thresholds, as defined by the federal banking agencies. The actual capital amounts and ratios for the Company and the Bank are presented in the following tables as of the periods indicated:

	Total Capital	Tier 1 Capital	Risk- Weighted Assets	Tangible Average Assets	Total Capital Ratio	Tier 1 Capital Ratio	Tier 1 Leverage Ratio	Common Equity Tier 1
<i>(dollars in thousands)</i>								
December 31, 2019								
WAL	\$ 3,257,874	\$ 2,775,390	\$ 25,390,142	\$ 26,110,275	12.8%	10.9%	10.6%	10.6%
WAB	3,030,301	2,703,549	25,452,261	26,134,431	11.9	10.6	10.3	10.6
Well-capitalized ratios					10.0	8.0	5.0	6.5
Minimum capital ratios					8.0	6.0	4.0	4.5
 December 31, 2018								
WAL	\$ 2,897,356	\$ 2,431,320	\$ 21,983,976	\$ 22,204,799	13.2%	11.1%	10.9%	10.7%
WAB	2,628,650	2,317,745	22,040,765	22,209,700	11.9	10.5	10.4	10.5
Well-capitalized ratios					10.0	8.0	5.0	6.5
Minimum capital ratios					8.0	6.0	4.0	4.5

18. EMPLOYEE BENEFIT PLANS

The Company has a qualified 401(k) employee benefit plan for all eligible employees. Participants are able to defer between 1% and 75% (up to a maximum of \$19,000 for those under 50 years of age and up to a maximum of \$25,000 for those over 50 years of age in 2019) of their annual compensation. The Company may elect to match a discretionary amount each year, which is 75% of the first 6% of the participant's compensation deferred into the plan. The Company's contributions to this plan total \$6.2 million, \$5.6 million, and \$3.1 million for the years ended December 31, 2019, 2018, and 2017, respectively.

In addition, the Company maintains a non-qualified 401(k) restoration plan for the benefit of executives of the Company and certain affiliates. Participants are able to defer a portion of their annual salary and receive a matching contribution based primarily on the contribution structure in effect under the Company's 401(k) plan, but without regard to certain statutory limitations applicable under the 401(k) plan. The Company's total contribution to the restoration plan was \$0.1 million for the years ended December 31, 2019, 2018, and 2017.

In connection with the Bridge acquisition, the Company assumed Bridge's SERP, an unfunded noncontributory defined benefit pension plan. The SERP provides retirement benefits to certain Bridge officers based on years of service and final average salary. The Company uses a December 31 measurement date for this plan.

The following table reflects the accumulated benefit obligation and funded status of the SERP:

	December 31,	
	2019	2018
	<i>(in thousands)</i>	
Change in benefit obligation		
Benefit obligation at beginning of period	\$ 9,991	\$ 8,891
Service cost	632	614
Interest cost	569	512
Actuarial losses/(gains)	834	41
Expected benefits paid	(270)	(67)
Projected benefit obligation at end of year	\$ 11,756	\$ 9,991
Unfunded projected/accumulated benefit obligation	(11,756)	(9,991)
Additional liability	\$ —	\$ —
Weighted average assumptions to determine benefit obligation		
Discount rate	5.25%	5.75%
Rate of compensation increase	3.00%	3.00%

The components of net periodic benefit cost recognized for the year ended December 31, 2019 and 2018 and the amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost during 2020 are as follows:

	Year Ended December 31,		
	2020	2019	2018
	<i>(in thousands)</i>		
Components of net periodic benefit cost			
Service cost	\$ 511	\$ 632	\$ 614
Interest cost	612	569	512
Amortization of prior service cost	19	64	103
Amortization of actuarial (gains)/losses	(35)	(159)	(164)
Net periodic benefit cost	\$ 1,107	\$ 1,106	\$ 1,065
Other comprehensive income (cost)	\$ (16)	\$ (95)	\$ (61)

19. RELATED PARTY TRANSACTIONS

Principal stockholders, directors, and executive officers of the Company, their immediate family members, and companies they control or own more than a 10% interest in, are considered to be related parties. In the ordinary course of business, the Company engages in various related party transactions, including extending credit and bank service transactions. All related party transactions are subject to review and approval pursuant to the Company's Related Party Transactions policy.

Federal banking regulations require that any extensions of credit to insiders and their related interests not be offered on terms more favorable than would be offered to non-related borrowers of similar creditworthiness. The following table summarizes the aggregate activity in such loans for the periods indicated:

	Year Ended December 31,	
	2019	2018
	<i>(in thousands)</i>	
Balance, beginning	\$ 4,580	\$ 5,918
New loans	—	—
Advances	323	—
Repayments and other	(1,091)	(1,338)
Balance, ending	<u>\$ 3,812</u>	<u>\$ 4,580</u>

None of these loans are past due, on non-accrual status or have been restructured to provide a reduction or deferral of interest or principal because of deterioration in the financial position of the borrower. There were no loans to a related party that were considered classified loans at December 31, 2019 or 2018. The interest income associated with these loans was approximately \$0.2 million, \$0.3 million and \$0.5 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Loan commitments outstanding with related parties totaled approximately \$10.6 million and \$30.7 million at December 31, 2019 and 2018, respectively.

The Company also accepts deposits from related parties, which totaled \$100.1 million and \$87.9 million at December 31, 2019 and 2018, respectively, with related interest expense totaling approximately \$0.3 million during the year ended December 31, 2019, and \$0.2 million during each of the years ended December 31, 2018 and 2017.

Donations, sponsorships, and other payments to related parties totaled less than \$1.0 million during the years ended December 31, 2019 and 2017 and totaled \$8.1 million during the year ended December 31, 2018. Total related party payments of \$8.1 million for the year ended December 31, 2018 include a donation to the Company's charitable foundation of \$7.6 million, which consisted of a non-cash donation of OREO property of \$6.9 million and a cash donation of \$0.7 million.

During the year ended December 31, 2018, the Company sold an OREO property to a related party with a carrying value \$0.9 million and recognized a loss of \$0.2 million on the sale.

20. PARENT COMPANY FINANCIAL INFORMATION

The condensed financial statements of the holding company are presented in the following tables:

WESTERN ALLIANCE BANCORPORATION

Condensed Balance Sheets

	December 31,	
	2019	2018
<i>(in thousands)</i>		
ASSETS:		
Cash and cash equivalents	\$ 75,885	\$ 115,721
Money market investments	—	7
Investment securities - AFS	12,767	16,454
Investment securities - equity	47,123	49,824
Investment in bank subsidiaries	3,063,470	2,568,027
Investment in non-bank subsidiaries	52,337	80,019
Other assets	22,488	27,200
Total assets	<u>\$ 3,274,070</u>	<u>\$ 2,857,252</u>
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Qualifying debt	\$ 242,000	\$ 211,376
Accrued interest and other liabilities	15,322	32,142
Total liabilities	<u>257,322</u>	<u>243,518</u>
Total stockholders' equity	<u>3,016,748</u>	<u>2,613,734</u>
Total liabilities and stockholders' equity	<u>\$ 3,274,070</u>	<u>\$ 2,857,252</u>

WESTERN ALLIANCE BANCORPORATION

Condensed Income Statements

	Year Ended December 31,		
	2019	2018	2017
<i>(in thousands)</i>			
Income:			
Dividends from subsidiaries	\$ 134,000	\$ 152,116	\$ 97,264
Interest income	2,818	2,905	2,547
Non-interest income	5,112	761	2,470
Total income	<u>141,930</u>	<u>155,782</u>	<u>102,281</u>
Expense:			
Interest expense	14,554	13,949	11,459
Non-interest expense	19,543	19,025	16,293
Total expense	<u>34,097</u>	<u>32,974</u>	<u>27,752</u>
Income before income taxes and equity in undistributed earnings of subsidiaries	<u>107,833</u>	<u>122,808</u>	<u>74,529</u>
Income tax benefit	5,628	10,436	5,229
Income before equity in undistributed earnings of subsidiaries	<u>113,461</u>	<u>133,244</u>	<u>79,758</u>
Equity in undistributed earnings of subsidiaries	<u>385,710</u>	<u>302,544</u>	<u>245,734</u>
Net income	<u>\$ 499,171</u>	<u>\$ 435,788</u>	<u>\$ 325,492</u>

Western Alliance Bancorporation

Condensed Statements of Cash Flows

	Year Ended December 31,		
	2019	2018	2017
	<i>(in thousands)</i>		
Cash flows from operating activities:			
Net income	\$ 499,171	\$ 435,788	\$ 325,492
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in net undistributed earnings of subsidiaries	(385,710)	(302,544)	(245,734)
Other operating activities, net	9,885	(5,889)	16,921
Net cash provided by operating activities	123,346	127,355	96,679
Cash flows from investing activities:			
Purchases of securities	(10,841)	(44,409)	(11,765)
Principal pay downs, calls, maturities, and sales proceeds of securities	19,032	11,362	23,196
Capital contributions to subsidiaries	—	—	(50,000)
Other investing activities, net	7	(7)	—
Net cash provided by (used in) investing activities	8,198	(33,054)	(38,569)
Cash flows from financing activities:			
Share repurchases	(120,131)	(35,688)	—
Other financing activities, net	80	554	(12,965)
Dividends paid on common stock	(51,329)	—	—
Net cash used in financing activities	(171,380)	(35,134)	(12,965)
Net (decrease) increase in cash and cash equivalents	(39,836)	59,167	45,145
Cash and cash equivalents at beginning of year	115,721	56,554	11,409
Cash and cash equivalents at end of year	\$ 75,885	\$ 115,721	\$ 56,554

21. SEGMENTS

The Company's reportable segments are aggregated based primarily on geographic location, services offered, and markets served. The Company's regional segments, which include Arizona, Nevada, Southern California, and Northern California, provide full service banking and related services to their respective markets. The operations from the regional segments correspond to the following banking divisions: ABA in Arizona, BON and FIB in Nevada, TPB in Southern California, and Bridge in Northern California.

The Company's NBL segments provide specialized banking services to niche markets. The Company's NBL reportable segments include HOA Services, Public & Nonprofit Finance, Technology & Innovation, HFF, and Other NBLs. These NBLs are managed centrally and are broader in geographic scope than the Company's other segments, though still predominately located within the Company's core market areas.

The Corporate & Other segment consists of corporate-related items, income and expense items not allocated to the Company's other reportable segments, and inter-segment eliminations.

The Company's segment reporting process begins with the assignment of all loan and deposit accounts directly to the segments where these products are originated and/or serviced. Equity capital is assigned to each segment based on the risk profile of their assets and liabilities. With the exception of goodwill, which is assigned a 100% weighting, equity capital allocations ranged from 0% to 12% during the year, with a funds credit provided for the use of this equity as a funding source. Any excess or deficient equity not allocated to segments based on risk is assigned to the Corporate & Other segment.

Net interest income, provision for credit losses, and non-interest expense amounts are recorded in their respective segment to the extent that the amounts are directly attributable to those segments. Net interest income is recorded in each segment on a TEB with a corresponding increase in income tax expense, which is eliminated in the Corporate & Other segment.

Further, net interest income of a reportable segment includes a funds transfer pricing process that matches assets and liabilities with similar interest rate sensitivity and maturity characteristics. Using this funds transfer pricing methodology, liquidity is transferred between users and providers. A net user of funds has lending/investing in excess of deposits/borrowings and a net provider of funds has deposits/borrowings in excess of lending/investing. A segment that is a user of funds is charged for the use of funds, while a provider of funds is credited through funds transfer pricing, which is determined based on the average life of the assets or liabilities in the portfolio.

Net income amounts for each reportable segment is further derived by the use of expense allocations. Certain expenses not directly attributable to a specific segment are allocated across all segments based on key metrics, such as number of employees, average loan balances, and average deposit balances. These types of expenses include information technology, operations, human resources, finance, risk management, credit administration, legal, and marketing.

Income taxes are applied to each segment based on the effective tax rate for the geographic location of the segment. Any difference in the corporate tax rate and the aggregate effective tax rates in the segments are adjusted in the Corporate & Other segment.

The following is a summary of operating segment balance sheet information for the periods indicated:

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
<i>(in millions)</i>					
At December 31, 2019:					
Assets:					
Cash, cash equivalents, and investment securities	\$ 4,471.2	\$ 1.8	\$ 9.0	\$ 2.3	\$ 2.2
Loans, net of deferred loan fees and costs	21,123.3	3,847.9	2,252.5	2,253.9	1,311.2
Less: allowance for credit losses	(167.8)	(31.6)	(18.0)	(18.3)	(9.7)
Total loans	20,955.5	3,816.3	2,234.5	2,235.6	1,301.5
Other assets acquired through foreclosure, net	13.9	—	13.0	0.9	—
Goodwill and other intangible assets, net	297.6	—	23.2	—	154.6
Other assets	1,083.7	48.6	59.4	15.0	19.8
Total assets	\$ 26,821.9	\$ 3,866.7	\$ 2,339.1	\$ 2,253.8	\$ 1,478.1
Liabilities:					
Deposits	\$ 22,796.5	\$ 5,384.7	\$ 4,350.1	\$ 2,585.3	\$ 2,373.6
Borrowings and qualifying debt	393.6	—	—	—	—
Other liabilities	615.1	17.8	11.9	1.2	15.9
Total liabilities	23,805.2	5,402.5	4,362.0	2,586.5	2,389.5
Allocated equity:	3,016.7	453.6	301.0	253.3	312.5
Total liabilities and stockholders' equity	\$ 26,821.9	\$ 5,856.1	\$ 4,663.0	\$ 2,839.8	\$ 2,702.0
Excess funds provided (used)	—	1,989.4	2,323.9	586.0	1,223.9

	National Business Lines					
	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
<i>(in millions)</i>						
Assets:						
Cash, cash equivalents, and investment securities	\$ —	\$ —	\$ —	\$ —	\$ 10.1	\$ 4,445.8
Loans, net of deferred loan fees and costs	237.2	1,635.6	1,552.0	1,930.8	6,098.7	3.5
Less: allowance for credit losses	(2.0)	(13.7)	(12.6)	(12.6)	(49.3)	—
Total loans	235.2	1,621.9	1,539.4	1,918.2	6,049.4	3.5
Other assets acquired through foreclosure, net	—	—	—	—	—	—
Goodwill and other intangible assets, net	—	—	119.7	0.1	—	—
Other assets	1.2	18.3	7.3	8.8	64.3	841.0
Total assets	\$ 236.4	\$ 1,640.2	\$ 1,666.4	\$ 1,927.1	\$ 6,123.8	\$ 5,290.3
Liabilities:						
Deposits	\$ 3,210.1	\$ 0.1	\$ 3,771.5	\$ —	\$ 36.9	\$ 1,084.2
Borrowings and qualifying debt	—	—	—	—	—	393.6
Other liabilities	1.8	52.9	0.1	—	2.8	510.7
Total liabilities	3,211.9	53.0	3,771.6	—	39.7	1,988.5
Allocated equity:	84.5	131.6	317.5	158.5	494.3	509.9
Total liabilities and stockholders' equity	\$ 3,296.4	\$ 184.6	\$ 4,089.1	\$ 158.5	\$ 534.0	\$ 2,498.4
Excess funds provided (used)	3,060.0	(1,455.6)	2,422.7	(1,768.6)	(5,589.8)	(2,791.9)

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
<i>(in millions)</i>					
At December 31, 2018:					
Assets:					
Cash, cash equivalents, and investment securities	\$ 4,259.7	\$ 2.5	\$ 10.9	\$ 2.5	\$ 3.0
Loans, net of deferred loan fees and costs	17,710.6	3,647.9	2,003.5	2,161.1	1,300.2
Less: allowance for credit losses	(152.7)	(30.7)	(18.7)	(19.8)	(10.7)
Total loans	17,557.9	3,617.2	1,984.8	2,141.3	1,289.5
Other assets acquired through foreclosure, net	17.9	0.8	13.9	—	—
Goodwill and other intangible assets, net	299.2	—	23.2	—	155.5
Other assets	974.8	46.9	57.8	14.2	23.9
Total assets	\$ 23,109.5	\$ 3,667.4	\$ 2,090.6	\$ 2,158.0	\$ 1,471.9
Liabilities:					
Deposits	\$ 19,177.4	\$ 5,090.2	\$ 3,996.4	\$ 2,347.5	\$ 1,839.1
Borrowings and qualifying debt	851.5	—	—	—	—
Other liabilities	466.9	10.4	14.5	4.5	12.2
Total liabilities	20,495.8	5,100.6	4,010.9	2,352.0	1,851.3
Allocated equity:	2,613.7	441.0	277.4	242.9	304.1
Total liabilities and stockholders' equity	\$ 23,109.5	\$ 5,541.6	\$ 4,288.3	\$ 2,594.9	\$ 2,155.4
Excess funds provided (used)	—	1,874.2	2,197.7	436.9	683.5

	National Business Lines					
	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
<i>(in millions)</i>						
Assets:						
Cash, cash equivalents, and investment securities	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,240.8
Loans, net of deferred loan fees and costs	210.0	1,547.5	1,200.9	1,479.9	4,154.9	4.7
Less: allowance for credit losses	(1.9)	(14.2)	(10.0)	(8.5)	(38.2)	—
Total loans	208.1	1,533.3	1,190.9	1,471.4	4,116.7	4.7
Other assets acquired through foreclosure, net	—	—	—	—	—	3.2
Goodwill and other intangible assets, net	—	—	120.4	0.1	—	—
Other assets	0.9	20.1	6.3	7.2	37.1	760.4
Total assets	\$ 209.0	\$ 1,553.4	\$ 1,317.6	\$ 1,478.7	\$ 4,153.8	\$ 5,009.1
Liabilities:						
Deposits	\$ 2,607.2	\$ —	\$ 2,559.0	\$ —	\$ —	\$ 738.0
Borrowings and qualifying debt	—	—	—	—	—	851.5
Other liabilities	2.1	25.2	0.1	0.4	49.6	347.9
Total liabilities	2,609.3	25.2	2,559.1	0.4	49.6	1,937.4
Allocated equity:	70.7	123.9	268.7	122.3	340.0	422.7
Total liabilities and stockholders' equity	\$ 2,680.0	\$ 149.1	\$ 2,827.8	\$ 122.7	\$ 389.6	\$ 2,360.1
Excess funds provided (used)	2,471.0	(1,404.3)	1,510.2	(1,356.0)	(3,764.2)	(2,649.0)

The following is a summary of operating segment income statement information for the periods indicated:

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
<i>(in thousands)</i>					
Year Ended December 31, 2019:					
Net interest income	\$ 1,040,412	\$ 249,083	\$ 161,801	\$ 131,053	\$ 95,697
Provision for (recovery of) credit losses	18,500	3,181	545	1,243	(500)
Net interest income after provision for credit losses	1,021,912	245,902	161,256	129,810	96,197
Non-interest income	65,095	7,169	12,021	4,149	8,591
Non-interest expense	(482,781)	(96,578)	(62,276)	(60,310)	(51,709)
Income (loss) before income taxes	604,226	156,493	111,001	73,649	53,079
Income tax expense (benefit)	105,055	39,124	23,310	20,621	14,862
Net income	\$ 499,171	\$ 117,369	\$ 87,691	\$ 53,028	\$ 38,217

	National Business Lines					
	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
<i>(in thousands)</i>						
Net interest income	\$ 86,594	\$ 13,342	\$ 130,299	\$ 52,905	\$ 125,467	\$ (5,829)
Provision for (recovery of) credit losses	60	57	2,844	3,790	7,280	—
Net interest income after provision for credit losses	86,534	13,285	127,455	49,115	118,187	(5,829)
Non-interest income	367	—	14,267	—	5,269	13,262
Non-interest expense	(37,078)	(7,617)	(47,974)	(9,180)	(44,561)	(65,498)
Income (loss) before income taxes	49,823	5,668	93,748	39,935	78,895	(58,065)
Income tax expense (benefit)	11,459	1,304	21,562	9,185	18,146	(54,518)
Net income	\$ 38,364	\$ 4,364	\$ 72,186	\$ 30,750	\$ 60,749	\$ (3,547)

Regional Segments

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
Year Ended December 31, 2018:		<i>(in thousands)</i>			
Net interest income	\$ 915,879	\$ 224,754	\$ 148,085	\$ 115,561	\$ 92,583
Provision for (recovery of) credit losses	23,000	2,235	(2,447)	2,292	1,809
Net interest income (expense) after provision for credit losses	892,879	222,519	150,532	113,269	90,774
Non-interest income	43,116	7,689	11,326	3,800	9,932
Non-interest expense	(425,667)	(91,161)	(62,536)	(57,735)	(52,574)
Income (loss) before income taxes	510,328	139,047	99,322	59,334	48,132
Income tax expense (benefit)	74,540	34,824	20,951	16,709	13,565
Net income	\$ 435,788	\$ 104,223	\$ 78,371	\$ 42,625	\$ 34,567

National Business Lines

	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
Net interest income	\$ 67,154	\$ 15,149	\$ 105,029	\$ 55,332	\$ 80,073	\$ 12,159
Provision for (recovery of) credit losses	281	(1,101)	5,657	3,275	11,046	(47)
Net interest income (expense) after provision for credit losses	66,873	16,250	99,372	52,057	69,027	12,206
Non-interest income	614	158	14,121	13	2,076	(6,613)
Non-interest expense	(32,390)	(8,120)	(41,159)	(9,603)	(26,822)	(43,567)
Income (loss) before income taxes	35,097	8,288	72,334	42,467	44,281	(37,974)
Income tax expense (benefit)	8,072	1,905	16,637	9,768	10,184	(58,075)
Net income	\$ 27,025	\$ 6,383	\$ 55,697	\$ 32,699	\$ 34,097	\$ 20,101

Regional Segments

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
Year Ended December 31, 2017:		<i>(in thousands)</i>			
Net interest income (expense)	\$ 784,664	\$ 198,622	\$ 145,001	\$ 109,177	\$ 85,360
Provision for (recovery of) credit losses	17,250	1,153	(4,724)	100	4,575
Net interest income (expense) after provision for credit losses	767,414	197,469	149,725	109,077	80,785
Non-interest income	45,344	4,757	9,135	3,396	10,000
Non-interest expense	(360,941)	(76,118)	(61,066)	(51,808)	(48,387)
Income (loss) before income taxes	451,817	126,108	97,794	60,665	42,398
Income tax expense (benefit)	126,325	49,317	34,133	25,529	17,591
Net income	\$ 325,492	\$ 76,791	\$ 63,661	\$ 35,136	\$ 24,807

National Business Lines

	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
Net interest income (expense)	\$ 54,102	\$ 28,485	\$ 82,473	\$ 56,961	\$ 65,908	\$ (41,425)
Provision for (recovery of) credit losses	341	593	2,821	4,493	9,729	(1,831)
Net interest income (expense) after provision for credit losses	53,761	27,892	79,652	52,468	56,179	(39,594)
Non-interest income	558	—	8,422	52	1,772	7,252
Non-interest expense	(28,289)	(8,522)	(36,726)	(10,166)	(20,550)	(19,309)
Income (loss) before income taxes	26,030	19,370	51,348	42,354	37,401	(51,651)
Income tax expense (benefit)	9,676	6,317	19,255	15,883	14,000	(65,376)
Net income	\$ 16,354	\$ 13,053	\$ 32,093	\$ 26,471	\$ 23,401	\$ 13,725

22. REVENUE FROM CONTRACTS WITH CUSTOMERS

ASC 606, *Revenue from Contracts with Customers*, requires revenue to be recognized at an amount that reflects the consideration to which the entity expects to be entitled in exchange for transferring goods or services to a customer. ASC 606 applies to all contracts with customers to provide goods or services in the ordinary course of business, except for contracts that are specifically excluded from its scope. The majority of the Company's revenue streams including interest income, credit and debit card fees, income from equity investments, including warrants and SBIC equity income, income from bank owned life insurance, foreign currency income, lending related income, and gains and losses on sales of investment securities are outside the scope of ASC 606. Revenue streams including service charges and fees, interchange fees on credit and debit cards, and success fees are within the scope of ASC 606.

Disaggregation of Revenue

The following table represents a disaggregation of revenue from contracts with customers for the periods indicated along with the reportable segment for each revenue category:

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
<i>(in thousands)</i>					
Year Ended December 31, 2019					
Revenue from contracts with customers:					
Service charges and fees	\$ 23,353	\$ 4,781	\$ 8,131	\$ 3,012	\$ 3,885
Debit and credit card interchange (1)	5,839	1,151	1,212	583	2,859
Success fees (2)	1,580	—	—	—	—
Other income	288	15	14	5	65
Total revenue from contracts with customers	\$ 31,060	\$ 5,947	\$ 9,357	\$ 3,600	\$ 6,809
Revenues outside the scope of ASC 606 (3)	34,035	1,222	2,664	549	1,782
Total non-interest income	\$ 65,095	\$ 7,169	\$ 12,021	\$ 4,149	\$ 8,591

	National Business Lines					
	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
<i>(in thousands)</i>						
Year Ended December 31, 2019						
Revenue from contracts with customers:						
Service charges and fees	\$ 329	\$ —	\$ 3,211	\$ —	\$ 4	\$ —
Debit and credit card interchange (1)	34	—	—	—	—	—
Success fees (2)	—	—	1,580	—	—	—
Other income	3	—	4	—	171	11
Total revenue from contracts with customers	\$ 366	\$ —	\$ 4,795	\$ —	\$ 175	\$ 11
Revenues outside the scope of ASC 606 (3)	1	—	9,472	—	5,094	13,251
Total non-interest income	\$ 367	\$ —	\$ 14,267	\$ —	\$ 5,269	\$ 13,262

- (1) Included as part of Card income in the Consolidated Income Statement.
(2) Included as part of Income from equity investments in the Consolidated Income Statement.
(3) Amounts are accounted for under separate guidance. Refer to discussion of revenue sources not subject to ASC 606 under the Non-interest income section in "Note 1. Summary of Significant Accounting Policies."

	Consolidated Company	Regional Segments			
		Arizona	Nevada	Southern California	Northern California
Year Ended December 31, 2018		<i>(in thousands)</i>			
Revenue from contracts with customers:					
Service charges and fees	\$ 22,295	\$ 3,902	\$ 8,151	\$ 2,666	\$ 3,795
Debit and credit card interchange (1)	6,801	1,132	1,379	650	3,616
Success fees (2)	3,335	—	—	—	96
Other income	626	181	194	59	161
Total revenue from contracts with customers	\$ 33,057	\$ 5,215	\$ 9,724	\$ 3,375	\$ 7,668
Revenues outside the scope of ASC 606 (3)	10,059	2,474	1,602	425	2,264
Total non-interest income	\$ 43,116	\$ 7,689	\$ 11,326	\$ 3,800	\$ 9,932

	National Business Lines					
	HOA Services	Public & Nonprofit Finance	Technology & Innovation	Hotel Franchise Finance	Other NBLs	Corporate & Other
Year Ended December 31, 2018	<i>(in thousands)</i>					
Revenue from contracts with customers:						
Service charges and fees	\$ 585	\$ —	\$ 3,201	\$ —	\$ —	\$ (5)
Debit and credit card interchange (1)	24	—	—	—	—	—
Success fees (2)	—	—	3,239	—	—	—
Other income	4	—	—	—	1	26
Total revenue from contracts with customers	\$ 613	\$ —	\$ 6,440	\$ —	\$ 1	\$ 21
Revenues outside the scope of ASC 606 (3)	1	158	7,681	13	2,075	(6,634)
Total non-interest income	\$ 614	\$ 158	\$ 14,121	\$ 13	\$ 2,076	\$ (6,613)

- (1) Included as part of Card income in the Consolidated Income Statement.
(2) Included as part of Income from equity investments in the Consolidated Income Statement.
(3) Amounts are accounted for under separate guidance. Refer to discussion of revenue sources not subject to ASC 606 under the Non-interest income section in "Note 1. Summary of Significant Accounting Policies."

Performance Obligations

Many of the services the Company performs for its customers are ongoing, and either party may cancel at any time. The fees for these contracts are dependent upon various underlying factors, such as customer deposit balances, and as such may be considered variable. The Company's performance obligations for these services are satisfied as the services are rendered and payment is collected on a monthly, quarterly, or semi-annual basis. Other contracts with customers are for services to be provided at a point in time, and fees are recognized at the time such services are rendered. The Company had no material unsatisfied performance obligations as of December 31, 2019. The revenue streams within the scope of ASC 606 are described in further detail below.

Service Charges and Fees

The Company performs deposit account services for its customers, which include analysis and treasury management services, use of safe deposit boxes, check upcharges, and other ancillary services. The depository arrangements the Company holds with its customers are considered day-to-day contracts with ongoing renewals and optional purchases, and as such, the contract duration does not extend beyond the services performed. Due to the short-term nature of such contracts, the Company generally recognizes revenue for deposit related fees as services are rendered. From time to time, the Company may waive certain fees for its customers. The Company considers historical experience when recognizing revenue from contracts with customers, and may reduce the transaction price to account for fee waivers or refunds.

Debit and Credit Card Interchange

When a credit or debit card issued by the Company is used to purchase goods or services from a merchant, the Company earns an interchange fee. The Company considers the merchant its customer in these transactions as the Company provides the merchant with the service of enabling the cardholder to purchase the merchant's goods or services with increased convenience, and it enables the merchants to transact with a class of customer that may not have access to sufficient funds at the time of purchase. The Company acts as an agent to the payment network by providing nightly settlement services between the network and the merchant. This transmission of data and funds represents the Company's performance obligation and is performed nightly. As the payment network

is in direct control of setting the rates and the Company is acting as an agent, the interchange fee is recorded net of expenses as the services are provided.

Success Fees

Success fees are one-time fees detailed as part of certain loan agreements and are earned immediately upon occurrence of a triggering event. Examples of triggering events include a borrower obtaining its next round of funding, an acquisition, or completion of a public offering. Success fees are variable consideration as the transaction price can vary and is contingent on the occurrence or non-occurrence of a future event. As the consideration is highly susceptible to factors outside of the Company's influence and uncertainty about the amount of consideration is not expected to be resolved for an extended period of time, the variable consideration is constrained and is not recognized until the achievement of the triggering event.

Principal versus Agent Considerations

When more than one party is involved in providing goods or services to a customer, ASC 606 requires the Company to determine whether it is the principal or an agent in these transactions by evaluating the nature of its promise to the customer. An entity is a principal and therefore records revenue on a gross basis, if it controls a promised good or service before transferring that good or service to the customer. An entity is an agent and records as revenue the net amount it retains for its agency services if its role is to arrange for another entity to provide the goods or services. The Company most commonly acts as a principal and records revenue on a gross basis, except in certain circumstances. As an example, revenues earned from interchange fees, in which the Company acts as an agent, are recorded as non-interest income, net of the related expenses paid to the principal.

Contract Balances

The timing of revenue recognition may differ from the timing of cash settlements or invoicing to customers. The Company records contract liabilities, or deferred revenue, when payments from customers are received or due in advance of providing services to customers. The Company generally receives payments for its services during the period or at the time services are provided, and therefore does not have material contract liability balances at period-end. The Company records contract assets or receivables when revenue is recognized prior to receipt of cash from the customer. Accounts receivable totals \$1.6 million and \$1.4 million as of December 31, 2019 and December 31, 2018, respectively, and are presented in Other Assets on the Consolidated Balance Sheets.

23. QUARTERLY FINANCIAL DATA (UNAUDITED)

	Year Ended December 31, 2019			
	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	<i>(in thousands, except per share amounts)</i>			
Interest income	\$ 315,420	\$ 315,608	\$ 302,848	\$ 291,168
Interest expense	43,447	49,186	48,167	43,832
Net interest income	271,973	266,422	254,681	247,336
Provision for credit losses	4,000	4,000	7,000	3,500
Net interest income after provision for credit losses	267,973	262,422	247,681	243,836
Non-interest income	16,027	19,441	14,218	15,410
Non-interest expense	(129,699)	(125,955)	(114,213)	(112,914)
Income before provision for income taxes	154,301	155,908	147,686	146,332
Income tax expense	26,236	28,533	24,750	25,536
Net income	\$ 128,065	\$ 127,375	\$ 122,936	\$ 120,796
Earnings per share:				
Basic	\$ 1.26	\$ 1.25	\$ 1.19	\$ 1.16
Diluted	\$ 1.25	\$ 1.24	\$ 1.19	\$ 1.16

	Year Ended December 31, 2018			
	Fourth Quarter	Third Quarter	Second Quarter	First Quarter
	<i>(in thousands, except per share amounts)</i>			
Interest income	\$ 281,968	\$ 265,216	\$ 251,602	\$ 234,697
Interest expense	38,455	31,178	27,494	20,477
Net interest income	243,513	234,038	224,108	214,220
Provision for credit losses	6,000	6,000	5,000	6,000
Net interest income after provision for credit losses	237,513	228,038	219,108	208,220
Non-interest income	13,611	4,418	13,444	11,643
Non-interest expense	(111,129)	(113,841)	(102,548)	(98,149)
Income before provision for income taxes	139,995	118,615	130,004	121,714
Income tax expense	20,909	7,492	25,325	20,814
Net income	\$ 119,086	\$ 111,123	\$ 104,679	\$ 100,900
Earnings per share:				
Basic	\$ 1.14	\$ 1.06	\$ 1.00	\$ 0.97
Diluted	\$ 1.13	\$ 1.05	\$ 0.99	\$ 0.96

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures.

As of the end of the period covered by this Annual Report on Form 10-K, an evaluation was carried out by the Company's management, with the participation of its CEO and CFO, of the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e), under the Exchange Act). Based upon that evaluation, the Company's CEO and CFO concluded that the disclosure controls and procedures were effective as of the end of the period covered by this report. No changes were made to the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) during the last fiscal quarter that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of WAL is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed under the supervision of the Company's CEO and CFO to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

As of December 31, 2019, management assessed the effectiveness of the Company's internal control over financial reporting based on the criteria for effective internal control over financial reporting established in "*Internal Control-Integrated Framework*" issued by the COSO in 2013. Based on this assessment, management determined that the Company maintained effective internal control over financial reporting as of December 31, 2019, based on those criteria.

RSM US LLP, the independent registered public accounting firm that audited the Consolidated Financial Statements of the Company included in this Annual Report on Form 10-K, has audited the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. Their report, which expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, is included herein.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Western Alliance Bancorporation

Opinion on the Internal Control Over Financial Reporting

We have audited Western Alliance Bancorporation and Subsidiaries' (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. 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* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets as of December 31, 2019 and 2018, and the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2019 of the Company and our report, dated March 2, 2020, expressed an unqualified opinion.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

Phoenix, Arizona

March 2, 2020

Item 9B. Other Information

On February 25, 2020, the BOD of WAL approved the Western Alliance Bancorporation Severance and Change in Control Plan, as amended and restated effective February 25, 2020 (the “Plan”). The Plan amends and restates and replaces in its entirety the prior Western Alliance Bancorporation Change in Control Severance Plan, originally effective September 19, 2012.

Under the Plan, certain executives, including WAL’s named executive officers, who are designated by the BOD and who enter into individual participation agreements (“Executives”) are eligible to participate in the Plan and to receive severance and certain other payments under the circumstances set forth in the Plan.

The Plan generally provides that severance benefits will be paid upon (i) the termination of an Executive’s employment for unsatisfactory work performance (“Poor Performance”) that does not provide grounds for termination with Cause (as defined in the Plan), (ii) the termination of an Executive’s employment without Cause (other than a termination for Poor Performance), (iii) a retirement at or after age sixty with at least ten years of continuous service (a “Qualified Retirement”), and (iv) the termination of an Executive’s employment without Cause (other than a termination for Poor Performance) or by the Executive for Good Reason (as defined in the Plan), in either case within the twenty-four month period following a Change in Control (as defined in the Plan) (a “Change in Control Termination”).

Under the Plan, in the event of a qualifying termination of employment in any of the circumstances described above, and contingent upon the Executive’s execution of a binding release agreement and waiver of claims, the Executive will be entitled to receive accrued benefits, payable in accordance with WAL’s normal payroll practice, and the severance and other payments set forth in the Plan. Following a termination for Poor Performance, the Executive will receive a lump sum cash payment in an amount equal to nine months of the Executive’s annual base salary for the year in which the termination occurs. Following a termination without Cause (other than a termination for Poor Performance), the Executive will receive (i) a lump sum cash payment in an amount equal to one-and-a-half times the Executive’s annual base salary for the year in which the termination occurs, plus (ii) a lump sum cash payment in an amount equal to WAL’s portion of premiums paid for continuation coverage for up to twenty-four months following termination of employment pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985 (the “COBRA Premium Payment”). Following a Qualified Retirement, the Executive will be entitled to receive a lump sum cash payment of a pro rata amount of the Executive’s annual bonus for the year in which the Qualified Retirement occurs, based on WAL’s actual projected performance at the time of the Qualified Retirement.

Following a Change in Control Termination, the Executive will receive (i) a lump sum cash payment in an amount equal to the sum of (a) two times the Executive’s annual base salary (using the greater of the base salary for the year in which the Change in Control occurs or the year in which the termination occurs), and (b) two times the Executive’s target annual bonus (using the greater of the annual bonus for the year in which the Change in Control occurs or the year in which the termination occurs), plus (ii) a lump sum cash payment in an amount equal to the COBRA Premium Payment. In addition, upon a Change in Control, each Executive will receive any unpaid annual bonus that was earned by the Executive in the year prior to the year in which the Change in Control occurs, regardless of whether the Executive’s employment is terminated.

In order to be eligible to receive benefits under the Plan, each Executive must comply with the confidentiality, non-solicitation and non-disparagement covenants set forth in the Plan. In addition, an Executive whose employment terminates due to a Qualified Retirement or a Change in Control Termination must also comply with the non-competition covenants set forth in the Plan. If any amount or benefits to be paid or provided to an Executive under the Plan or any other arrangement would trigger the excise tax imposed on “excess parachute payments,” the Executive’s payments and benefits will be reduced to the one dollar less than the amount that would cause the payments and benefits to be subject to the excise tax, unless the Executive would be better off (on an after-tax basis) receiving all payments and benefits and paying all applicable excise and income taxes.

The foregoing description is a summary of the material terms of the Plan and related participation agreements. This summary does not purport to be complete and is qualified in its entirety by reference to the full and complete terms of the Plan and form of participation agreement, copies of which are filed as Exhibit 10.8 and Exhibit 10.13, respectively, to this Annual Report on Form 10-K and are incorporated herein by reference.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference from the Company's Definitive Proxy Statement for the 2020 Annual Meeting of Stockholders to be held on June 11, 2020.

Item 11. Executive Compensation

The information required by this item is incorporated by reference from the Company's Definitive Proxy Statement for the 2020 Annual Meeting of Stockholders to be held on June 11, 2020.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference from the Company's Definitive Proxy Statement for the 2020 Annual Meeting of Stockholders to be held on June 11, 2020.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference from the Company's Definitive Proxy Statement for the 2020 Annual Meeting of Stockholders to be held on June 11, 2020.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference from the Company's Definitive Proxy Statement for the 2020 Annual Meeting of Stockholders to be held on June 11, 2020.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) The following financial statements are incorporated by reference from Item 8 hereto:

Report of Independent Registered Public Accounting Firm	70
Consolidated Balance Sheets as of December 31, 2019 and 2018	72
Consolidated Income Statements for the three years ended December 2019, 2018, and 2017	73
Consolidated Statements of Comprehensive Income for the three years ended December 31, 2019, 2018, and 2017	75
Consolidated Statements of Stockholders' Equity for the three years ended December 31, 2019, 2018, and 2017	76
Consolidated Statements of Cash Flows for the three years ended December 31, 2019, 2018, and 2017	77
Notes to Consolidated Financial Statements	79

(2) *Financial Statement Schedules*

Not applicable.

EXHIBITS

- 3.1 Amended and Restated Certificate of Incorporation of Western Alliance, effective as of May 19, 2015 (incorporated by reference to Exhibit 3.1 of Western Alliance's Form 10-K filed with the SEC on March 1, 2019).
- 3.2 Amended and Restated Bylaws of Western Alliance, effective as of May 19, 2015 (incorporated by reference to Exhibit 3.2 of Western Alliance's Form 8-K filed with the SEC on May 22, 2015).
- 3.3 Articles of Conversion, as filed with the Nevada Secretary of State on May 29, 2014 (incorporated by reference to Exhibit 3.1 of Western Alliance's Form 8-K filed with the SEC on June 3, 2014).
- 3.4 Certificate of Conversion, as filed with the Delaware Secretary of State on May 29, 2014 (incorporated by reference to Exhibit 3.2 of Western Alliance's Form 8-K filed with the SEC on June 3, 2014).
- 3.5 Certificate of Designation of Non-Cumulative Perpetual Preferred Stock, Series B, as filed with the Delaware Secretary of State on May 29, 2014 (incorporated by reference to Exhibit 3.4 of Western Alliance's Form 8-K filed with the SEC on June 3, 2014).
- 4.1* Description of Securities of the Registrant, effective as of December 31, 2019.
- 4.2 Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 of Western Alliance's Form 8-K filed with the SEC on June 3, 2014).
- 4.3 Senior Debt Indenture, dated August 25, 2010, between Western Alliance and Wells Fargo Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 of Western Alliance's Form 8-K filed with the SEC on August 25, 2010).
- 4.4 Form of Senior Debt Indenture (incorporated by reference to Exhibit 4.2 of Western Alliance's Form S-3 filed with the SEC on May 7, 2015).
- 4.5 Form of Subordinated Debt Indenture (incorporated by reference to Exhibit 4.3 of Western Alliance's Form S-3 filed with the SEC on May 7, 2015).
- 4.6 Form of 5.00% Fixed to Floating Rate Subordinated Bank Note due July 15, 2025 (incorporated by reference to Exhibit 4.1 of Western Alliance's Form 8-K filed with the SEC on July 2, 2015).
- 4.7 Subordinated Debt Indenture, dated June 16, 2016, between Western Alliance and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.1 of Western Alliance's Form 8-K filed with the SEC on June 16, 2016).
- 4.8 First Supplemental Indenture (including Form of Debenture) dated June 16, 2016 between Western Alliance and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.2 of Western Alliance's Form 8-K filed with the SEC on June 16, 2016).
- 4.9 Form of Global Debenture dated June 16, 2016 (incorporated by reference to Exhibit 4.3 of Western Alliance's Form 8-K filed with the SEC on June 16, 2016).
- 10.1 Western Alliance 2005 Stock Incentive Plan, as amended (incorporated by reference to Appendix G of the Registrant's definitive Proxy Statement on Schedule 14A filed with the Commission on April 2, 2014). ±
- 10.2 Bridge Capital Holdings 2006 Equity Incentive Plan (incorporated by reference to Exhibit 4.11 of Western Alliance's Form S-8 filed with the SEC on July 2, 2015). ±
- 10.3 Form of BankWest Nevada Corporation Incentive Stock Option Plan Agreement (incorporated by reference to Exhibit 10.3 of Western Alliance's Registration Statement on Form S-1 filed with the SEC on April 28, 2005). ±
- 10.4 Form of Western Alliance Incentive Stock Option Plan Agreement (incorporated by reference to Exhibit 10.4 of Western Alliance's Registration Statement on Form S-1 filed with the SEC on April 28, 2005). ±
- 10.5 Form of Western Alliance 2002 Stock Option Plan Agreement (incorporated by reference to Exhibit 10.5 of Western Alliance's Registration Statement on Form S-1 filed with the SEC on April 28, 2005). ±
- 10.6 Form of Western Alliance 2002 Stock Option Plan Agreement (with double trigger acceleration clause) (incorporated by reference to Exhibit 10.6 of Western Alliance's Registration Statement on Form S-1 filed with the SEC on April 28, 2005). ±
- 10.7 Form of Non-Competition Agreement (incorporated by reference to Exhibit 10.8 of Western Alliance's Registration Statement on Form S-1 filed with the SEC on April 28, 2005). ±
- 10.8* Western Alliance Severance and Change in Control Plan. ±
- 10.9 Form of Indemnification Agreement, by and between Western Alliance and each of Western Alliance's directors and executive officers (incorporated by reference to Exhibit 10.10 of Western Alliance's Form 10-K/A filed with the SEC on March 1, 2017). ±
- 10.10 Offer Letter, dated May 1, 2017, by and between Kenneth A. Vecchione and Western Alliance (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 5, 2017). ±

- 10.11 Employment Letter Agreement, dated February 7, 2018, by and between Barbara J. Kennedy and Western Alliance (incorporated by reference to Exhibit 10.1 of Western Alliance's Form 10-Q filed with the SEC on April 30, 2019). ±
- 10.12* Separation and Release of Claims Agreement, dated November 2, 2019, by and between James Haught and Western Alliance. ±
- 10.13* Form of participation agreement under the Company's Change in Control Severance Plan. ±
- 10.14* Form of Performance-Based Stock Unit Agreement pursuant to the Company's 2005 Stock Incentive Plan. ±
- 10.15* Form of Executive Restricted Stock Agreement pursuant to the Company's 2005 Stock Incentive Plan. ±
- 21.1* List of Subsidiaries of Western Alliance.
- 23.1* Consent of RSM US LLP.
- 24.1* Power of Attorney (see signature page).
- 31.1* CEO Certification Pursuant Rule 13a-14(a)/15d-14(a).
- 31.2* CFO Certification Pursuant Rule 13a-14(a)/15d-14(a).
- 32** CEO and CFO Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to section 906 of the Sarbanes Oxley Act of 2002.
- 101.INS* XBRL Instance Document.
- 101.SCH* XBRL Taxonomy Extension Schema Document.
- 101.DEF* XBRL Taxonomy Extension Definition Linkbase Document.
- 101.CAL* XBRL Taxonomy Extension Calculation Linkbase Document.
- 101.LAB* XBRL Taxonomy Extension Label Linkbase Document.
- 101.PRE* XBRL Taxonomy Extension Presentation Linkbase Document.

* Filed herewith.

** Furnished herewith.

± Management contract or compensatory arrangement.

Stockholders may obtain copies of exhibits by writing to: Dale Gibbons, Western Alliance Bancorporation, One East Washington Street Suite 1400, Phoenix, AZ 85004.

Item 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

WESTERN ALLIANCE BANCORPORATION

March 2, 2020

By: /s/ Kenneth A. Vecchione

Kenneth A. Vecchione

Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kenneth A. Vecchione and Dale Gibbons, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully and to all intents and purposes as he or she might or could do in person hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant in their listed capacities on March 2, 2020.

Name	Title
/s/ Kenneth A. Vecchione Kenneth A. Vecchione	President and Chief Executive Officer
/s/ Robert Sarver Robert Sarver	Executive Chairman
/s/ Dale Gibbons Dale Gibbons	Vice Chairman and Chief Financial Officer (Principal Financial Officer)
/s/ J. Kelly Ardrey Jr. J. Kelly Ardrey Jr.	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
/s/ Bruce D. Beach Bruce D. Beach	Director
/s/ Howard Gould Howard Gould	Director
/s/ Steven J. Hilton Steven J. Hilton	Director
/s/ Marianne Boyd Johnson Marianne Boyd Johnson	Director
/s/ Robert Latta Robert Latta	Director
/s/ Todd Marshall Todd Marshall	Director
/s/ Adriane C. McFetridge Adriane C. McFetridge	Director
/s/ James Nave James Nave	Director
/s/ Michael Patriarca Michael Patriarca	Director
/s/ Donald D. Snyder Donald D. Snyder	Director
/s/ Sung Won Sohn Sung Won Sohn	Director

WESTERN ALLIANCE BANCORPORATION

LIST OF SUBSIDIARIES

(As of December 31, 2019)

Name	Doing Business As	Jurisdiction of Incorporation or Organization
Western Alliance Bank	Alliance Bank of Arizona Bridge Bank First Independent Bank Bank of Nevada Torrey Pines Bank Alliance Association Bank Western Alliance Corporate Finance Western Alliance Public Finance Western Alliance Resort Finance Western Alliance Warehouse Lending	Arizona
CS Insurance Co.	Not applicable	Arizona
Las Vegas Sunset Properties	Not applicable	Nevada
Helios Prime, Inc.	Not applicable	Delaware
Western Alliance Business Trust	Not applicable	Delaware
WA PWI, LLC	Not applicable	Arizona
Western One, LLC	Not applicable	Arizona
Western Alliance Equipment Finance	Not applicable	Arizona
BW Real Estate, Inc.	Not applicable	Nevada
BankWest Nevada Capital Trust II	Not applicable	Delaware
Intermountain First Statutory Trust I	Not applicable	Connecticut
First Independent Statutory Trust I	Not applicable	Delaware
WAL Trust No. 1	Not applicable	Delaware
WAL Statutory Trust No. 2	Not applicable	Connecticut
WAL Statutory Trust No. 3	Not applicable	Connecticut
Bridge Capital Holdings Trust I	Not applicable	Delaware
Bridge Capital Holdings Trust II	Not applicable	Delaware

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement (Nos. 333-205437, 333-199727, 333-127032, 333-145548, 333-162107, and 333-183574) on Forms S-8 and Registration Statement (No. 333-203959) on Form S-3 of Western Alliance Bancorporation and Subsidiaries of our reports dated March 2, 2020 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting of Western Alliance Bancorporation and Subsidiaries appearing in this Annual Report on Form 10-K of Western Alliance Bancorporation and Subsidiaries for the year ended December 31, 2019.

/s/ RSM US LLP

Phoenix, Arizona
March 2, 2020

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Kenneth A. Vecchione, certify that:

1. I have reviewed this Annual Report on Form 10-K of Western Alliance Bancorporation;
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(s) 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(s) 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/ Kenneth A. Vecchione

Kenneth A. Vecchione

Chief Executive Officer

Western Alliance Bancorporation

Date: March 2, 2020

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Dale Gibbons, certify that:

1. I have reviewed this Annual Report on Form 10-K of Western Alliance Bancorporation;
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(s) 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(s) 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/ Dale Gibbons

Dale Gibbons

Chief Financial Officer

Western Alliance Bancorporation

Date: March 2, 2020

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

This certification is given by the undersigned Chief Executive Officer and Chief Financial Officer of Western Alliance Bancorporation (the "Registrant") pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Each of the undersigned hereby certifies, with respect to the Registrant's annual report on Form 10-K for the year ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), that, to each of their knowledge:

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

Date: March 2, 2020

/s/ Kenneth A. Vecchione

Chief Executive Officer
Western Alliance Bancorporation

Date: March 2, 2020

/s/ Dale Gibbons

Chief Financial Officer
Western Alliance Bancorporation

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One East Washington Street, Suite 1400
Phoenix, Arizona 85004
(602) 389-3500 | westernalliancebank.com