

Annual Report

2023



Our new logo stands for where we're going while honoring where we've been.

The new Umpqua Bank logo honors a legacy synonymous with community prosperity and a relationship style of banking. The simplicity of the tree captures the rich heritage of our roots in the West while supporting our increased sophistication and scale.







To Our Shareholders:

2023 was a significant year for your company. We closed a transformational merger with Umpqua Bank, expanding our footprint to encompass eight Western states and creating one of the largest banks headquartered in the West. Amid a turbulent industry backdrop, we completed the rollout of our Do Right Together culture and leveraged the speed and agility of our combined teams to execute a complex systems conversion just three weeks after the close of the merger. With the merger integration complete, we have aligned our focus forward on optimizing future operating performance as we continue to execute on our strategies to be the business bank of choice in each of our markets.

Closing a Transformational Merger

The completion of our merger with Umpqua Bank became the year's second largest open market bank deal by asset-size in 2023. Combined, we are now the largest bank headquartered in the Northwest and the 3rd largest bank headquartered on the West Coast as well as one of the top-30 largest publicly traded banks in the nation.

From meticulous planning to execution, the tireless dedication of our associates throughout the merger process has positioned us as a formidable force in the financial landscape of the West. Their commitment to a seamless transition experience not only demonstrated the power of our combined bank to the industry but also reinforced the trust that our customers place in us.

Demonstrating Stability & Focus During a Historic Year

The industry upheaval that ensued from the failure of Silicon Valley Bank began one week after the close of our merger. As regional banks fell under the microscope, our fortress balance sheet – with exceptionally strong capital generation and liquidity, the latter underscored by a highly diversified deposit base by type, size and geography – and seasoned team of bankers, enabled us to stand out as well-positioned among our peers.

With a critical systems conversion scheduled 10 days after the onset of two regional bank closures, our bankers capitalized on a long history of strong customer relationships to reinforce confidence in our strength and stability while navigating support conversations for the approaching systems conversion. Not only did the team successfully deliver a conversion with minimal disruption for customers, they did so in near-record time, completing our merger and core systems conversion in just 17 days. Their diligent efforts allowed us to execute the conversion as planned, avoiding costly extension fees and enabling us to meet cost savings targets ahead of schedule and 6% above our original projection, even after taking franchise reinvestment into account.

The quality of our associates and the strength of our organization resulted in more industry recognition in 2023. Among these recognitions, we were ranked by Forbes as one of America's Best Banks, recognized by Newsweek as one of America's Most Trusted Banks and named the 2023 Lender of the Year by the ExportImport Bank of the United States.

Expanding Our Foundation for Growth

In 2023, our company affirmed its commitment to become a leading community-focused regional commercial bank well-positioned to unlock the vast growth potential across our Western markets. We expanded our full-relationship banking team in Colorado with top local talent, opened our first retail branch in Utah and began work to expand our footprint in Arizona with three new branch locations. Our talented leaders in these newer markets have earned the additional investment by exceeding profitability targets ahead of schedule.

In addition to our strategic growth in newer markets, we focused on expanding our services in our longstanding historical markets. We began offering Trust services in California and Nevada and we added a specialty group with a seasoned team in California's North Bay Area. We continued to drive advancement and adoption of technology to support customers. Our teams implemented realtime payment technology during the year, allowing customers greater flexibility in managing the timing of payments. We also increased customer adoption of more advanced remote deposit capture technology in support of additional deposit gathering efforts. We continue to leverage strategic investments in technology to provide greater flexibility for customers as well as increased emphasis on fraud prevention capabilities.

Elevating Our Commitment to Community Prosperity

We reinforced our commitment to the prosperity of the communities we serve throughout our expanded footprint. We offered enhanced grants to nonprofit organizations throughout the West and contributed \$20 million to the Umpqua Bank Charitable Foundation to further bolster the Company's overall community impact.

To celebrate our history and mark milestone anniversaries for Columbia Banking System and Umpqua Bank, we issued \$1 million in grants to nonprofits throughout our footprint, including \$700,000 distributed among our historic Northwest communities.

An expanded community advisory panel composed of leaders from nonprofit organizations representing key areas of focus within our Community Benefits Agreement was established during the year. The group began work to guide and support programs and products aimed at achieving the objectives in the agreement.

Our combined team worked together to bring our annual associate-driven fundraising campaign, Warm Hearts Winter Drive, to more than 300 branches across the West. The drive surpassed our initial goal and raised more than \$360,000, bringing the drive's

nine-year total to nearly \$2.5 million. The generosity of our associates, customers and local community members will ensure families and individuals struggling with homelessness during the difficult winter months have warm clothing and shelter.

Sharing Gratitude for Our Incredible Team

2023 brought forward multiple merger and industry related challenges and our people repeatedly rose to the occasion. Their ability to adapt quickly while maintaining focus on our customers is a skill that will continue to serve us well as we deliver on our promise to provide the service of a community bank at scale. Their expertise, dedication and collaboration are the driving forces behind our achievements and the secret ingredient in the difference we make for our customers. Thanks to their hard work, your company remains one of the premier banking franchises in the country.

Sincerely,

Clint E. Stein

President and Chief Executive Officer

Cort L. O'Haver

Executive Chairman of the Board

Craig D. Eerkes

Lead Independent Director

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

FORM 10-K

×	ANNUAL REPORT PURSU	UANT TO SECTIO	ON 13 OR 15(d) O	F THE SECURIT	IES EXCHANGE ACT (OF 1934	
	For the fiscal year ended:	December 31, 202	23				
				OR			
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934						
	for the transition period from		to				
			Commission fil	le number: 000-2028	88		
		COLUMI	BIA BAN	KING SY	STEM, INC.		
		(Exa	act name of registr	ant as specified in it	s charter)		
	W	ashington			91-142	22237	
(State or Other Jurisdiction (I.R.S. Emp		(I.R.S. Employer Ide	ployer Identification Number)				
	of Incorpora	tion or Organizatio	n)				
				A Street			
		(Add	dress of Principal I	hington 98402-215 (Executive Offices)(Z) 305-1900			
		(Reg	istrant's telephone	number, including	area code)		
Securi	ities registered pursuant to Secti	on 12(b) of the Act:					
	TITLE OF EACH CLAS	SS	TRADI	NG SYMBOL	N.	AME OF EXC	CHANGE
	Common Stock			COLB			Market LLC
	te by check mark if the registra					Yes 🗷	
Indica	te by check mark if the registra	nt is not required to	file reports pursual	nt to Section 13 or S	section 15(d) of the Act.	Yes □	No 🗷
during	the by check mark whether the registre the preceding 12 months (or for ements for the past 90 days.	or such shorter period					
Regul	te by check mark whether the reation S-T ($\$232.405$ of this chaped No \square						
emerg	te by check mark whether the reing growth company. See the de 12b-2 of the Exchange Act. (0	efinitions of "large a					
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	Non-	accelerated filer		Sm	aller reporting company		
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over f	te by check mark whether the reinancial reporting under Section at the report.						
	urities are registered pursuant to t the correction of an error to pro				the financial statement of	the registrant	included in the filing
	te by check mark whether any of the registrant's executive office					ive-based com	npensation received by
Indica	te by check mark whether the re	egistrant is a shell co	ompany (as defined	d in Rule 12b-2 of th	ne Act). Yes 🗆 No 🗷		
	ggregate market value of the vot 8 per share, and 166,512,408 sha			tes of the registrant	as of June 30, 2023, based	on the closin	g price on that date of

The registrant had outstanding 208,625,649 shares of common stock as of January 31, 2024.

DOCUMENTS INCORPORATED BY REFERENCEPortions of the Proxy Statement for the 2024 Annual Meeting of Shareholders of Columbia Banking System, Inc. ("Proxy Statement") are incorporated by reference in this Annual Report on Form 10-K in response to Part III, Items 10, 11, 12, 13 and 14.

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The acronyms, abbreviations, and terms listed below are used in various sections of this Annual Report on Form 10-K, including Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 8. Financial Statements and Supplementary Data.

GLOSSARY OF DEFINED TERMS					
ACH	Automated Clearing House				
ACL	Allowance for Credit Losses				
ACLLL	Allowance for Credit Losses on Loans and Leases				
ALCO	Asset/Liability Management Committee				
ASC	Accounting Standards Codification				
ASU	Accounting Standards Update				
ATM	Automated Teller Machine				
Bank	Umpqua Bank				
Basel III	Basel capital framework (third accord)				
BHCA	Bank Holding Company Act of 1956				
BIPOC	Black, Indigenous, and People of Color				
Board	The Company's Board of Directors				
BOLI	Bank Owned Life Insurance				
BSA	Bank Secrecy Act				
BTFP	Bank Term Funding Program				
Capital Rules	Risk-based capital standards currently applicable to the Company and the Bank				
CARES Act	Coronavirus Aid, Relief and Economic Security Act				
CCPA	California Consumer Protection Act of 2018				
CDL	Collateral-Dependent Loans				
CECL	Current Expected Credit Losses (ASC Topic 326)				
CET1	Common Equity Tier 1				
CFPB	Consumer Financial Protection Bureau				
Columbia	Columbia Banking System, Inc.				
Company	Columbia Banking System, Inc. and its Subsidiaries				
COVID-19	Coronavirus Disease 2019				
CPRA	California Privacy Rights Act				
CRA	Community Reinvestment Act of 1977				
CVA	Credit Valuation Adjustments				
DCBS	Oregon Department of Consumer and Business Services Division of Financial Regulation				
DCF	Discounted Cash Flow				
DCP	Deferred Compensation Plan				
DEI	Diversity, Equity, and Inclusion				
DIF	Deposit Insurance Fund				
Dodd-Frank Act	Dodd-Frank Wall Street Reform and Consumer Protection Act				
DTA	Deferred Tax Assets				
ESG	Environmental, Social, and Governance				
ESP	Employee Stock Purchase				
FASB	Financial Accounting Standards Board				
FDIA	Federal Deposit Insurance Act				
FDIC	Federal Deposit Insurance Corporation				
Federal Reserve	Board of Governors of the Federal Reserve System				
FHLB	Federal Home Loan Bank				

	GLOSSARY OF DEFINED TERMS (CONTINUED)
FinPac	Financial Pacific Leasing, Inc.
Fintech	Financial technology
FRB	Federal Reserve Bank
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
GNMA	Government National Mortgage Association
HELOC	Home Equity Line of Credit
IDI	Insured Depository Institutions
LGD	Loss Given Default
LIBOR	London Inter-Bank Offered Rate
Merger	Umpqua Holdings Corporation merged with and into Columbia, with Columbia as the surviving corporation
Merger Agreement	Agreement and Plan of Merger dated as of October 11, 2021, by and among UHC, Columbia, and Cascade Merger Sub, Inc., as amended on January 9, 2023
Merger Date	February 28, 2023
MSR	Mortgage Servicing Rights
NOL	Net Operating Loss
OCC	Office of the Comptroller of the Currency
PCD	Purchased Credit Deteriorated
PD	Probability of Default
ROU	Right-Of-Use
RSA	Restricted Stock Awards
RSU	Restricted Stock Units
RUC	Reserve for Unfunded Commitments
SBA	Small Business Administration
SEC	Securities and Exchange Commission
SERP	Supplemental Retirement Plan associated with legacy Columbia
SOFR	Secured Overnight Financing Rate
SOX	Sarbanes-Oxley Act of 2002
SRP	Supplemental Retirement Plan
SRP/DCP	Umpqua Supplemental Retirement & Deferred Compensation Plan
TDR	Troubled Debt Restructured
Trusts	Trusts wholly-owned by the Company
UHC	Umpqua Holdings Corporation
USDA	United States Department of Agriculture
Umpqua	Umpqua Bank

PART I

ITEM 1. BUSINESS.

In this Annual Report on Form 10-K, we refer to Columbia Banking System, Inc. as the "Company," "Columbia," "we," "us," "our," or similar references.

Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, which are intended to be covered by the safe harbor for "forward-looking statements" provided by the Private Securities Litigation Reform Act of 1995. These statements may include statements that expressly or implicitly predict future results, performance, or events. Statements other than statements of historical fact are forward-looking statements. You can find many of these statements by looking for words such as "anticipates," "expects," "believes," "estimates," "intends," "forecast", and words or phrases of similar meaning.

We make forward-looking statements including, but not limited to, statements made about the combined company's prospects and results following the merger with Umpqua Holdings Corporation and the merger of Columbia State Bank into Umpqua Bank (collectively, the "Mergers"), completed in the first quarter 2023; derivatives and hedging; the results and performance of models and economic forecasts used in our calculation of the ACL; projected sources of funds and the Company's liquidity position and deposit level and types; our securities portfolio; loan sales; adequacy of our ACL, including the RUC; provision for credit losses; non-performing loans and future losses; our commercial real estate portfolio, its collectability and subsequent charge-offs; resolution of non-accrual loans; mortgage volumes and the impact of rate changes; the economic environment; inflation and interest rates generally; litigation; dividends; junior subordinated debentures; fair values of certain assets and liabilities, including MSR values and sensitivity analyses; tax rates; deposit pricing; and the effect of accounting pronouncements and changes in accounting methodology.

Forward-looking statements involve substantial risks and uncertainties, many of which are difficult to predict and are generally beyond our control. There are many factors that could cause actual results to differ materially from those contemplated by these forward-looking statements. In addition to the factors set forth in the sections titled "Risk Factors," "Business" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Annual Report on Form 10-K, the following factors, among others, could cause actual results to differ materially from the anticipated results expressed or implied by forward-looking statements:

- changes in general economic, political, or industry conditions, and in conditions impacting the banking industry specifically;
- deterioration in economic conditions that could result in increased loan and lease losses, especially those risks associated with concentrations in real estate related loans;
- uncertainty in U.S. fiscal and monetary policy, including the interest rate policies of the Federal Reserve or the
 effects of any declines in housing and commercial real estate prices, high or increasing unemployment rates,
 continued inflation, or any recession or slowdown in economic growth particularly in the western United States;
- volatility and disruptions in global capital and credit markets;
- the impact of bank failures or adverse developments at other banks on general investor sentiment regarding the stability and liquidity of banks;
- changes in interest rates that could significantly reduce net interest income and negatively affect asset yields and valuations and funding sources, including impacts on prepayment speeds;
- the impact of transition of LIBOR to other indexes including SOFR;
- competitive pressures among financial institutions and nontraditional providers of financial services, including on product pricing and services;
- continued consolidation in the financial services industry resulting in the creation of larger financial institutions that have greater resources;
- our ability to successfully, including on time and on budget, implement and sustain information technology product and system enhancements and operational initiatives;

- our ability to attract new deposits and loans and leases;
- our ability to retain deposits;
- our ability to achieve the efficiencies and enhanced financial and operating performance we expect to realize from investments in personnel, acquisitions, and infrastructure;
- the possibility that our recorded goodwill could become impaired, which may have an adverse impact on our earnings and capital;
- demand for financial services in our market areas;
- stability, cost, and continued availability of borrowings and other funding sources, such as brokered and public deposits;
- changes in legal or regulatory requirements or the results of regulatory examinations that could increase expenses or restrict growth;
- changes in the scope and cost of FDIC insurance and other coverage;
- our ability to manage climate change concerns, related regulations, and potential impacts on the creditworthiness of our customers;
- · our ability to recruit and retain key management and staff;
- our ability to raise capital or incur debt on reasonable terms;
- regulatory limits on the Bank's ability to pay dividends to the Company that could impact the timing and amount
 of dividends to shareholders;
- financial services reform and the impact of legislation and implementing regulations on our business operations, including our compliance costs, interest expense, and revenue;
- a breach or failure of our operational or security systems, or those of our third-party vendors, including as a result
 of cyber-attacks;
- success, impact, and timing of our business strategies, including market acceptance of any new products or services;
- the outcome of legal proceedings;
- our ability to effectively manage credit risk, interest rate risk, market risk, operational risk, legal risk, liquidity risk and regulatory and compliance risk;
- the possibility that the anticipated benefits of the Mergers are not realized when expected or at all, including as a result of the impact of, or problems arising from, the integration of the two companies or as a result of the strength of the economy and competitive factors in the areas where we do business;
- potential adverse reactions or changes to business or employee relationships, including those resulting from the integration of the two companies and banks;
- economic forecast variables that are either materially worse or better than end of quarter projections and deterioration in the economy that exceeds current consensus estimates;
- the effect of geopolitical instability, including wars, conflicts, and terrorist attacks;
- natural disasters, including earthquakes, tsunamis, flooding, fires, pandemics, and other similarly unexpected events outside of our control;
- our ability to effectively manage problem credits;
- · our ability to successfully negotiate with landlords or reconfigure facilities; and
- the effects of any damage to our reputation resulting from developments related to any of the items identified above.

There are many factors that could cause actual results to differ materially from those contemplated by these forward-looking statements. Forward-looking statements are made as of the date of this Annual Report on Form 10-K. We undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required under federal securities laws. Readers should consider any forward-looking statements in light of this explanation, and we caution readers about relying on forward-looking statements.

For a more detailed discussion of some of the risk factors that could (i) affect our business, financial condition, and future results, or (ii) cause actual results to differ materially from those contemplated by these forward-looking statements, see the section entitled "Risk Factors" under Item 1A below. We do not intend to update any factors, except as required by SEC rules, or to publicly announce revisions to any of our forward-looking statements. Any forward-looking statement speaks only as of the date that such statement was made. You should consider any forward-looking statements in light of this explanation, and we caution you about relying on forward-looking statements.

SEC Filings

We electronically file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy and information statements and other information with the SEC. You may obtain these reports and statements, and any amendments, from the SEC's website at www.sec.gov. You may obtain copies of these reports, and any amendments, through the investor relations section of our website at www.columbiabankingsystem.com. These reports are available through our website as soon as reasonably practicable after they are filed electronically with the SEC.

Introduction

Columbia Banking System, Inc. (referred to in this Annual Report on Form 10-K as "we," "our," the "Company," and "Columbia") is a registered financial holding company. Columbia completed its previously announced merger with Umpqua Holdings Corporation on February 28, 2023. This combined two premier banks in the Northwest to create one of the largest banks headquartered in the West. Columbia completed its core systems conversion on March 20, 2023, and branch consolidations occurred through the second quarter of 2023.

Through the Bank, we provide a broad range of banking, private banking, mortgage, and other financial services to corporate, institutional, small business, and individual customers. FinPac, a commercial equipment leasing company, is a subsidiary of the Bank. Along with its subsidiaries, the Company is subject to the regulations of state and federal agencies and undergoes regular examinations by these regulatory agencies.

The majority of the Bank's loans and deposits are within its service areas in Oregon, Washington, California, Idaho, Nevada, Arizona, Colorado, and Utah. Umpqua Bank is an Oregon state-chartered commercial bank, the deposits of which are insured in whole or in part by the FDIC.

Business Strategy

Columbia Banking System, Inc., through its principal subsidiary, Umpqua Bank, seeks to bank businesses of all sizes, along with their owners, executives, and employees, in addition to the residents of the communities it serves. We seek to provide our customers with the financial sophistication and product depth of a regional banking company while retaining the appeal and service level of a community bank. Our approach is a concentrated focus on full banking relationships, bringing together collaborative teams from commercial and consumer banking as well as wealth management, and leveraging our retail branch network to provide community banking at scale.

We continually evaluate our existing business processes while focusing on maintaining asset quality and a granular loan and deposit portfolio diversified by product, customer, industry, and geography. Our merger with Umpqua Holdings Corporation accelerated our targeted strategy to expand market share in communities in the western United States. Our scaled franchise and offerings, talented associate base, and customer-focused business model enable us to provide comprehensive financial services in a manner that serves our four identified stakeholder groups: associates, customers, shareholders, and communities. We seek to expand total revenue while controlling expenses in an effort to gain operational efficiencies and increase our return on average tangible common equity. As a result of our strong commitment to highly personalized, relationship-oriented customer service, our diverse products, our strategic branch locations, and the long-standing community presence of our associates, we believe we are well positioned to attract new customers while not only retaining existing customers, but also deepening our relationship with them. Our ability to attract and retain talented associates strengthens our ability to drive balanced growth in loans, deposits, and sustainable, core fee income that results from providing customers tailored financial solutions to meet their needs.

Products and Services

We place the highest priority on customer service and assist our customers in making informed decisions when selecting from the products and services we offer. Our array of financial products are delivered through traditional and digital channels to meet the banking needs of our market area and commercial and consumer customers. To ensure the ongoing viability of our product offerings, we regularly examine the desirability and profitability of existing and potential new products. Our customers can access our products through online banking, mobile banking applications, and our website: www.umpquabank.com (information contained on our website is not incorporated by reference into this Annual Report on Form 10-K).

Commercial Lending Products. We offer specialized loans for corporate, middle market, and small business customers, including commercial lines of credit and term loans, accounts receivable and inventory financing, international trade finance, commercial property loans, multifamily loans, equipment loans, commercial equipment leases, real estate construction loans and permanent financing, and Small Business Administration program financing as well as capital markets.

Treasury Management. As Umpqua Bank focuses on banking the full customer relationship and meeting the needs of customers of all sizes, we offer treasury management and payments solutions to our customers through our Global Payments & Deposits group. These products include business digital and mobile banking solutions, ACH, wires, positive pay, remote deposit capture, integrated payments, integrated receivables, lockbox, cash vault, Real-Time Payments via The Clearinghouse, commercial card, and foreign exchange and international banking related products. We also offer merchant services in coordination with a strategic partner. Within our business digital experience, customers can engage in a fully authenticated chat and co-browse feature with a knowledgeable Treasury and Payments representative if they require assistance with any of the Bank's solutions.

Deposit Products. We offer deposit products, including non-interest bearing checking accounts, analyzed business accounts, interest-bearing checking and savings accounts, money market accounts, insured cash sweep and other investment sweep solutions, and certificates of deposit. Interest-bearing accounts earn interest at rates established by management based on competitive market factors and management's desire to increase certain types of deposit liabilities. Our approach is to provide a streamlined and differentiated experience that meets the customer's needs across all channels. This approach is designed to add value for the customer and generate related fee income for the services provided.

Wealth Management. As a division of Umpqua Bank, the Wealth Management team provides a full suite of financial planning, investment, trust, insurance, and private banking solutions to individuals, families, and businesses through the Columbia Wealth Advisors, Columbia Trust Company, and Columbia Private Bank. We deliver personalized service and experience through dedicated financial advisors that leverage an approach that revolves around the three stages of the wealth cycle: grow, preserve, and transition.

Residential Real Estate Loans. Real estate loans are available for the construction, purchase, and refinancing of residential owner occupied and rental properties. Borrowers can choose from a variety of fixed and adjustable rate options and terms. We sell many of the residential real estate loans that we originate into the secondary market. Servicing is retained on the majority of these loans.

Consumer Loans. We provide loans to individual borrowers for a variety of purposes, including secured and unsecured personal loans, home equity and personal lines of credit, and motor vehicle loans.

Market Area and Competition

The geographic markets we serve are highly competitive for deposits, loans, and leases. We compete with traditional banking institutions, as well as non-bank financial service providers, such as credit unions, mortgage companies, fintechs, and online based financial service providers. In our primary market areas of Oregon, Washington, California, Idaho, and Nevada, major national banks generally hold top market share positions. Competition also includes small community banks that operate in concentrated areas within our footprint and other regional banks that focus on commercial and retail banking. In 2021, the Bank expanded our market area by adding loan production offices in Colorado and Arizona. In 2023, the Bank further expanded our market area by adding a branch in Utah.

As the industry becomes increasingly oriented toward technology-driven delivery systems, permitting transactions to be conducted on mobile devices and computers, non-bank institutions are able to attract customers and provide lending and other financial services even without offices located in our primary service area. Some insurance companies and brokerage firms compete for deposits by offering rates that are higher than the weighted average market price and may be inappropriate for the Bank in relation to its asset and liability management objectives.

Credit unions present a significant competitive challenge for our banking services and products. As credit unions currently enjoy an exemption from income tax, they are able to offer higher deposit rates and lower loan rates than banks can on a comparable basis. Credit unions are also not currently subject to certain regulatory constraints, such as the Community Reinvestment Act, which, among other things, requires us to implement procedures to make and monitor loans throughout the communities we serve. Adhering to such regulatory requirements raises the costs associated with our lending activities and reduces potential operating profits. Accordingly, we seek to compete by focusing on building customer relationships, providing superior service, and offering a wide variety of commercial and consumer banking products. Our branch system funds our lending activities and allows us to better serve both retail (consumer) and business (commercial) depositors. We believe this approach enables us to expand lending activities while attracting a stable core deposit base and enhancing utilization of our full range of products and services. Our branch system and other delivery channels are continually evaluated as an important component of ongoing efforts to improve efficiencies without compromising customer service.

The following table presents the Bank's market share percentage for total deposits as of June 30, 2023 in each state where we have operations. As the Bank's branch in Utah was not established until August 2023, it is not included in the table below. The table also indicates the ranking by deposit size in each market. All information in the table was obtained from S&P Global, which compiles deposit data published by the Federal Deposit Insurance Corporation as of June 30, 2023 and updates the information for any bank mergers and acquisitions completed subsequent to the reporting date.

State	Market Share	Market Rank	Number of Branches
Oregon	15.78 %	2	108
Washington	7.15 %	5	106
Idaho	3.70 %	11	25
Nevada	0.47 %	16	4
California	0.39 %	24	61

Sustainability and Environmental, Social, and Governance

We take pride in being a proactive partner to build stronger, more resilient, and inclusive economies. Our approach to sustainability is about making better business decisions that support all of our stakeholders for the long term, and it is embedded in the fabric of our corporate values and culture, driving us to think very intentionally about the communities we serve. In 2023, the organization continued to track our corporate responsibility performance against ESG standards outlined by the Global Reporting Initiative and the Sustainability Accounting Standards Board frameworks.

Our annual ESG Report is available at the "About Us-Our Impact" section of the Bank's website (www.umpquabank.com) but is not incorporated by reference into this Annual Report on Form 10-K. The ESG Report provides additional detail about our evolving ESG work as it relates to the breadth of our stakeholders.

The following is a brief overview:

Associates

We create an environment where our associates have the chance to grow, connect, and do meaningful work together.

Relationship banking is at our core, and our people are the key to maintaining relationships with each other, our customers, and our communities. We intentionally create an environment where associates care about one another, root for the customer down the street, and participate in making their community a better place to live and work. Our associates are encouraged to use their skills and passions to make a difference in their communities while growing their careers and being recognized and appreciated for their diverse talents, backgrounds, and perspectives.

- We emphasize a culture of kindness and positivity, encouraging behaviors consistent with our Do Right TOGETHER¹ values, which describe the qualities we expect all of our associates to embody every day in all interactions with other associates, customers, shareholders, and in our communities.
- Diversity, equity, and inclusion are strong anchors in our foundation. We celebrate differences and encourage authenticity, not just where we work, but also with our customers and in our communities.
- We support our associates with a portfolio of programs that address their well-being, from physical and financial health to community connections and workplace recognition.

Customers

We are committed to helping individuals, families, and businesses thrive. The Company focuses on the genuine human connection and building long-term relationships by putting customer needs first. We see technology as a vital tool to better serve our customers expanding access to the expertise of our bankers.

- We prioritize financial health and access to capital for our customers and communities. We continue to innovate and find new ways to provide access to financial solutions across a diverse customer base.
- Underscoring our commitment to the growth and success of our customers and their needs, we surveyed 1,250 businesses nationwide to gauge their perspective and plans on the United States economy and business conditions.
 2023 was the sixth year in a row that the Bank has published the Umpqua Bank Business Barometer Report with insights from these small and middle market business leaders throughout the country.
- In 2023, we continued to invest in community lending efforts to promote access to homeownership for first-time homebuyers through responsible lending practices and education programs.

¹ The Do Right TOGETHER values consist of:

T: Build TRUST through credibility.

O: Take OWNERSHIP of personal and company goals.

G: Pursue GROWTH for you, your customers, and communities.

E: Practice EMPATHY to increase understanding.

T: Embrace TEAMWORK to improve outcomes.

H: Serve others with HEART.

E: Bring ENJOYMENT to everything you do.

R: Form lasting RELATIONSHIPS with customers and each other.

Communities

We strive to help level the economic playing field by taking a leading role in helping our communities prosper. Our approach to community investment focuses on increasing the economic vitality of our communities, particularly in places where systemic challenges hinder access to financial expertise, gainful employment, and building intergenerational wealth.

- Through the Umpqua Bank Charitable Foundation, we are committed to providing grant funding in communities in which we have a physical banking presence. In addition to other programs and in celebration of Umpqua Bank and Columbia Banking System's respective 70th and 30th anniversaries, the Foundation made grants totaling \$1 million to several local nonprofits who have shown strong community leadership, a commitment to improving access to economic opportunity, and their support for a variety of under-resourced communities in the areas of affordable housing and homeownership, education, career readiness, entrepreneurship, and health and wellness.
- In 2023, we initiated a giving focus for underrepresented groups, and we continue to support our associates by offering a matching program that doubles their gifts, including an increased giving match in support of organizations aligned with the Company's Associate Resource Groups.
- Umpqua Bank expanded its operational capacity to meet the needs of Individual Development Accounts providers and savers, enabling low-income families to save towards a targeted goal and purpose.
- After the Merger close in early 2023, we began executing on the \$8.1 billion Community Benefits Plan with the
 National Community Reinvestment Coalition that builds on our commitment to advance economic opportunity for
 individuals and support small business formation in historically underserved communities throughout the Bank's
 footprint. In support of this, we convened a Community Advisory Panel, comprised of nonprofit partners that
 represent under-resourced groups from throughout the Bank's footprint, to help to guide our efforts.
- The Company's Connect Volunteer NetworkTM continues to be one of the nation's leading volunteer programs, providing all associates with up to 40 hours of paid time off each year committed to a wide range of community needs.
- 2023 saw record contributions for our annual Warm Hearts Winter Drive supporting those experiencing homelessness, bringing the nine-year total to \$2.5 million.

Planet

We focus on smart business operations that benefit both the environment and the company. As a financial institution, we acknowledge the economic, societal, and ecological impacts of climate change to our business and to our customers. It is our responsibility to advance smart, responsible practices that lessen our impact and contribute to the company's business goals. As we expand into new markets, we are taking steps that are designed to optimize the resources we consume and minimize the waste we create, limiting our operational impact so that we help both our communities and our bottom line.

- The Company's intention to align operational processes with our commitment to reduce our impact on the environment is stronger than ever.
- We maintain an Environmental Commitment Statement.
- Through the ESG Report, we publicly report our Greenhouse Gas Inventory as well as our energy, water, and business travel usage.

Stakeholder Engagement

We solicit input from our stakeholders through a variety of channels, including:

- Customers may provide feedback to any of our associates through our customer resource center and through outreach from our customer insights team.
- Associates may provide feedback through periodic engagement surveys, executive listening sessions, and all-hands and division calls.
- Communities may reach out anytime or talk directly with footprint-based Community Impact Officers.
- We maintain regular contact with government entities and regulatory bodies.
- Investors may contact our Director of Investor Relations via our Investor Relations webpage (www.columbiabankingsystem.com).

Human Capital

In our unique brand of banking, where relationships come first, associates are vital to our success. We bring together the power of the collective talents, skills, and expertise of our dedicated associates to realize our purpose, and to deliver on our commitment to our customers and our communities. We believe in helping businesses and families thrive, and equally, in helping our associates thrive.

We strive to deliver an employment experience anchored in a healthy and vibrant culture that appreciates and respects all associates. Our Do Right Together culture, and the values of Trust, Ownership, Growth, Empathy, Teamwork, Heart, Enjoyment, and Relationships, shape how we approach and serve our associates, customers, shareholders, and communities.

We empower our associates to grow, connect, and do meaningful work. We recognize their diverse talents, backgrounds, and perspectives. And we are dedicated to providing competitive, performance-based compensation along with attractive benefits, a safe and healthy workplace, and a wealth of learning opportunities.

Demographics. As of December 31, 2023, we employed 5,114 employees, the majority of which were full-time associates. Our workforce includes customer-facing associates across our various business lines. These include our retail branches, business and commercial banking teams, Wealth Management experts, as well as professionals in various support functions that enable the business, such as technology, finance, risk, audit, legal, and human resources. Our teams are primarily in eight western states.

While our workforce increased compared to the prior period as a result of the Merger, total workforce decreased by 11% on a combined company basis, which was driven primarily by natural attrition, merger-related reductions, and shifts in the business strategy in specific lines of business. Turnover rate, as calculated in our payroll system on a combined basis, was under 24%.

Employee Health and Well-being. We have embraced a go-forward hybrid work model for many functions and roles, where associates may work remotely two days per week, while working in one of our Community Hubs the other three days. This model is supported by technology teaming solutions and allows our associates to have the flexibility to work remotely while also enjoying the benefits of in-person collaboration and being part of a workplace community and company culture.

We offer competitive medical, dental, vision, life, short and long-term disability, and accident insurance, in addition to paid time off for vacation, sick time, and volunteerism. Medical benefits are available to associates working 30 hours per week, while paid time off begins at 20 hours per week. These programs are assessed regularly against market benchmarks.

Compensation. We attract and reward our associates by providing market competitive compensation and benefit practices. Our compensation approach is designed to pay for performance and reward associate contributions. Our salary structure is informed by market data, and recognizing that the compensation environment is dynamic, we review and adjust our pay ranges regularly. This includes an ongoing practice of analyzing pay equity. In addition, many positions have incentive plans to encourage achievement of various corporate, business unit, and individual goals.

On a regular basis, we conduct an associate engagement survey to gain insights into associate sentiment about various aspects of the associate experience. This feedback is used to assess the effectiveness of our people practices and prioritize enhancements to our programs.

Talent Development. We believe in the growth of our associates as individuals and as professionals. Our talent development programs provide our associates with the skills and experiences that allow them to thrive, supporting achievement of their personal career goals. We provide a best-in-class online learning catalog that is on-demand for all associates, in addition to specific training for many roles. Our development programs build key leadership capabilities, and support growth of our internal leadership talent pipeline. We have available new manager programs, tuition reimbursement, banking school participation, coaching, and mentoring programs. Additionally, we have a robust annual talent review and succession planning program that is key to our overall talent management practice. This results in targeted development approaches, identification of emerging talent, and a healthy succession-talent bench.

Diversity, Equity, and Inclusion. The Company is committed to ensuring a culture of inclusion where differences are respected, celebrated, and embraced. We are committed to creating a banking experience where the relationships we build and the solutions we offer support and attract the diversity of our communities. Our goal is to recruit the best qualified associates, building teams that reflect our communities' experiences, cultures, and perspectives, and it is our policy to comply with all laws applicable to discrimination in the workplace. Our commitment to inclusivity is embedded in our strategy and we continue to enhance our DEI practices, which are guided by our executive team and overseen by the Board of Director's Nominating and Governance Committee. We have continued to expand programs that support inclusivity and belonging across all of our stakeholder groups, such as our Associate Resource Groups, which are open to all associates participating as members or allies and increasing our DEI-focused giving to \$500,000 in 2023. We currently have five resource groups: Pride, Women, Military, BIPOC, and People with Disabilities. Our Diversity Council is comprised of individuals from across the organization, who advance our diversity and inclusion initiatives. We strive to be a bank for everyone and take pride in our role as a community leader. An illustration of our commitment at the most senior level is in the diverse make-up of our 14 member Board that includes five women and four BIPOC, with women chairing three, or 60%, of the Board committees or subsidiary boards.

Information about our Executive Officers

Information regarding employment agreements with our executive officers is contained in Item 11 below, which item is incorporated by reference to the Proxy Statement.

Government Policies

The operations of the Company and our subsidiaries are affected by state and federal legislative and regulatory changes and by policies of various regulatory authorities, including domestic monetary policies of the Board of Governors of the Federal Reserve System, United States fiscal policy, and capital adequacy and liquidity constraints imposed by federal and state regulatory agencies.

Supervision and Regulation

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

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

Federal and State Bank Holding Company Regulation

General. The Company is a bank holding company as defined in the BHCA that has elected to become a financial holding company, and is therefore subject to regulation, supervision, and examination by the Federal Reserve. The Company must file reports with and provide the Federal Reserve such additional information as it may require. Under the Financial Services Modernization Act of 1999, a bank holding company may apply to the Federal Reserve to become a financial holding company, and thereby engage (directly or through a subsidiary) in certain expanded activities deemed financial in nature, such as securities underwriting and dealing, insurance underwriting and brokerage, merchant banking and other activities that are determined by the FRB, in coordination with the Treasury Department, to be "financial in nature or incidental thereto" or that the FRB determines unilaterally to be "complementary" to financial activities. Upon the consummation of our merger with UHC in early 2023, the Company elected to be treated as a financial holding company. To maintain its status as a financial holding company, a bank holding company (and all of its depository institution subsidiaries) must each remain "well capitalized" and "well managed." If a bank holding company fails to meet these regulatory standards, the Federal Reserve could place limitations on its ability to conduct the broader financial activities permissible for financial holding companies or impose limitations or conditions on the conduct or activities of the bank holding company or its affiliates. If the deficiencies persisted, the Federal Reserve could order the bank holding company to divest any subsidiary bank or to cease engaging in any activities permissible for financial holding companies that are not permissible for bank holding companies.

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

In July 2021, the Biden administration issued an executive order on competition, which included provisions relating to bank mergers. These provisions "encourage" the Department of Justice and the federal banking regulators to update guidelines on banking mergers and to provide more scrutiny of bank mergers. We are unable to predict what impact the executive order, or any responsive change to such guidelines, will have on the timing of or ability to obtain regulatory approvals of future mergers.

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

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

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

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

Federal and State Regulation of Umpqua Bank

General. The deposits of Umpqua Bank, an Oregon state-chartered commercial bank in Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Washington, are insured by the FDIC. As a result, Umpqua Bank is subject to supervision and regulation by the DCBS and the FDIC. These agencies have the authority to prohibit banks from engaging in what they believe constitute unsafe or unsound banking practices. Furthermore, under the FDIA, insurance of deposits may be terminated by the FDIC if the FDIC finds that the insured depository institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations or has violated any applicable law, regulation, rule, order, or condition imposed by the FDIC. With respect to branches of Umpqua Bank, the Bank is also subject to certain laws and regulations governing its activities in the states in which we operate.

State Bank Regulation. Umpqua Bank, as an Oregon state-chartered bank, is primarily subject to the state-level supervision and regulation of the DCBS. In addition, Umpqua Bank is subject to regulation by the financial institution oversight authorities in the states of Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, and Washington. Our primary state regulator regularly examines the Bank or participates in joint examinations with the FDIC; these agencies may prohibit the Bank from engaging in what they believe constitute unsafe or unsound banking practices.

Consumer Protection. The Bank is subject to a variety of federal and state consumer protection laws and regulations that govern its relationship with consumers, including laws and regulations that impose certain disclosure requirements and regulate the manner in which we take deposits, make, and collect loans, and provide other services. Failure to comply with these laws and regulations may subject the Bank to various penalties, including but not limited to, enforcement actions, injunctions, fines, civil monetary penalties, criminal penalties, punitive damages, and the loss of certain contractual rights. As an insured depository institution with assets of \$10 billion or more, the CFPB has primary enforcement and enforcement authority for federal consumer financial laws over the Bank. This includes the right to obtain information about the Bank's activities and compliance systems and procedures and to detect and assess risks to consumers and markets. The CFPB engages in several activities, including (i) investigating consumer complaints about credit cards and mortgages, (ii) launching supervisory programs, (iii) conducting research for and developing mandatory financial product disclosures, and (iv) engaging in consumer financial protection rulemaking. Umpqua Bank has established a compliance management system designed to ensure consumer protection. In October 2023, the CFPB issued a proposed rule regarding personal financial data rights that would apply to financial institutions that offer consumer deposit accounts such as Umpqua Bank. Covered financial institutions would be required to provide consumers electronic access to 24 months of transaction data and certain account information under the proposed rule and would be prohibited from imposing any fees or charges for maintaining or providing access to such data. The proposed rule would also impose data accuracy, retention, and other obligations. We will continue to evaluate the proposed rule and the impact on Umpqua Bank.

Community Reinvestment. The CRA requires that, in connection with examinations of financial institutions within their jurisdiction, the Federal Reserve, OCC or the FDIC evaluate the record of the financial institution in meeting the credit needs of its local communities, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of the institution. A bank's community reinvestment record is also considered by the applicable banking agencies in evaluating mergers, acquisitions, and applications to open a branch or facility. The Bank's failure to comply with the CRA could, among other things, result in the denial or delay of such transactions. The Bank received a rating of "Satisfactory" in its most recently completed CRA examination. On October 24, 2023, the Federal Reserve, FDIC and the OCC jointly issued a final rule amending the agencies' CRA regulations to achieve the following goals: (i) encourage banks to expand access to credit, investment and banking services in low- and moderate-income communities, (ii) adapt to changes in the banking industry, including internet and mobile banking, (iii) provide greater clarity and consistency in the application of the CRA regulations and (iv) tailor CRA evaluations and data collection to bank size and type. Management will continue to evaluate any changes to CRA regulations.

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

The Patriot Act further augments and strengthens the requirements set forth in the BSA. The Patriot Act, in relevant part, (i) prohibits banks from providing correspondent accounts directly to foreign shell banks; (ii) imposes due diligence requirements on banks opening or holding accounts for foreign financial institutions or wealthy foreign individuals; (iii) requires financial institutions to establish an anti-money-laundering compliance program; and (iv) eliminates civil liability for persons who file suspicious activity reports. The Patriot Act also includes provisions providing the government with power to investigate terrorism, including expanded government access to bank account records.

Umpqua Bank is also subject to regulation under the International Emergency Economic Powers Act and the Trading with the Enemy Act, as administered by the United States Treasury Department's Office of Foreign Assets Control ("Sanctions Laws"). The Sanctions Laws are intended to restrict transactions with persons, companies, or foreign governments sanctions by U.S. authorities. An institution that fails to meet these standards may be subject to regulatory sanctions, including limitations on growth. Umpqua Bank has established compliance programs designed to comply with the BSA, the Patriot Act and applicable Sanctions Laws.

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

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

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

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

Interstate Banking and Branching

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

Dividends

Columbia is a legal entity separate and distinct from the Bank and its other subsidiaries. As a bank holding company, Columbia is subject to certain restrictions on its ability to pay dividends under applicable banking laws and regulations. Federal bank regulators are authorized to determine under certain circumstances relating to the financial condition of a bank holding company or a bank that the payment of dividends would be an unsafe or unsound practice and to prohibit payment thereof. In particular, federal bank regulators have stated that paying dividends that deplete a banking organization's capital base to an inadequate level would be an unsafe and unsound banking practice and that banking organizations should generally pay dividends only out of current operating earnings. In addition, in the current financial and economic environment, the Federal Reserve has indicated that bank holding companies should carefully review their dividend policy and has discouraged payment ratios that are at maximum allowable levels unless both asset quality and capital are very strong. Federal Reserve policy also provides that a bank holding company should inform the Federal Reserve reasonably in advance of declaring or paying a dividend that exceeds earnings for the period for which the dividend is being paid or that could result in a material adverse change to the bank holding company's capital structure.

A significant portion of our income comes from dividends from the Bank, which is also the primary source of our liquidity. In addition to the restrictions discussed above, the Bank is subject to limitations under Oregon law regarding the level of dividends that it may pay to the Company. Oregon law provides that a bank may not pay dividends greater than the bank's unreserved retained earnings, deducting therefrom, to the extent not already charged against earnings or reflected in a reserve, all bad debts, which are debts on which interest is past due and unpaid for at least six months, unless the debt is fully secured and in the process of collection; all other assets charged-off as required by Oregon bank regulators or a state or federal examiner; and all accrued expenses, interest and taxes of the institution. Under the Oregon Bank Act and Federal Deposit Insurance Corporation Improvement Act of 1991, Umpqua Bank is subject to restrictions on the payment of cash dividends to its parent company and may be required to receive prior approval in certain circumstances. In addition, state and federal regulatory authorities are authorized to prohibit banks and holding companies from paying dividends that would constitute an unsafe or unsound banking practice. The Bank currently has an accumulated deficit and is required to seek FDIC and DCBS approval for dividends from Umpqua Bank to the Company.

Regulatory Capital Requirements

The Federal Reserve monitors the capital adequacy of the Company on a consolidated basis, and the FDIC and the DCBS will monitor the capital adequacy of the Bank. The Capital Rules are based on the December 2010 final capital framework for strengthening international capital standards, known as Basel III, of the Basel Committee. As of December 31, 2023, Columbia and the Bank met all capital adequacy requirements under the Capital Rules, as described below.

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

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

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

The Capital Rules provide for a number of deductions from and adjustments to CET1. These include, for example, the requirement that mortgage servicing rights, certain deferred tax assets and significant investments in non-consolidated financial entities be deducted from CET1 to the extent that any one such category exceeds 10% of CET1 or all such categories in the aggregate exceed 15% of CET1. The Capital Rules also generally preclude certain hybrid securities, such as trust preferred securities, from being counted as Tier 1 capital for most bank holding companies.

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

In December 2017, the Basel Committee published standards that it described as the finalization of the Basel III post-crisis regulatory reforms. The standards are commonly referred to as "Basel IV." Among other things, these standards revise the Basel Committee's standardized approach for credit risk (including by recalibrating risk weights and introducing new capital requirements for certain "unconditionally cancellable commitments," such as home equity lines of credit) and provide a new standardized approach for operational risk capital. The Basel framework standards have been generally effective since January 1, 2023, with an aggregate output floor phasing in through January 1, 2028.

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

Prompt Corrective Action Framework

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

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

"Well-capitalized"

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

"Adequately capitalized"

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

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

As of December 31, 2023, the Company and the Bank met the capital requirements to be well-capitalized with CET1 capital ratios of 9.64% and 10.52%, respectively, Tier 1 capital ratios of 9.64% and 10.52%, respectively, total capital ratios of 11.86% and 11.57%, respectively, and Tier 1 leverage ratios of 7.60% and 8.30%, respectively.

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

Brokered Deposits

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

Regulatory Oversight and Examination

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

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

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

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

Financial Privacy

Under the Gramm-Leach-Bliley Act of 1999, as amended, a financial institution may not disclose non-public personal information about a consumer to unaffiliated third parties unless the institution satisfies various disclosure requirements and the consumer has not elected to opt out of the information sharing. The financial institution must provide its customers with a notice of its privacy policies and practices. The Federal Reserve, the FDIC, and other financial regulatory agencies issued regulations implementing notice requirements and restrictions on a financial institution's ability to disclose non-public personal information about consumers to unaffiliated third parties.

In addition, privacy and data protection are areas of increasing state legislative focus, and several states have recently enacted consumer privacy laws that impose significant compliance obligations with respect to personal information. For example, the Company is subject to the CCPA and its implementing regulations. The CCPA gives consumers the right to request disclosure of information collected about them, and whether that information has been sold or shared with others, the right to request deletion of personal information (subject to certain exceptions), the right to opt out of the sale of the consumer's personal information, and the right not to be discriminated against for exercising these rights. The CCPA contains several exemptions, including an exemption applicable to information that is collected, processed, sold, or disclosed pursuant to the Gramm-Leach-Bliley Act of 1999, as amended. In November 2020, voters in the CPRA, a ballot measure that amends and supplements the CCPA by, among other things, expanding certain rights relating to personal information and its use, collection, and disclosure by covered businesses. The key provisions of the CPRA became effective on January 1, 2023, with civil and administrative enforcement of the CPRA beginning July 1, 2023. Similar laws may in the future be adopted by other states where the Company does business. The Company has made and will make operational adjustments in accordance with the requirements of the CCPA and other state privacy laws. Furthermore, privacy and data protection areas are expected to receive further attention at the federal level. The potential effects of state or federal privacy and data protection laws on the Company's business cannot be determined at this time and will depend both on whether such laws are adopted by states in which the Company does business and/or at the federal level and the requirements imposed by any such laws.

Cybersecurity

The federal banking agencies have established certain expectations with respect to an institution's information security and cybersecurity programs, with an increasing focus on risk management, processes related to information technology and operational resiliency, and the use of third parties in the provision of financial services. In October 2016, the federal banking agencies jointly issued an advance notice of proposed rulemaking on enhanced cybersecurity risk-management and resilience standards that would address five categories of cyber standards which include (i) cyber risk governance, (ii) cyber risk management, (iii) internal dependency management, (iv) external dependency management, and (v) incident response, cyber resilience, and situational awareness. The federal banking agencies have not yet taken further action on these proposed standards.

State regulators have also been increasingly active in implementing privacy and cybersecurity standards and regulations. Recently, several states have adopted regulations requiring certain financial institutions to implement cybersecurity programs with detailed requirements, including data encryption requirements. Many states have also recently implemented or modified their data breach notification and data privacy requirements. We expect this trend of state-level cybersecurity regulation to continue and are continually monitoring developments in the states in which the Company operates.

In February 2018, the SEC published interpretive guidance to assist public companies in preparing disclosures about cybersecurity risks and incidents. These SEC guidelines, and any other regulatory guidance, are in addition to notification and disclosure requirements under state and federal banking law and regulations. In addition, on July 26, 2023, the SEC adopted new rules that require reporting in Current Reports on Form 8-K of material cybersecurity incidents. These new rules also require disclosures in Annual Reports on Form 10-K describing (i) the processes for assessing, identifying and managing material risks from cybersecurity threats, (ii) the material effects or reasonably likely material effects of risks from cybersecurity threats and previous cybersecurity incidents and (iii) the board of directors' oversight of risks from cybersecurity threats and management's role and expertise in assessing and managing material risks from cybersecurity threats.

In November 2021, the U.S. federal bank regulatory agencies adopted a rule regarding notification requirements for banking organizations related to significant computer security incidents. Under the final rule, a bank holding company, such as the Company, and an FDIC-supervised insured depository institution, such as the Bank, are required to notify the Federal Reserve or FDIC, respectively, within 36 hours of incidents that have materially disrupted or degraded, or are reasonably likely to materially disrupt or degrade, the banking organization's ability to deliver services to a material portion of its customer base, jeopardize the viability of key operations of the banking organization, or impact the stability of the financial sector.

Corporate Governance and Accounting

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

Deposit Insurance

The Bank's deposits are insured under the FDIA up to the maximum applicable limits and are subject to deposit insurance assessments designed to tie what banks pay for deposit insurance to the risks they pose. Under the FDIC's assessment system for determining payments to the DIF, large IDIs with more than \$10 billion in assets are assessed under a complex "scorecard" methodology that seeks to capture both the probability that an individual large IDI will fail and the magnitude of the impact on the DIF if such a failure occurs. The assessment base of a large IDI is its total assets less tangible equity. In addition, the FDIC must recover, by special assessment, losses to the FDIC deposit insurance fund as a result of the FDIC's use of the systemic risk exception to the least cost resolution test under the FDIA. For additional discussion of this special assessment, see the section entitled "Non-Interest Expense" under Item 7 below.

The Volcker Rule

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

Interchange Fees

The Company is subject to rules governing interchange fees, which establish standards for assessing whether the interchange fees that may be charged with respect to certain electronic debit transactions are "reasonable and proportional" to the costs incurred by issuers for processing such transactions.

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

Incentive Compensation

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

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

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

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

In October 2023, Nasdaq adopted a rule as required by the SEC's 2022 rule-making that requires listed companies to adopt policies mandating the recovery or "clawback" of excess incentive-based compensation earned by a current or former executive officer during the three fiscal years preceding a required accounting restatement, including to correct an error that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period. The excess compensation would be based on the amount the executive officer would have received had the incentive-based compensation been determined using the restated financials. Effective as of December 1, 2023, Columbia adopted a clawback policy in accordance with Nasdaq's listing standards.

Proposed Legislation

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

Effects of Government Monetary Policy

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

ITEM 1A. RISK FACTORS.

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

Risks Relating to our Operations

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

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

Due to the complexity and interconnectedness of information technology systems, the process of enhancing our systems can itself create a risk of systems disruptions and security issues. Additionally, we face the risk of operational disruption, failure, termination, or capacity constraints of any of the third parties that facilitate our business activities, including exchanges, clearing agents, clearing houses or other financial intermediaries. Such parties can also be the source of an attack on, or breach of, our operational systems. Failures, interruptions or security breaches in our information systems could damage our reputation, result in a loss of customer business, result in a violation of privacy or other laws, or expose us to civil litigation, regulatory fines or losses not covered by insurance, all of which could have a material adverse impact on our business, financial condition, results of operations and prospects. Further, as an investigation into a cyberattack is inherently unpredictable, it may take a significant amount of time for us to fully uncover the scope of and damage related to a cyberattack and develop an effective mitigation plan. During such time, damage related to a cyberattack may continue and communications to the public, customers, regulators, and other stakeholders may not be timely or accurate. Potential new regulations may require us to publicly disclose information about a cyberattack before the incident has been resolved or fully investigated.

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

As previously disclosed in the Company's Current Report on Form 8-K filed on June 27, 2023 and discussed in greater detail in Note 18 - Commitments and Contingencies, on June 21, 2023, Umpqua Bank was informed by one of its technology service providers (the "Vendor") that a widely reported security incident involving MOVEit, a widely-used filesharing software, resulted in the unauthorized acquisition by a third party of the names and social security numbers or tax identification numbers of certain of Umpqua Bank's consumer and small business customers. Umpqua Bank notified potentially affected customers of this incident and has worked with the Vendor to provide formal notification to affected customers with additional information and resources.

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

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

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

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

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

Furthermore, notwithstanding our prior acquisitions, we cannot provide any assurance as to the extent to which we can continue to grow through acquisitions as this will depend on the availability of prospective target opportunities at valuations we find attractive and other factors. Among other things, acquisitions by financial institutions are subject to approval by a variety of federal and state regulatory agencies. Regulatory approvals could be delayed, impeded, restrictively conditioned, or denied due to existing or new regulatory issues we have, or may have, with regulatory agencies.

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

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

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

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

The development and use of Artificial Intelligence ("AI") presents risks and challenges that may adversely impact our business.

We or our third-party (or fourth-party) vendors, clients or counterparties may develop or incorporate AI technology in certain business processes, services, or products. The development and use of AI present a number of risks and challenges to our business. The legal and regulatory environment relating to AI is uncertain and rapidly evolving, both in the U.S. and internationally, and includes regulatory schemes targeted specifically at AI as well as provisions in intellectual property, privacy, consumer protection, employment, and other laws applicable to the use of AI. These evolving laws and regulations could require changes in our implementation of AI technology and increase our compliance costs and the risk of noncompliance. AI models, particularly generative AI models, may produce output or take action that is incorrect, that result in the release of private, confidential, or proprietary information, that reflect biases included in the data on which they are trained, infringe on the intellectual property rights of others, or that is otherwise harmful. In addition, the complexity of many AI models makes it challenging to understand why they are generating particular outputs. This limited transparency increases the challenges associated with assessing the proper operation of AI models, understanding and monitoring the capabilities of the AI models, reducing erroneous output, eliminating bias, and complying with regulations that require documentation or explanation of the basis on which decisions are made. Further, we may rely on AI models developed by third parties, and, to that extent, would be dependent in part on the manner in which those third parties develop and train their models, including risks arising from the inclusion of any unauthorized material in the training data for their models, and the effectiveness of the steps these third parties have taken to limit the risks associated with the output of their models, matters over which we may have limited visibility. Any of these risks could expose us to liability or adverse legal or regulatory consequences and harm our reputation and the public perception of our business or the effectiveness of our security measures.

In addition to our use of AI technologies, we are exposed to risks arising from the use of AI technologies by bad actors to commit fraud and misappropriate funds and to facilitate cyberattacks. AI, if used to perpetrate fraud or launch cyberattacks, could create panic at a particular financial institution or exchange, which could pose a threat to financial stability.

Risks Relating to our Merger with UHC

Combining Columbia and UHC may be more difficult, costly, or time-consuming than expected, and Columbia may fail to realize the anticipated benefits of the Merger.

The success of the Merger, which closed in early 2023, depends, in part, on the ability to realize the anticipated cost savings from combining the businesses of Columbia and UHC. To realize the anticipated benefits and cost savings from the Merger, Columbia and UHC must successfully integrate and combine their businesses in a manner that permits those cost savings to be realized without adversely affecting current revenues and future growth. If we are not able to successfully achieve these objectives, the anticipated benefits of the Merger may not be realized fully or at all or may take longer to realize than expected. In addition, the actual cost savings of the Merger could be less than anticipated, and integration may result in additional and unforeseen expenses.

While Columbia has realized \$143 million in annualized cost-savings due to the merger as of December 31, 2023, exceeding its original \$135 million target, an inability to maintain the full extent of these cost savings following the Merger, as well as any delays encountered in the integration process, could have an adverse effect upon the revenues, levels of expenses and operating results of the combined company, which may adversely affect the value of our common stock.

It is possible that the integration process could result in the loss of key employees, the disruption of each company's ongoing businesses or inconsistencies in standards, controls, procedures, and policies that adversely affect the companies' ability to maintain relationships with clients, customers, depositors, and employees or to achieve the anticipated benefits and cost savings of the Merger. Integration efforts between the companies may also divert management attention and resources. These integration matters could have an adverse effect on the combined company for an undetermined period after completion of the Merger.

The Company may be unable to retain legacy personnel successfully.

The success of the Merger will depend in part on the Company's ability to retain the talents and dedication of key employees. It is possible that these employees, including key employees, may decide not to remain with the Company. If the Company is unable to retain key employees, including management, who are critical to the successful future operations of the combined company, the Company could face disruptions in its operations, loss of existing customers, loss of key information, expertise or know-how and unanticipated additional recruitment costs. If key employees terminate their employment, the Company's business activities may be adversely affected and the Company may not be able to locate or retain suitable replacements.

Interest Rate and Credit Risks

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

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

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

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

While our loan portfolio is diversified across business sectors, it is concentrated in commercial real estate and commercial business loans. These types of loans generally are viewed as having more risk of default than residential real estate loans or certain other types of loans or investments. In fact, the FDIC has issued pronouncements alerting banks of its concern about significant loan concentrations. Commercial real estate valuations can be materially affected over relatively short periods of time by changes in business climate, economic conditions, interest rates, and, in many cases, the results of operations of businesses and other occupants of the real property. Emerging and evolving factors such as the shift to work-from-home or hybrid-work arrangements, changing consumer preferences (including online shopping), and resulting changes in occupancy rates as a result of these and other trends can also impact such valuations over relatively short periods. Because our loan portfolio contains commercial real estate and commercial business loans with relatively large balances, the deterioration of one or a few of these loans may cause a significant increase in our non-performing loans. An increase in non-performing loans could result in a loss of earnings from these loans, an increase in the provision for loan losses, or an increase in loan charge-offs, any of which would have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects.

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

As of December 31, 2023, 75% of our total gross loans were secured by real estate. Any renewed downturn in the economies or real estate values in the markets we serve could have a material adverse effect on both borrowers' ability to repay their loans and the value of the real property securing such loans. Commercial real estate mortgage loans, which comprise a significant portion of our loan portfolio, generally involve a greater degree of credit risk than residential real estate mortgage loans because they typically have larger balances and are more affected by adverse conditions in the economy. Because payments on loans secured by commercial real estate often depend upon the successful operation and management of the properties and the businesses which operate from within them, repayment of such loans may be affected by factors outside the borrower's control, such as adverse conditions in the real estate market or the economy or changes in government regulations. Following the COVID-19 pandemic there has been an evolution of various remote work options which could impact the long-term performance of some types of office properties within our commercial real estate portfolio. Accordingly, the federal banking regulatory agencies have expressed concerns about weaknesses in the current commercial real estate market. Our ability to recover on defaulted loans would then be diminished, and we would be more likely to suffer losses on defaulted loans, any or all of which would have an adverse impact, which could be material, on our business, financial condition, results of operations and prospects.

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

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

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

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

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

Fluctuating interest rates could adversely affect our business.

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

Further, our profitability is dependent to a large extent upon net interest income, which is the difference (or "spread") between the interest earned on loans, securities and other interest-earning assets and the interest paid on deposits, borrowings, and other interest-bearing liabilities. Because of the differences in maturities and repricing characteristics of our interest-earning assets and interest-bearing liabilities, changes in interest rates do not produce equivalent changes in interest income earned on interest-earning assets and interest paid on interest-bearing liabilities. Accordingly, fluctuations in interest rates could adversely affect our interest rate spread, and, in turn, our profitability. The Federal Reserve raised benchmark interest rates throughout 2023 and interest rates may remain elevated in response to economic conditions, particularly inflationary pressures. Increases in interest rates, to combat inflation or otherwise, may result in a change in the mix of noninterest and interest-bearing accounts, and may have otherwise unpredictable effects. For example, increases in interest rates may result in increases in the number of delinquencies, bankruptcies or defaults by clients and more non-performing assets and net charge-offs, decreases in deposit levels, decreases to the demand for interest rate-based products and services, including loans, and changes to the level of off-balance sheet market-based investments preferred by our clients, each of which may reduce our interest rate spread. Lower rates would continue to constrain our interest rate spread and adversely affect our business forecasts. We are unable to predict changes in interest rates, which are affected by factors beyond our control, including inflation, deflation, recession, unemployment, money supply and other changes in financial markets.

Reform of interest rate benchmarks and the use of alternative reference rates by us and our clients could adversely affect our business, financial condition, and results of operations.

Certain alternative reference rates appear to have gained acceptance among market participants as benchmarks in debt securities, loans, and other financial instruments. However, interest rate benchmark reforms may have unexpected adverse consequences that could be contrary to market expectations. Alternative reference rates may be based upon indices, and may have characteristics, different from the benchmarks they replace. In some cases, financial instruments may perform less predictably after alternative reference rates have replaced the original benchmarks. Further, given the limited performance and historical data of new alternative rates, there can be no assurance that: (i) any of the new rates will be similar to, perform the same as, produce the economic equivalent of, or be an adequate substitute for the benchmarks that they replace; or (ii) any particular use of hedges will be effective.

In addition, we may be adversely impacted by the use of alternative reference rates as a result of our business activities and our underlying operations. We utilize reference rates in a variety of agreements and instruments and are responsible for the use of reference rates in a variety of capacities, as well as in our operational functions. We could be subject to claims from customers, counterparties, investors, or regulators alleging that we did not correctly discharge our responsibilities in interpreting and implementing contractual interest rate provisions or in selecting new alternative reference rates. These types of claims could subject us to increased legal and operational expenses and could damage our reputation.

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

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

We may be required, in the future, to recognize a credit loss with respect to investment securities.

Our securities portfolio currently includes securities with unrecognized losses. As of December 31, 2023, gross unrealized losses in our securities portfolio were \$488.1 million. We may continue to observe declines in the fair market value of these securities. Securities issued by certain states and municipalities may come under scrutiny due to concerns about credit quality. Although management believes the credit quality of the Company's state and municipal securities portfolio to be good, there can be no assurance that the credit quality of these securities will not decline in the future. We evaluate the securities portfolio for any securities with an associated credit loss each reporting period, as required by GAAP in the United States. There can be no assurance, however, that future evaluations of the securities portfolio will not require us to recognize credit losses with respect to these and other holdings. For example, it is possible that government-sponsored programs to allow mortgages to be refinanced to lower rates could materially adversely impact the yield on our portfolio of mortgage-backed securities, since a significant portion of our investment portfolio is composed of such securities.

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

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

Funding and Liquidity Risks

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

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

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

Deposits are a critical source of funds for our continued growth and profitability.

Our ability to continue to grow depends primarily on our ability to successfully attract deposits to fund loan growth. Core deposits are a low cost and generally stable source of funding and a significant source of funds for our lending activities. Our inability to retain or attract such funds could adversely affect our liquidity. If we are forced to seek other sources of funds, such as additional brokered deposits or borrowings from the FHLB, the interest expense associated with these other funding sources are now and may be higher than the rates we are currently paying on our deposits, which would adversely impact our net income, and such sources of funding may be more volatile and unavailable.

Rate fluctuations

Volatility in interest rates can also result in the flow of funds away from financial institutions into investments such as United States government and corporate securities and other investment vehicles (including mutual funds) that generally pay higher rates of return than financial institutions in part because of the absence of federal insurance premiums. This may cause the Bank to lose some of its low-cost deposit funding. Customers may also continue to move noninterest-bearing deposits into interest-bearing accounts, which increases overall deposit costs. Higher funding costs may reduce the Company's net interest margin and net interest income. A prolonged period of high or increasing interest rates may cause the Company to experience an acceleration of deposit migration, which could adversely affect the Company's operations and liquidity. This risk is exacerbated by technological developments and trends in customer behavior, including the ease and speed with which deposits may be transferred electronically, particularly by a growing number of customers who maintain accounts with multiple banks.

Loss of customer deposits could increase the Company's funding costs.

The Company relies on bank deposits to be a low-cost and stable source of funding. The Company competes with banks and other financial services companies for deposits. Increases in short-term interest rates since March 2022 have resulted in and are expected to continue to result in more intense competition in deposit pricing. Competition and increasing interest rates have caused the Company to increase the interest rates it pays on deposits. If the Company's competitors raise the interest rates they pay on deposits, the Company's funding costs may increase, either because the Company raises the interest rates it pays on deposits to avoid losing deposits to competitors or because the Company loses deposits to competitors and must rely on more expensive sources of funding. Higher funding costs reduce the Company's net interest margin and net interest income.

Checking and savings account balances and other forms of customer deposits may decrease when customers perceive alternative investments, such as the stock market, as providing a better risk-adjusted return. When customers move money out of bank deposits and into other investments, the Company may lose a relatively low-cost source of funds, increasing the Company's funding costs and reducing the Company's net interest income. In addition, mass withdrawals of deposits occurred at certain banks that failed in 2023, seemingly triggered by losses in such bank's investment securities portfolios and concerns about uninsured and uncollateralized deposits. A loss in the value of the Company's investment or loan portfolio, perceived concerns regarding the Company and Bank's capital positions or perceived concerns regarding the level of the Bank's uninsured and uncollateralized deposits could cause rapid and significant deposit outflows. This risk could be exacerbated by technological developments and changes in banking relationships, such as customers maintaining accounts at multiple banks, which increase the ease and speed with which depositors are able to move their deposits, as well as by the way information, including false information or unfounded rumors, can be spread quickly through social media and other online channels. If the Bank were to experience a significant outflow of deposits, the Company may face significantly increased funding costs, suffer significant losses and have a significantly reduced ability to raise new capital.

The Company could lose access to sources of liquidity if it were to experience financial or regulatory issues.

The Company relies on sources of liquidity provided by the Federal Reserve Bank, such as the Federal Reserve Bank discount window and other liquidity facilities that the Federal Reserve Board may establish from time to time, as well as liquidity provided by the FHLB. To access these sources of liquidity, the Federal Reserve Board or FHLB may impose conditions that the Company and the Bank are in sound financial condition (as determined by the Federal Reserve Board or FHLB) or that the Company and Bank maintain minimum supervisory ratings. If the Company or Bank were to experience financial or regulatory issues, it could affect the ability to access liquidity facilities, including at times when the Company or Bank needs additional liquidity for the operation of its business. If the Company or Bank were to lose access to these liquidity sources, it could have a material adverse effect on the Company's operations and financial condition.

Legal, Accounting and Compliance Risks

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

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

If we fail to maintain appropriate levels of capital or liquidity, we could become subject to formal or informal enforcement actions that may impose restrictions on our business, including limiting our lending activities or our ability to expand, requiring us to raise additional capital (which may be dilutive to shareholders) or requiring regulatory approval to pay dividends or otherwise return capital to shareholders. We also face the risk of becoming subject to new or more stringent requirements in connection with the introduction of new regulations or modifications of existing regulations, which could require us to hold more capital or liquidity or have other adverse effects on our business or profitability.

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

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

Changes in accounting standards could materially impact our financial statements.

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

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

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

Financial holding company status.

Financial holding companies are allowed to engage in certain financial activities in which a bank holding company is not otherwise permitted to engage. However, to maintain financial holding company status, a bank holding company (and all of its depository institution subsidiaries) must be "well capitalized" and "well managed." If a bank holding company ceases to meet these capital and management requirements, there are many penalties it would be faced with, including the FRB may impose limitations or conditions on the conduct of its activities, and it may not undertake any of the broader financial activities permissible for financial holding companies or acquire a company engaged in such financial activities without prior approval of the FRB. If a company does not return to compliance within 180 days, which period may be extended, the FRB may require divestiture of that company's depository institutions. To the extent we do not meet the requirements to be a financial holding company in the future, there could be a material adverse effect on our business, financial condition, and results of operations.

Risks Relating to Markets and External Events

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

Our business is directly impacted by factors such as economic, political and market conditions, broad trends in industry and finance, changes in government monetary and fiscal policies and inflation, foreign policy, and financial market volatility, all of which are beyond our control. Global economies continue to face significant challenges to achieving normalized economic growth rates. Any renewed deterioration in the economies of the nation as a whole or in our markets would have an adverse effect, which could be material, on our business, financial condition, results of operations and prospects, and could also cause the market price of our stock to decline. If recessionary economic conditions or an economic downturn develop, they would likely have a negative financial impact across the financial services industry, including on us. If these conditions are more severe, the extent of the negative impact on our business and financial performance can increase and be more severe, including the adverse effects listed above and discussed throughout this "Risk Factors" section.

Supply chain constraints, robust demand and labor shortages have led to persistent inflationary pressures throughout the economy. Volatility and uncertainty related to inflation and the effects of inflation, which may lead to increased costs for businesses and consumers and potentially contribute to poor business and economic conditions generally, may also enhance or contribute to some of the risks discussed herein. For example, higher inflation, or volatility and uncertainty related to inflation, could reduce demand for our products, adversely affect the creditworthiness of our borrowers, result in lower values for our investment securities and other interest-earning assets, and increase expense related to talent acquisition and retention.

Additionally, economic conditions, financial markets and inflationary pressures may be adversely affected by the impact of current or anticipated geopolitical uncertainties, military conflicts, including those in the Middle East and Russia's invasion of Ukraine, pandemics, and global, national, and local responses thereto by governmental authorities and other third parties. These unpredictable events could create, increase, or prolong economic and financial disruptions and volatility that adversely affect our business, financial condition, capital, and results of operations.

Substantial competition in our market areas could adversely affect us.

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

Climate change concerns could adversely affect our business, affect client activity levels, and damage our reputation.

Concerns over the long-term impacts of climate change have led and will continue to lead to governmental efforts around the world to mitigate those impacts. Consumers and businesses are also changing their behavior and business preferences as a result of these concerns. New governmental regulations or guidance relating to climate change, as well as changes in consumers' and businesses' behaviors and business preferences, may affect whether and on what terms and conditions we will engage in certain activities or offer certain products or services. The governmental and supervisory focus on climate change could also result in our becoming subject to new or heightened regulatory requirements relating to climate change, such as requirements relating to operational resiliency or stress testing for various climate stress scenarios. Any such new or heightened requirements could result in increased regulatory, compliance or other costs or higher capital requirements. In connection with the transition to a low carbon economy, legislative or public policy changes and changes in consumer sentiment could negatively impact the businesses and financial condition of our clients, which may decrease revenues from those clients and increase the credit risk associated with loans and other credit exposures to those clients. Our business, reputation, and ability to attract and retain employees may also be harmed if our response to climate change is perceived to be ineffective or insufficient.

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

A major catastrophe, such as an earthquake, tsunami, flood, fire, or other natural disaster, including those caused or exacerbated by climate change, public health issues such as the COVID-19 or other pandemics, or other events beyond our control, could result in a prolonged interruption of our business. For example, our headquarters is located in Tacoma, Washington and we have operations throughout the western United States, a geographical region that has been or may be affected by earthquakes, wildfires, tsunamis, and flooding activity. Because we primarily serve individuals and businesses in our eight-state footprint, a natural disaster likely would have a greater impact on our business, operations, and financial condition than if our business were more geographically diverse throughout the United States. The occurrence of any of these natural disasters could negatively impact our performance by disrupting our operations or the operations of our customers, which could have a material adverse effect on our financial condition, results of operations and cash flows.

Risks Relating to Investment in our Stock

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

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

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

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

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

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

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 1C. CYBERSECURITY.

Risk Management and Strategy

We recognize the importance of assessing, identifying, and managing material risks associated with cybersecurity threats, as such term is defined in Item 106(a) of Regulation S-K. We believe these risks include, among other things, operational risks resulting in system disruption; intellectual property theft; fraud; extortion; harm to associates or customers including by way of inadvertent release of information; violation of privacy or security laws and other litigation and legal risk; and reputational risks. We have implemented several cybersecurity processes, technologies, and controls to aid in our efforts to assess, identify, and manage such material risks. We have invested in data security and privacy protections, and we follow what we believe to be industry-standard recommendations for data security. However, if we fail to properly assess and identify cybersecurity threats, we may become increasingly vulnerable to such risks.

To identify and assess material risks from cybersecurity threats, our corporate risk management program considers cybersecurity threat risks alongside other Company risks as part of our overall risk assessment process. Our corporate risk professionals collaborate with subject matter specialists, as necessary, to gather insights for identifying and assessing material cybersecurity threat risks, their severity, and potential mitigations. We employ a range of tools and services, including programs across identity and access management, training and awareness, threat management, cybersecurity operations, cybersecurity enablement, and cybersecurity data, host, and network security. This includes regular network and endpoint monitoring, vulnerability assessments, penetration testing, and tabletop exercises to inform our professionals' risk identification and assessment.

We also have a cybersecurity-specific risk assessment process, which helps identify our cybersecurity threat risks by comparing our processes to standards set by the Federal Financial Institutions Examination Council's Cybersecurity Assessment Tool. These standards are aligned to the National Institute of Standards and Technology ("NIST"), International Organization for Standardization, Center for Internet Security, and experts are engaged by us to evaluate the integrity of our information systems, as such term is defined in Item 106(a) of Regulation S-K.

To help us preserve the availability of critical data and systems, maintain regulatory compliance, and achieve our goal of managing our material risks from cybersecurity threats, and with an aim to protect against, detect, and respond to cybersecurity incidents, as such term is defined in Item 106(a) of Regulation S-K, we undertake the below listed activities:

- Closely monitor emerging data protection laws and implement changes to our processes designed to comply with such data protection laws;
- Undertake regular reviews of our policies and standards related to cybersecurity;
- Proactively inform our customers of substantive changes related to customer data handling;
- Conduct annual customer data handling and use requirements training for associates;
- Conduct annual cybersecurity management and incident training for associates involved in our systems and processes that handle sensitive data;
- Conduct regular cybersecurity training and awareness for all associates and all contractors with access to corporate systems;
- Through policy, practice, and contract (as applicable) require associates, as well as third-parties who provide services on our behalf, to treat customer information and data with care;
- Run tabletop exercises to simulate a response to a cybersecurity incident and use the findings to improve our processes and technologies;
- Leverage the NIST incident handling framework to help us identify, protect, detect, respond, and recover when there is an actual or potential cybersecurity incident; and
- Maintain what we believe to be customary and appropriate third-party information security coverage for incident loss mitigation.

We also maintain an incident response plan designed to coordinate the activities we take with a goal to prepare for, detect, respond to, and recover from cybersecurity incidents, which include processes to triage, assess severity for, escalate, contain, investigate, and remediate the incident, as well as to comply with potentially applicable legal obligations and mitigate brand and reputational damage.

As part of the above processes, we regularly engage with regulatory examiners, internal and external auditors, and other third-parties, as well as a regular review by both our technology risk management team and corporate risk management team to help identify areas for continued focus, improvement and/or compliance.

Our processes also aim to address cybersecurity threat risks associated with our use of third-party service providers, including those in our supply chain or who have access to our customer and employee data or our systems. Third-party risks are included within our enterprise risk management assessment program, as well as our cybersecurity-specific risk identification program, both of which are discussed above. In addition, cybersecurity considerations affect the selection and oversight of our third-party service providers. We perform diligence on third parties that have access to our systems, data or facilities that house such systems or data, and monitor cybersecurity threat risks identified through such diligence. Additionally, we generally require those third parties that could introduce significant cybersecurity risk to us to agree by contract to manage their cybersecurity risks in specified ways, and to agree to be subject to cybersecurity audits, which we conduct as appropriate.

As disclosed above, we have implemented several cybersecurity processes, technologies, and controls to aid in our efforts to assess, identify, and manage material risks associated with cybersecurity threats, as such term is defined in Item 106(a) of Regulation S-K. However, any failure in, or unauthorized access to, our information systems, as such term is defined in Item 106(a) of Regulation S-K, could disrupt our business, result in unintentional disclosure or misuse of confidential or proprietary information, damage our reputation, increase our costs and cause losses, and have a material adverse effect on our business, financial condition, results of operations and prospects. Failures, interruptions, or data breaches involving our information systems, or the information systems of our vendors, could damage our reputation, result in a loss of customer business, result in a violation of privacy or other laws, or expose us to civil litigation, regulatory fines or losses not covered by insurance, all of which could have a material adverse impact on our business, financial condition, results of operations and prospects.

As of the date of this Annual Report on Form 10-K, we do not believe that any risks from cybersecurity threats have materially affected or are reasonably likely to materially affect us, including our business strategy, results of operations, or financial condition. The expenses we have incurred from cybersecurity incidents, including the Vendor Incident have been immaterial to date. Nevertheless, we also believe risks from certain cybersecurity threats, including as a result of our previously disclosed Vendor Incident could potentially result in charges, settlements or other potential liabilities that could materially affect our business strategy, results of operations, and financial condition, depending on the outcome of pending lawsuits as discussed further below.

As previously disclosed, on June 21, 2023, our wholly-owned subsidiary Umpqua Bank was informed by one of its technology service providers (the "Vendor") that a widely reported security incident involving MOVEit, a filesharing software used globally by government agencies, enterprise corporations, and financial institutions, resulted in the unauthorized acquisition by a third-party of the names and social security numbers or tax identification numbers of certain of Umpqua Bank's consumer and small business customers (the "Vendor Incident"). Other than the information described above, no Umpqua Bank account information was compromised as a result of the Vendor Incident, and no information from Umpqua Bank's commercial customers was involved in the Vendor Incident. On June 22, 2023, Umpqua Bank sent an email to potentially affected consumer and small business customers informing them of the Vendor Incident. In August 2023, the Vendor, on behalf of Umpqua Bank, also sent notice via U.S. mail to the 429,252 Umpqua Bank customers whose information was involved in the Vendor Incident.

As previously disclosed, beginning on August 18, 2023, some of the notified individuals filed lawsuits against Umpqua Bank in various federal and state courts seeking monetary recovery and other relief on behalf of themselves and one or more putative classes of other individuals similarly situated. The cases collectively allege claims for negligence, negligence per se, breach of contract, breach of implied contract, breach of third-party beneficiary contract, breach of fiduciary duty, invasion of privacy, breach of the covenant of good faith and fair dealing, unjust enrichment and violation of certain statutes, namely the Washington Consumer Protection Act, the California Consumer Legal Remedies Act, the California Consumer Privacy Act, and the California Unfair Competition Law. Umpqua Bank has engaged defense counsel and intends to vigorously defend against these suits and any similar or related suits or claims. Umpqua Bank has notified relevant insurance carriers and business counterparties and continues to reserve all of its relevant rights to indemnity, defense, contribution, and other relief in connection with these matters. We cannot predict or determine the timing or outcome of these lawsuits or the impact they may have, if any, on our financial condition, results of operations or cash flows. We believe that if one or more outcomes that are determined in favor of the plaintiffs in the litigation arising from the Vendor Incident it could have a material adverse effect on our business, operations, or financial results.

Separately and as previously disclosed, Umpqua Bank experienced an on-premises MOVEit security incident in May 2023. The on-premises instance was removed from the network immediately and decommissioned, and the unauthorized actor did not obtain any customer information or Umpqua Bank data. An independent forensics firm was engaged and confirmed our assessment of this on-premises MOVEit incident, which did not cause any interruption of business operations. We do not currently believe the on-premises incident will have a material adverse effect on our business, operations, or financial results.

Cybersecurity Governance

Cybersecurity is an important part of our risk management processes and an area of increasing focus for our Board and management.

Our Board of Director's Enterprise Risk Management Committee (the "ERMC") is responsible for the oversight of risks from cybersecurity threats. At least annually, the ERMC receives an overview from management of our cybersecurity threat risk management and strategy processes covering topics such as anticipated emerging threats, cybersecurity posture, progress towards predetermined risk-mitigation-related goals, and material cybersecurity threat risks or incidents and developments, as well as the steps management has taken to respond to such risks. In such sessions, the ERMC generally receives materials including a cybersecurity scorecard and other materials indicating current and emerging cybersecurity threat risks, and describing the Company's ability to mitigate those risks, and discusses such matters with our Chief Information Security Officer, Chief Information Officer, and Chief Privacy and Information Risk Officer. Members of the ERMC are also encouraged to regularly engage in ad hoc conversations with management on cybersecurity-related news events and discuss any updates to our cybersecurity risk management and strategy programs. Material cybersecurity threat risks are also considered during separate Board meeting discussions of important matters like enterprise risk management, operational budgeting, business continuity planning, mergers and acquisitions, brand management, and other relevant matters.

Our cybersecurity risk management and strategy processes, which are discussed in greater detail above, are led by our Chief Information Security Officer and Chief Privacy and Information Risk Officer. Such individuals have collectively over 40 years of prior work experience in various roles involving managing information security, developing cybersecurity strategy, implementing effective information and cybersecurity programs. They also have several relevant degrees and certifications, including Certified Information Security Manager, Certified Information Systems Auditor, Certified Information Systems Security Professional, Global Information Assurance Certification, and Certified Professional Hacker.

These members of management are informed about and monitor the prevention, mitigation, detection, and remediation of cybersecurity incidents through their management of, and participation in, the cybersecurity risk management and strategy processes described above, including the operation of our incident response plan. As discussed above, these members of management report to the ERMC about cybersecurity threat risks, among other cybersecurity related matters, at least annually.

ITEM 2. PROPERTIES.

The Company's principal properties include our corporate headquarters which is located at 13th & A Street, Tacoma, Washington and leased corporate office space in Lake Oswego, Oregon.

As of December 31, 2023, the Company had the following properties located throughout several counties in Oregon, Washington, California, Idaho, Nevada, Colorado, Arizona, and Utah:

	Owned Properties	Leased Properties	Total Properties
Customer-facing locations	169	149	318
Administrative locations	7	23	30
Total locations	176	172	348

ITEM 3. LEGAL PROCEEDINGS.

The information required by this item is set forth in Part II, Item 8 under Note 18 - Commitments and Contingencies—Legal Proceedings and Regulatory Matters, and incorporated herein by reference.

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.

(a) Our common stock is traded on the Nasdaq Stock Market LLC under the symbol "COLB." As of December 31, 2023, our common stock was held by 5,345 shareholders of record, a number that does not include beneficial owners who hold shares in "street name," or shareholders from previously acquired companies that have not exchanged their stock. As of December 31, 2023, a total of 1.7 million shares of unvested restricted stock units and awards were outstanding.

The payment of future cash dividends is at the discretion of our Board and subject to a number of factors, including results of operations, general business conditions, growth, financial condition, and other factors deemed relevant by the Board. Further, our ability to pay future cash dividends is subject to certain regulatory requirements and restrictions discussed in the *Supervision and Regulation* section in Item 1 above.

- (b) Not applicable.
- (c) The following table provides information about repurchases of common stock by the Company during the quarter ended December 31, 2023:

Period	Total number of Common Shares Purchased ⁽¹⁾	A ^c Co	verage Price Paid per ommon Share	Total Number of Shares Purchased as Part of Publicly Announced Plan (2)	Maximum Dollar Value of Shares that May be Purchased at Period End under the Plan
10/01/23 - 10/31/23	8,142	\$	19.56	_	\$
11/01/23 - 11/30/23	301	\$	20.52	_	\$ —
12/01/23 - 12/31/23	364	\$	27.18		\$
Total for quarter	8,807	\$	19.90	_	

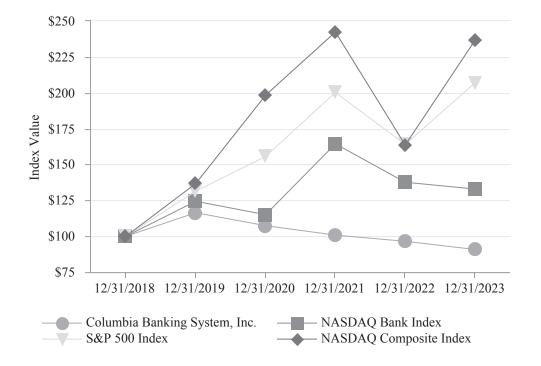
- Common shares repurchased by the Company during the quarter consist of cancellation of 8,807 shares to be issued upon vesting of restricted stock to pay withholding taxes. During the three months ended December 31, 2023, no shares were repurchased pursuant to the Company's publicly announced corporate stock repurchase plan described in (2) below.
- As of December 31, 2023, the Company does not have a current share repurchase authorization from the Board of Directors.

Restricted shares cancelled to pay withholding taxes totaled 261,000 and 120,000 shares during the years ended December 31, 2023 and 2022, respectively.

Information relating to compensation plans under which the Company's equity securities are authorized for issuance is set forth in "Part III—Item 12" of this Annual Report on Form 10-K.

Stock Performance Graph

The following chart, which is furnished as part of our annual report to shareholders and not filed, compares the yearly percentage changes in the cumulative shareholder return on our common stock during the five fiscal years ended December 31, 2023, with (i) the Nasdaq Composite Index, (ii) the Standard and Poor's 500 Index and (iii) the Nasdaq Bank Index. This comparison assumes \$100.00 was invested on December 31, 2018, in our common stock and the comparison indices, and assumes the reinvestment of all cash dividends prior to any tax effect and retention of all stock dividends. Price information from December 31, 2018 to December 31, 2023, was obtained by using the closing prices as of the last trading day of each year.



	Period Ending										
	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022	12/31/2023					
Columbia Banking System, Inc.	\$100.00	\$116.40	\$107.37	\$100.78	\$96.48	\$90.78					
Nasdaq Composite Index	\$100.00	\$136.73	\$198.33	\$242.38	\$163.58	\$236.70					
S&P 500 Index	\$100.00	\$131.47	\$155.65	\$200.29	\$163.98	\$207.04					
Nasdaq Bank Index	\$100.00	\$124.38	\$115.04	\$164.41	\$137.65	\$132.92					

ITEM 6. RESERVED

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

FORWARD LOOKING STATEMENTS AND RISK FACTORS

See the discussion of forward-looking statements and risk factors in Part I Item 1 and Item 1A of this Annual Report on Form 10-K.

The following discussion and analysis of our financial condition and results of operations constitutes management's review of the factors that affected our financial and operating performance for the years ended December 31, 2023 and 2022. This discussion should be read in conjunction with the consolidated financial statements and notes thereto contained elsewhere in this Annual Report on Form 10-K. Since the Merger was accounted for as a reverse acquisition, the Company's financial results for any periods prior to the Merger Date reflect UHC results only on a standalone basis, and all share and per-share data have been restated based on the exchange ratio from the Merger of 0.5958. Accordingly, for a discussion of the year ended December 31, 2021, including a comparison to the year ended December 31, 2022, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, on Umpqua Holding Corporation's Annual Report on Form 10-K for the year ended December 31, 2022, filed with the Securities and Exchange Commission on February 24, 2023.

EXECUTIVE OVERVIEW

Business Combination

• Columbia completed its previously announced merger with UHC on February 28, 2023. Promptly following the Merger, Columbia's wholly-owned bank subsidiary, Columbia State Bank, merged with and into UHC's wholly-owned bank subsidiary, Umpqua Bank, with Umpqua Bank surviving such merger. The Company acquired approximately \$19.2 billion in assets, including \$10.9 billion in loans measured at fair value and \$15.2 billion in deposits. The comparison of the year ended December 31, 2023 to prior periods is significantly impacted by the Merger. See Note 2 - Business Combination to the consolidated financial statements in Item 8. Financial Statements and Supplementary Data of this Annual Report on Form 10-K for further information regarding the Mergers.

Financial Performance

- Earnings per diluted common share were \$1.78 for the year ended December 31, 2023, compared to \$2.60 for the year ended December 31, 2023. The decrease for the year ended December 31, 2023, as compared to the prior period, reflects an increase in average diluted shares to 195.9 million for the year ended December 31, 2023, as compared to 129.7 million for the year ended December 31, 2022, due to shares issued on February 28, 2023 in connection with the Merger.
- Net income was \$348.7 million for the year ended December 31, 2023, as compared to \$336.8 million for the year ended December 31, 2022. The increase was primarily driven by higher interest income as a result of additional loans and securities acquired through the Merger and the favorable impact of higher interest rates on loan repricing, as well as higher non-interest income related to customers added through the Merger. The increase was partially offset by an increase in interest expense as a result of higher funding costs related to balances added through the Merger, deposit and liability mix shifting, and rising interest rates, as well as higher provision for credit loss largely due to the initial provision for historical Columbia non-PCD loans and higher non-interest expense due to the Merger. Net income in 2023 was also impacted by lower mortgage banking income following strategic business changes made in 2022 and reduced demand for single-family mortgage loans.

- Net interest margin, on a tax equivalent basis, was 3.91% for the year ended December 31, 2023, compared to 3.62% for the year ended December 31, 2022. The increase is primarily due to an increase in interest earning asset yields given upward interest rate movements, with the most impactful average rate increases in the loan and taxable securities categories, as well as ten months of purchase accounting accretion and amortization. These effects were partially offset by higher funding costs. Trends affecting net interest margin had a similar impact on net interest income, which increased to \$1.8 billion for the year ended December 31, 2023, compared to \$1.1 billion for the year ended December 31, 2022, partly reflecting a larger balance sheet for the year ended December 31, 2023 due to the Merger.
- Non-interest income was \$203.9 million for the year ended December 31, 2023, compared to \$199.5 million for the year ended December 31, 2022. The increase was primarily driven by increases in service charges on deposits, card-based fees, and financial services and trust revenue, due to ten months of the higher run rate for the combined organization, in addition to a favorable change in the fair value adjustment for certain loans held for investment of \$61.1 million, partially offset by a decrease in mortgage banking revenue driven by a \$34.8 million decrease related to origination and sales of residential mortgages and an unfavorable change of \$51.3 million related to fair value of the MSR asset.
- Non-interest expense was \$1.3 billion for the year ended December 31, 2023, compared to \$735.0 million for the year ended December 31, 2022. This reflects an increase in salaries and employee benefits of \$174.9 million, due to ten months of the higher expense run rate as a combined organization, an increase in merger-related expenses of \$154.3 million, an increase in intangible amortization of \$107.2 million due to the core deposit intangible asset associated with the Merger, and an increase in FDIC assessments of \$57.4 million largely driven by the \$32.9 million FDIC special assessment expense incurred during the fourth quarter of 2023.
- Total gross loans and leases were \$37.4 billion as of December 31, 2023, an increase of \$11.3 billion, or 43%, compared to December 31, 2022. The increase in total loans was primarily due to \$10.9 billion in loans acquired through the Merger, which offset the sale of \$743.9 million in loans during the year. The Bank is focused on generating business through customer relationships that drive balanced growth in loans, deposits, and core fee income.
- Total deposits were \$41.6 billion as of December 31, 2023, an increase of \$14.5 billion, or 54%, from December 31, 2022. The increase was primarily due to \$15.2 billion in deposits acquired in the Merger, partially offset by lower customer balances due primarily to the impact of inflation and market liquidity tightening. The deposit portfolio mix also reflects a migration from non-interest bearing to interest-bearing accounts and alternative investments, as customers evaluated the interest rate earned on excess cash balances in the higher interest rate environment.
- Total consolidated assets were \$52.2 billion as of December 31, 2023, compared to \$31.8 billion as of December 31, 2022. The increase was primarily due to \$19.2 billion in acquired assets as a result of the Merger, with the majority of the increase attributable to loans and investment securities. Refer to Note 2 Business Combination for more information pertaining to the completed Merger.

Credit Quality

• Non-performing assets increased to \$113.9 million, or 0.22% of total assets, as of December 31, 2023, compared to \$58.8 million, or 0.18% of total assets, as of December 31, 2022. Non-performing loans were \$112.9 million, or 0.30% of total loans and leases, as of December 31, 2023, compared to \$58.6 million, or 0.22% of total loans and leases, as of December 31, 2022. The increases in non-performing assets and non-performing loans reflects assets acquired in the Merger and a move toward a more normalized credit environment following a phase of exceptionally high-quality performance.

- The ACL was \$464.1 million, or 1.24% of loans and leases, as of December 31, 2023, an increase of \$148.7 million, as compared to \$315.4 million, or 1.21% of loans and leases, as of December 31, 2022. The increase in the ACL was due to loan portfolio growth, largely reflective of loans acquired through the Merger, and changes in the economic forecasts used in credit models. As a result of the Merger, the ACL increased by \$120.7 million, which reflects a \$32.3 million upward adjustment at closing with no impact to the statement of operations due to acquired PCD loans and acquired unfunded commitments, in addition to an \$88.4 million provision expense due to acquired non-PCD loans.
- The Company had a provision for credit losses of \$213.2 million for the year ended December 31, 2023, compared to a provision for credit losses of \$84.0 million in the prior year. The increase in provision expense for the year ended December 31, 2023 as compared to the prior year reflects the \$88.4 million initial provision for historical Columbia non-PCD loans related to the Merger, changes in the economic forecasts used in credit models, and portfolio migration trends. As a percentage of average outstanding loans and leases, the provision for credit losses for the year ended December 31, 2023 was 0.60%, as compared to 0.35% for the prior year.

Liquidity

- Total cash and cash equivalents were \$2.2 billion as of December 31, 2023, an increase of \$867.9 million from December 31, 2022. The increase is mainly due to an increase in borrowings to support short-term liquidity, as there was reduced available liquidity within the banking industry as a result of recent volatility in response to the bank failures in early 2023.
- Including secured off-balance sheet lines of credit, total available liquidity was \$18.7 billion as of December 31, 2023, representing 36% of total assets, 45% of total deposits, and 138% of uninsured deposits.

Capital and Growth Initiatives

- The Company realized \$143 million in annualized cost-savings due to the Merger as of December 31, 2023, exceeding our original \$135 million target.
- The Company's total risk-based capital ratio was 11.9% and its common equity tier 1 risk-based capital ratio was 9.6% as of December 31, 2023, as compared to 13.7% and 11.0%, respectively, as of December 31, 2022. The decline in regulatory capital ratios was primarily driven by initial fair value marks related to historical Columbia asset and liability balances added to the balance sheet as a result of the Merger, and we expect net capital accretion as purchase accounting marks accrete into income on a quarterly basis. Post-closing capital ratios, as reported for the quarter ended March 31, 2023, represented the low point for the year as regulatory capital ratios expanded thereafter as capital generated through earnings offset capital paid out to shareholders through dividends.
- The Company paid cash dividends of \$1.43 per common share during the year ended December 31, 2023.

FDIC Special Assessment

• In November 2023, the FDIC approved the final rule to impose a special assessment to recover the losses to the deposit insurance fund resulting from the closures of Silicon Valley Bank and Signature Bank. Under the final rule, the assessment base is the estimated uninsured deposits, as reported in Umpqua Bank and Columbia State Bank's December 31, 2022 Call Reports, excluding the first \$5 billion in estimated uninsured deposits, allocated in proportion to each Bank's estimated uninsured deposits. The FDIC will collect the special assessment at an annual rate of approximately 13.4 basis points over eight quarterly assessment periods beginning in the first quarterly assessment period of 2024. The company accrued \$32.9 million in the fourth quarter of 2023 related to the special assessment, which is included in non-interest expense on the Consolidated Statements of Operations.

CRITICAL ACCOUNTING ESTIMATES

In preparing the consolidated financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the balance sheet and revenues and expenses for the period. Actual results could differ significantly from those estimates.

The consolidated financial statements are prepared in conformity with GAAP and follow general practices within the financial services industry, in which the Company operates. This preparation requires management to make estimates, assumptions, and judgments that affect the amounts reported in the financial statements and accompanying notes. These estimates, assumptions, and judgments are based on information available as of the date of the financial statements; accordingly, as this information changes, actual results could differ from the estimates, assumptions, and judgments reflected in the financial statements. Certain estimates inherently have a greater reliance on the use of assumptions and judgments and, as such, have a greater possibility of producing results that could be materially different than originally reported.

Management believes the ACL, business combinations and goodwill estimates are important to the portrayal of the Company's financial condition and results of operations and requires difficult, subjective, or complex judgments and, therefore, management considers them to be critical accounting estimates.

Allowance for Credit Losses

The Bank has established an Allowance for Credit Losses Committee, which is responsible for, among other things, regularly reviewing the ACL methodology, including allowance levels, and ensuring that it is designed and applied in accordance with generally accepted accounting principles.

CECL is not prescriptive in the methodology used to determine the expected credit loss estimate. Therefore, management has flexibility in selecting the methodology. However, the expected credit losses must be estimated over a financial asset's contractual term, adjusted for prepayments, utilizing quantitative and qualitative factors.

The Company utilizes complex models to obtain reasonable and supportable forecasts of future economic conditions dependent upon specific macroeconomic variables related to each of the Company's loan and lease portfolios. Loans and leases deemed to be collateral-dependent are individually evaluated for loss based on the value of the underlying collateral or a discounted cash flow analysis.

The adequacy of the ACL is monitored on a regular basis and is based on management's evaluation of numerous factors, including: the CECL model outputs; quality of the current loan portfolio; the trend in the loan portfolio's risk ratings; current economic conditions; loan concentrations; loan growth rates; past-due and non-performing trends; evaluation of specific loss estimates for significant problem loans; historical charge-off and recovery experience; and other pertinent information. As of December 31, 2023, the Bank used Moody's Analytics' November 2023 baseline forecast to estimate the ACL. To assess the sensitivity in the ACL results and, when necessary, to inform qualitative adjustments, the Bank used a second scenario, Moody's Analytics' November 2023 S2 scenario, that differs in terms of severity. For additional information related to the Company's ACL, see Note 6 in the *Notes to Consolidated Financial Statements* in Item 8 of this Annual Report on Form 10-K.

Because current economic conditions and forecasts can change and future events are inherently difficult to predict, the anticipated amount of estimated credit losses on loans, and therefore the appropriateness of the ACL, could change significantly. It is difficult to estimate how potential changes in any one economic factor or input might affect the overall allowance because a wide variety of factors and inputs are considered in estimating the allowance and changes in those factors and inputs considered may not occur at the same rate and may not be consistent across all product types. Additionally, changes in factors and inputs may be directionally inconsistent, such that improvement in one factor may offset deterioration in others. Management believes that the ACL was adequate as of December 31, 2023.

Business Combinations

The Company accounts for business combinations using the acquisition method of accounting. Under this accounting method, the acquired company's assets and liabilities are recorded at fair value at the date of the acquisition, except as provided for by the applicable accounting guidance, and the results of operations of the acquired company are combined with the acquiree's results from the date of the acquisition forward. The difference between the purchase price and the fair value of

the net assets acquired (including identifiable intangible assets) is recorded as goodwill. Management uses significant estimates and assumptions to value such items, including projected cash flows, repayment rates, default rates and losses assuming default, discount rates, and realizable collateral values. The ACL for PCD loans is recognized within acquisition accounting. The ACL for non-PCD assets is recognized as provision for credit losses in the same reporting period as the acquisition. Fair value adjustments are amortized or accreted into the statement of operations over the estimated life of the acquired assets or assumed liabilities. The purchase date valuations and any subsequent adjustments determine the amount of goodwill recognized in connection with the acquisition. The use of different assumptions could produce significantly different valuation results, which could have material positive or negative effects on our results of operations.

The determination of fair values is based on valuations using management's assumptions of future growth rates, future attrition, discount rates, multiples of earnings or other relevant factors. In addition, the Company engages third-party specialists to assist in the development of fair values. Preliminary estimates of fair values may be adjusted for a period of time subsequent to the effective time of the acquisition if new information is obtained about facts and circumstances that existed as of the effective time of the acquisition that, if known, would have affected the measurement of the amounts recognized as of that date. Adjustments recorded during this period are recognized in the current reporting period.

Management uses various valuation methodologies to estimate the fair value of these assets and liabilities and often involves a significant degree of judgment, particularly when liquid markets do not exist for the particular item being valued. Examples of such items include loans, deposits, identifiable intangible assets, and certain other assets and liabilities.

Changes in these factors, as well as downturns in economic or business conditions, could have a significant adverse impact on the carrying value of assets, including goodwill and liabilities, which could result in impairment losses affecting our financial statements as a whole and our banking subsidiary in which the goodwill is recorded.

Goodwill

Goodwill is tested for impairment at the reporting unit level on an annual basis as of October 31 each year, and more frequently if events or circumstances indicate that there may be impairment. Goodwill impairment is determined by comparing the fair value of a reporting unit to its carrying amount. If the fair value of the reporting unit is less than its carrying value, the difference is the amount of impairment and goodwill is written down to the fair value of the reporting unit. The Company has a single reporting unit.

In testing goodwill, the Company may assess qualitative factors to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. In this qualitative assessment, the Company evaluates events and circumstances which may include, but are not limited to: the general economic environment; banking industry and market conditions; a significant adverse change in legal factors; significant decline in our stock price and market capitalization; unanticipated competition; the testing for recoverability of a significant asset group within the reporting unit; and an adverse action or assessment by a regulator.

If the quantitative impairment test is required or the decision to bypass the qualitative assessment is elected, the Company performs the goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, including goodwill. The determination of the fair value of a reporting unit is a subjective process that involves the use of estimates and judgments about economic and industry factors and the growth and earnings prospects of the Bank. Variability in the market and changes in assumptions or subjective measurements used to estimate fair value are reasonably possible and may have a material impact on our consolidated financial statements or results of operations.

Based on the results of the annual goodwill impairment test, it was determined that no goodwill impairment charges were required as our single reporting unit's fair value exceeded its carrying amount. As of December 31, 2023, we determined there were no events or circumstances which would more likely than not reduce the fair value of our reporting unit below its carrying amount.

RECENT ACCOUNTING PRONOUNCEMENTS

Information regarding Recent Accounting Pronouncements is included in Note 1 of the *Notes to Consolidated Financial Statements* in Item 8 below.

RESULTS OF OPERATIONS

As of December 31, 2023, Columbia's financial results for any periods ended prior to February 28, 2023, the Merger Date, reflect UHC results only on a standalone basis. Accordingly, Columbia's reported financial results for the first quarter of 2023 reflect only UHC financial results through the closing of the Merger. As a result of these two factors, Columbia's financial results for the year ended December 31, 2023, may not be directly comparable to prior or future reported periods.

Comparison of current year to prior year

For the year ended December 31, 2023, the Company had net income of \$348.7 million, compared to net income of \$336.8 million for the same period in the prior year. The increase was mainly attributable to an increase in net interest income, partially offset by increases in non-interest expense and the provision for credit losses. The increase in net interest income was due to higher loan interest income from increasing rates and higher average loan and lease balances, as well as the addition of historical Columbia portfolios. In addition to the favorable impact of higher interest rates, the increase in net interest income is due to the impact of purchase accounting accretion and amortization that was \$253.6 million for the year ended December 31, 2023. These increases were partially offset by higher funding costs. The increase in non-interest expense was mainly driven by higher salaries and employee benefits, merger-related expense, and intangible amortization, all of which were impacted by the Merger. The change in the provision was primarily due to the initial provision for historical Columbia non-PCD loans, in addition to changes in the economic forecasts used in credit models and portfolio migration trends.

The following table presents the return on average assets (GAAP), average common shareholders' equity (GAAP), and average tangible common shareholders' equity (non-GAAP) for the years ended December 31, 2023, 2022, and 2021. For each period presented, the table includes the calculated ratios based on reported net income. To the extent return on average common shareholders' equity is used to compare our performance with other financial institutions that do not have merger and acquisition-related intangible assets, we believe it is beneficial to also consider the return on average tangible common shareholders' equity. The return on average tangible common shareholders' equity is calculated by dividing net income by average shareholders' common equity less average goodwill and other intangible assets, net (excluding MSR). The return on average tangible common shareholders' equity is considered a non-GAAP financial measure and should be viewed in conjunction with the return on average common shareholders' equity.

Return on Average Assets, Common Shareholders' Equity and Tangible Common Shareholders' Equity

For the Years Ended December 31, 2023, 2022, and 2021:

(dollars in thousands)	2023	2022	2021
Return on average assets	0.70 %	1.09 %	1.39 %
Return on average common shareholders' equity	7.81 %	13.07 %	15.56 %
Return on average tangible common shareholders' equity	11.46 %	13.11 %	15.63 %
Calculation of average common tangible shareholders' equity:			
Average common shareholders' equity	\$ 4,466,725	\$ 2,575,577	\$ 2,700,711
Less: average goodwill and other intangible assets, net	1,423,075	6,847	12,057
Average tangible common shareholders' equity	\$ 3,043,650	\$ 2,568,730	\$ 2,688,654

Additionally, management believes tangible common equity and the tangible common equity ratio are meaningful measures of capital adequacy. Columbia believes the exclusion of certain intangible assets in the computation of tangible common equity and the tangible common equity ratio provides a meaningful base for period-to-period and company-to-company comparisons, which management believes will assist investors in analyzing the operating results and capital of the Company. Tangible common equity is calculated as total shareholders' equity less goodwill and other intangible assets, net (excluding MSR). In addition, tangible assets are total assets less goodwill and other intangible assets, net (excluding MSR). The tangible common equity ratio is calculated as tangible common shareholders' equity divided by tangible assets. Tangible common equity and the tangible common equity ratio are considered non-GAAP financial measures and should be viewed in conjunction with total shareholders' equity and the total shareholders' equity ratio.

The following table provides a reconciliation of ending shareholders' equity (GAAP) to ending tangible common equity (non-GAAP), and ending assets (GAAP) to ending tangible assets (non-GAAP) as of December 31, 2023, and 2022:

(dollars in thousands)	December 31, 2023	December 31, 2022
Total shareholders' equity	\$ 4,995,034	\$ 2,479,826
Subtract:		
Goodwill	1,029,234	_
Other intangible assets, net	603,679	4,745
Tangible common shareholders' equity	\$ 3,362,121	\$ 2,475,081
Total assets	\$52,173,596	\$31,848,639
Subtract:		
Goodwill	1,029,234	
Other intangible assets, net	603,679	4,745
Tangible assets	\$50,540,683	\$31,843,894
Total shareholders' equity to total assets ratio	9.57 %	7.79 %
Tangible common equity ratio	6.65 %	7.77 %

Non-GAAP financial measures have inherent limitations, are not required to be uniformly applied, and are not reviewed or audited. Although we believe these non-GAAP financial measures are frequently used by stakeholders in the evaluation of a company, they have limitations as analytical tools, and should not be considered in isolation or as a substitute for analyses of results as reported under GAAP.

NET INTEREST INCOME

Net interest income for 2023 increased by \$723.2 million or 68% compared to the same period in 2022, due primarily to a \$1.1 billion increase in loan interest income resulting from higher average rates and higher average loan and lease balances, attributable to the addition of historical Columbia portfolios and organic growth over the past year, as well as ten months of purchase accounting accretion and amortization, partially offset by a \$413.5 million increase in interest expense on deposits as a result of the higher rate environment and higher average balances in deposits, largely due to the Merger, and a \$234.0 million increase in term borrowings to support liquidity due to industry-wide deposit balance contraction, general liquidity management, and loan and lease growth that outpaced deposit growth during 2023 when acquired balances are excluded.

The net interest margin (net interest income as a percentage of average interest-earning assets) on a fully tax equivalent basis was 3.91% for 2023, an increase of 29 basis points compared to 2022. This increase primarily resulted from an increase in the average yields on interest-earning assets due to the higher rate environment and ten months of purchase accounting accretion and amortization, which more than offset correspondingly higher funding costs.

The yield on loans and leases for 2023 increased by 166 basis points as compared to 2022, primarily attributable to the rising interest rate environment and purchase accounting accretion and amortization related to the Merger.

The cost of interest-bearing liabilities increased 209 basis points for 2023, as compared to 2022, due to a higher mix of higher-cost time deposits and term borrowings, as well as rising interest rates driving up the cost of other deposits. Our net interest income is affected by changes in the amount and mix of interest-earning assets and interest-bearing liabilities, as well as changes in the yields earned on interest-earning assets and rates paid on deposits and borrowed funds.

The Federal Reserve increased the target range for the federal funds rate by 5.25% between March 2022 and July 2023, which marked the final increase to the federal funds rate to date during the current interest rate cycle. During that period, our net interest margin expanded as our asset sensitive balance sheet became increasingly profitable due to active rate increases by the Federal Reserve. Since the Federal Reserve ceased increasing the federal funds rate, we have experienced an increase in our funding costs that outpaces the increase in our earning asset yields as our deposits have continued to reprice higher and our funding base has experienced a shift toward higher-cost sources as Federal Reserve actions have reduced available liquidity within the banking industry. As a result, our net interest margin contracted from 3.93% in August 2023 to 3.63% in December 2023 due to the impact of higher funding costs and minimal change to the average yield on earning assets.

Our cost of funds in 2023 was significantly impacted by higher balances in non-core funding sources such as brokered deposits and term borrowings, which carry a higher rate of interest as compared to our core deposit funding base. These balances, along with higher balances in public funds, time deposits, and other higher-cost deposit categories contributed to an increase in our cost of interest bearing deposits and interest bearing liabilities to 2.71% and 3.15% in December 2023, from 1.97% and 2.72% in August 2023, respectively. The cost of interest bearing deposits and interest bearing liabilities as of December 31, 2023 (the "spot rate") was 2.75% and 3.19%, respectively, detailing that our cost of funds continued to increase through the month of December. Additional shifts in our funding mix will likely continue to pressure our cost of funds in 2024. Financial statement Note 13 – *Interest-Bearing Deposits* provides additional detail on the pricing characteristics of our time and brokered deposits scheduled to mature during 2024. As of December 31, 2023, we had approximately \$6.0 billion in time deposits, including \$2.6 billion in brokered time deposits, with a weighted average rate of 4.66% maturing in 2024.

The following table presents condensed average balance sheet information, together with interest income and yields on average interest-earning assets, and interest expense and rates paid on average interest-bearing liabilities for the years ended December 31, 2023, 2022, and 2021:

		2023			2022			2021	
(dollars in thousands)	Average Balance	Interest Income or Expense	Average Yields or Rates	is Interest Y Average Income or		Average Yields or Rates	Average Balance	Interest Income or Expense	Average Yields or Rates
INTEREST-EARNING ASSETS	S:								
Loans held for sale	\$ 87,675	\$ 3,871	4.42%	\$ 208,141	\$ 8,812	4.23%	\$ 500,070	\$ 15,149	3.03%
Loans and leases (1)	35,412,594	2,109,744	5.95%	24,225,518	1,041,446	4.29%	21,925,108	875,366	3.99%
Taxable securities	7,479,573	289,944	3.88%	3,343,721	72,702	2.17%	3,321,142	61,717	1.86%
Non-taxable securities (2)	740,376	28,236	3.81%	216,943	6,669	3.07%	248,256	7,458	3.00%
Temporary investments and interest-bearing cash	2,147,348	111,659	5.20%	1,561,808	19,706	1.26%	2,936,273	3,864	0.13%
Total interest earning assets (1)(2)	45,867,566	2,543,454	5.54%	29,556,131	1,149,335	3.88%	28,930,849	963,554	3.33%
Goodwill and other intangible assets	1,423,075			6,847			12,057		
Other assets	2,205,678			1,254,418			1,324,466		
Total assets	\$49,496,319			\$30,817,396			\$ 30,267,372		
INTEREST-BEARING LIABIL	ITIES:								
Interest-bearing demand deposits	\$ 6,280,333	\$ 97,162	1.55%	\$ 3,886,390	\$ 8,185	0.21%	\$ 3,462,035	\$ 1,865	0.05%
Money market deposits	9,962,837	185,035	1.86%	7,552,666	26,415	0.35%	7,624,707	5,964	0.08%
Savings deposits	2,994,333	3,384	0.11%	2,411,448	880	0.04%	2,200,608	729	0.03%
Time deposits	4,743,615	176,073	3.71%	1,743,988	12,715	0.73%	2,217,464	18,593	0.84%
Total interest-bearing deposits	23,981,118	461,654	1.93%	15,594,492	48,195	0.31%	15,504,814	27,151	0.18%
Repurchase agreements and federal funds purchased	269,853	3,923	1.45%	465,600	997	0.21%	454,994	280	0.06%
Borrowings	4,522,656	242,914	5.37%	226,665	8,920	3.94%	195,985	2,838	1.45%
Junior and other subordinated debentures	421,195	37,665	8.94%	399,568	19,889	4.98%	369,259	12,127	3.28%
Total interest-bearing liabilities	29,194,822	746,156	2.56%	16,686,325	78,001	0.47%	16,525,052	42,396	0.26%
Non-interest-bearing deposits	14,927,443			11,053,921			10,669,531		
Other liabilities	907,329			501,573			372,078		
Total liabilities	45,029,594			28,241,819			27,566,661		
Common equity	4,466,725			2,575,577			2,700,711		
Total liabilities and shareholders' equity	\$49,496,319			\$30,817,396			\$ 30,267,372		
NET INTEREST INCOME (2)		\$1,797,298			\$1,071,334			\$ 921,158	
NET INTEREST SPREAD (2)			2.98%			3.41%			3.07%
NET INTEREST INCOME TO EARNING ASSETS OR NET INTEREST MARGIN			3.91%			3.62%			3.18%

⁽¹⁾ Non-accrual loans and leases are included in the average balance.

Tax-exempt income has been adjusted to a tax equivalent basis at a 21% tax rate. The amount of such adjustment was an addition to recorded income of approximately \$4.1 million, \$1.3 million, and \$1.5 million for the years ended December 31, 2023, 2022, and 2021, respectively.

The following table sets forth a summary of the changes in tax equivalent net interest income due to changes in average asset and liability balances (volume) and changes in average rates (rate) for 2023 compared to 2022, as well as between 2022 and 2021. Changes in tax equivalent interest income and expense, which are not attributable specifically to either volume or rate, are allocated proportionately between both variances.

	2023	3 compared to	2022	2022 compared to 2021					
		ecrease) in into ense due to ch		Increase (decrease) in interest incon and expense due to changes in					
(in thousands)	Volume Rate Total		Volume	Rate	Total				
Interest-earning assets:									
Loans held for sale	\$ (5,304)	\$ 363	\$ (4,941)	\$ (10,935)	\$ 4,598	\$ (6,337)			
Loans and leases	581,254	487,044	1,068,298	97,290	68,790	166,080			
Taxable securities	133,038	84,204	217,242	422	10,563	10,985			
Non-taxable securities (1)	19,611	1,956	21,567	(959)	170	(789)			
Temporary investments and interest-bearing deposits	9,861	82,092	91,953	(2,612)	18,454	15,842			
Total interest-earning assets (1)	738,460	655,659	1,394,119	83,206	102,575	185,781			
Interest-bearing liabilities:									
Interest-bearing demand deposits	7,873	81,104	88,977	255	6,065	6,320			
Money market deposits	10,935	147,685	158,620	(57)	20,508	20,451			
Savings deposits	259	2,245	2,504	73	78	151			
Time deposits	48,352	115,006	163,358	(3,648)	(2,230)	(5,878)			
Repurchase agreements and federal funds purchased	(810)	3,736	2,926	348	369	717			
Borrowings	229,574	4,420	233,994	508	5,574	6,082			
Junior and other subordinated debentures	1,131	16,645	17,776	1,066	6,696	7,762			
Total interest-bearing liabilities	297,314	370,841	668,155	(1,455)	37,060	35,605			
Net increase in net interest income (1)	\$ 441,146	\$ 284,818	\$ 725,964	\$ 84,661	\$ 65,515	\$ 150,176			
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⁽¹⁾ Tax-exempt income has been adjusted to a tax equivalent basis at a 21% tax rate.

PROVISION FOR CREDIT LOSSES

The Company had a \$213.2 million provision for credit losses for 2023, as compared to an \$84.0 million provision for credit losses for 2022. The increase is primarily driven by the initial provision for historical Columbia non-PCD loans of \$88.4 million, changes in the economic forecast used in credit models, organic growth in the loan and lease portfolio, and portfolio migration trends. As a percentage of average outstanding loans and leases, the provision for credit losses recorded for 2023 was 0.60%, as compared to 0.35% for the prior period.

Net charge-offs were \$96.7 million for 2023, or 0.27% of average loans and leases, compared to net charge-offs of \$30.9 million, or 0.13% of average loans and leases, for 2022. The majority of net charge-offs relate to leases and equipment finance loans, included within the commercial loan portfolio.

Typically, loans in non-accrual status will not have an ACL as they will be written down to their net realizable value or charged off. However, the net realizable value for homogeneous leases and equipment finance agreements are determined by the loss given default calculated by the CECL model, and therefore homogeneous leases and equipment finance agreements on non-accrual will have an ACL amount until they become 181 days past due, at which time they are charged off. The non-accrual leases and equipment finance agreements of \$28.4 million as of December 31, 2023 have a related ACL of \$24.7 million, with the remaining loans written down to the estimated fair value of the collateral, less estimated costs to sell, and are expected to be resolved with no additional material loss, absent further decline in market prices.

NON-INTEREST INCOME

The following table presents the key components of non-interest income and the related dollar and percentage change for the years ended December 31, 2023 and 2022:

	2023 compared to 2022										
(dollars in thousands)		2023		2022		Change Amount	Change Percent				
Service charges on deposits	\$	65,525	\$	48,365	\$	17,160	35 %				
Card-based fees		55,263		37,370		17,893	48 %				
Financial services and trust revenue		13,471		90		13,381	nm				
Residential mortgage banking revenue, net		16,789		106,859		(90,070)	(84)%				
Gain on sale of debt securities, net		13		2		11	nm				
Gain (loss) on equity securities, net		2,300		(7,099)		9,399	(132)%				
Gain on loan and lease sales, net		4,414		6,696		(2,282)	(34)%				
Bank owned life insurance income		15,624		8,253		7,371	89 %				
Other income (loss)		30,528		(1,008)		31,536	nm				
Total non-interest income	\$	203,927	\$	199,528	\$	4,399	2 %				
nm = not meaningful and applies to percentages +/- 500%											

Service charges on deposits were impacted by a 46% increase in average deposits in 2023 compared to 2022, primarily due to the Merger, which resulted in an increase in service charges in 2023 compared to 2022 due to the higher volume of overall deposits as a combined company.

Card-based fees increased in 2023 compared to 2022 mainly due to the Merger and ten months of combined operations. The largest drivers in the increase were debit interchange fees and merchant processing fees, which were impacted by the higher volume of transactions associated with the larger client base as a combined company.

Financial services and trust revenue increased in 2023 compared to 2022, primarily due to the Merger and ten months of combined operations. The largest drivers in the increase were in brokerage service revenue related to wealth management and trust services based on increased volume with the larger client base.

Residential mortgage banking revenue decreased for 2023, compared to 2022. The variance was due to a net fair value loss of \$28.5 million related to the MSR asset for the year ended December 31, 2023, compared to a net fair value gain of \$22.8 million for the same period in 2022, which is net of MSR hedge losses of \$4.7 million for the current year compared to \$14.5 million in the prior year. In addition, revenue from origination and sale of mortgages decreased by \$34.8 million compared to the prior period due to a 76% decline in closed loan volume of for-sale mortgages. The Company undertook several strategic actions in 2022 and 2023 to restructure its mortgage business given lower mortgage origination volume in the higher rate environment and a focus on relationship banking that drives balanced growth in loans, deposits, and core fee income. These changes were intended to reduce expenses, limit the impact of fair value changes to the statement of operations, and moderate portfolio mortgage growth, and they include the sale of approximately one-third of the MSR portfolio in September 2023, which related to a non-relationship component of the serviced loan portfolio. This sale had a small contribution to the decrease in mortgage banking revenue during 2023 as servicing income declined in the fourth quarter of 2023 due to a smaller serviced loan portfolio. Due to the smaller portfolio of serviced loans, mortgage banking revenue is expected to be lower in 2024, consistent with the fourth quarter of 2023.

The following table presents our residential mortgage banking revenues for the years ended December 31, 2023 and 2022:

(dollars in thousands)	2023	2022
Origination and sale	\$ 11,881	\$ 46,712
Servicing	33,417	37,358
Change in fair value of MSR asset:		
Changes due to collection/realization of expected cash flows over time	(17,694)	(20,272)
Changes in valuation inputs or assumptions (1)	(6,122)	57,537
MSR hedge loss	 (4,693)	(14,476)
Residential mortgage banking revenue, net	\$ 16,789	\$ 106,859
Loans Held for Sale Production Statistics:		
Closed loan volume for-sale	\$ 441,568	\$ 1,839,466
Gain on sale margin	2.69 %	2.54 %

The changes in valuation inputs and assumptions principally reflect changes in discount rates and prepayment speeds, which are primarily affected by changes in interest rates.

Other income (loss) in 2023 compared to 2022 increased primarily due to a favorable change in the fair value of certain loans held for investment resulting in a fair value gain of \$2.6 million for the year ended December 31, 2023 as compared to a fair value loss of \$58.5 million for the year ended December 31, 2022; fair value changes for these loans have an inverse relationship with relevant interest rate changes during the year. The favorable change between periods was partially offset by a decrease in swap derivatives fair value, resulting in a loss of \$4.6 million for the year ended December 31, 2023 compared to a gain of \$16.2 million in the prior year period, resulting in an unfavorable change of \$20.8 million, as well as other miscellaneous fluctuations in income.

NON-INTEREST EXPENSE

The following table presents the key elements of non-interest expense and the related dollar and percentage change for the years ended December 31, 2023 and 2022:

	2023 compared to 2022									
(dollars in thousands)		2023		2022		Change Amount	Change Percent			
Salaries and employee benefits	\$	616,103	\$	441,226	\$	174,877	40 %			
Occupancy and equipment, net		183,480		138,451		45,029	33 %			
Communications		16,252		10,429		5,823	56 %			
Marketing		11,399		6,540		4,859	74 %			
Services		57,641		51,323		6,318	12 %			
FDIC assessments		71,402		13,964		57,438	411 %			
Intangible amortization		111,296		4,095		107,201	nm			
Merger-related expenses		171,659		17,356		154,303	nm			
Other expenses		73,468		51,566		21,902	42 %			
Total non-interest expense	\$	1,312,700	\$	734,950	\$	577,750	79 %			
nm = not meaningful and applies to percentages +/- 500%										

Salaries and employee benefits increased for 2023, as compared to 2022, primarily due to our employee base increasing by approximately 1,500, or 43%, compared to December 31, 2022, mostly attributable to the Merger. The current year includes ten months of expense as a combined company with a larger employee base.

Occupancy and equipment, net increased for 2023, compared to 2022, due mainly to an increase in branch locations and software costs related to the Merger.

FDIC assessments increased for 2023, as compared to 2022, due to \$32.9 million in expense related to the FDIC special assessment to replenish the Deposit Insurance Fund following bank closures in March 2023, in addition to an increase in the deposit insurance assessment rates by two basis points for all insured depository institutions in 2023, and the impact of having a larger balance sheet as a result of the Merger.

Intangible amortization increased for 2023, as compared to 2022, due to amortization associated with the core deposit intangible added as a result of the Merger.

Merger-related expense increased for 2023, as compared to 2022, with significant expenses due to the completion of the Merger in the first quarter of 2023. These expenses include acquisition-related expenses, facility closure related costs, customer communications, restructuring expenses (including associate severance and retention charges) and expenses related to conversions of systems, including consulting costs. Merger-related expenses are expected to decrease in 2024, as we completed systems integrations in 2023. Refer to Note 2 - *Business Combination* for the breakout of merger-related expense.

Other expense increased for 2023, as compared to 2022, which included an increase of \$11.8 million related to state and local taxes due to locations added with the Merger, as well as miscellaneous fluctuations in other expenses captured in this category.

While the Merger drove increases across expense categories as the Company is now significantly larger, the expense run rate of the combined organization benefits from \$143 million in annualized merger-related cost savings, net of associated reinvestments, which were achieved as of December 31, 2023 and compare favorably to our original \$135 million target annualized in October 2021.

INCOME TAXES

Our consolidated effective tax rate as a percentage of pre-tax income for 2023 was 26.0%, compared to 25.3% for 2022. The 2023 effective tax rate differed from the federal statutory rate of 21% principally because of state taxes, net tax-exempt income on investment securities, non-deductible FDIC assessments, and tax credits and benefits arising from low-income housing investments. Refer to Note 12 - *Income Taxes* for more information about the Company's taxes.

FINANCIAL CONDITION

CASH AND CASH EQUIVALENTS

Cash and cash equivalents were \$2.2 billion as of December 31, 2023, compared to \$1.3 billion at December 31, 2022. The increase is mainly due to an increase in borrowings to support short-term liquidity, as there was reduced available liquidity within the banking industry as a result recent volatility in response to the bank failures in early 2023.

INVESTMENT SECURITIES

The composition of our investment securities portfolio reflects management's investment strategy of maintaining an appropriate level of liquidity while providing a relatively stable source of interest income. The investment securities portfolio provides a vehicle for the investment of available funds, a source of liquidity (by pledging as collateral or through repurchase agreements) and collateral for certain public funds deposits.

Equity and other securities consist primarily of investments in fixed income mutual funds to support our CRA initiatives and securities invested in rabbi trusts for the benefit of certain current or former executives and employees as required by the underlying agreements. Equity and other securities were \$77.0 million at December 31, 2023, compared to \$73.0 million as of December 31, 2022. This increase is primarily due to an increase in rabbi trust assets of \$2.3 million due to the Merger.

Investment debt securities available for sale were \$8.8 billion as of December 31, 2023, compared to \$3.2 billion as of December 31, 2022. The increase was primarily due to the addition of \$6.2 billion in securities acquired at fair value through the Merger, which were categorized as available for sale. Following the close of the Merger, we restructured a portion of the historical Columbia securities portfolio during the first week of March by selling \$1.2 billion of securities and purchasing \$919.2 million of securities with the proceeds. The restructure transactions resulted in no gain or loss on the statement of operations. Purchases included agencies, mortgage-backed securities, and collateralized mortgage obligation. The restructuring reduced the potential adverse impact to net interest income of a declining interest rate environment as we believe this scenario presents more risk to net interest income than a "higher-for-longer" interest rate scenario. The net unrealized loss on investment securities available for sale decreased by \$109.2 million between December 31, 2023 and December 31, 2022.

The following tables present the par value, amortized cost, unrealized gains, unrealized losses, and approximate fair values of debt securities as available for sale and held to maturity investment debt securities portfolio by major type as of the dates presented:

presented:											
						Decembe	r 31	, 2023			
(dollars in thousands)	<u> </u>	urrent Par	1	Amortized Cost	ι	Inrealized Gains	τ	Inrealized Losses]	Fair Value	% of Portfolio
Available for sale:											
U.S. Treasury and agencies	\$	1,546,374	\$	1,551,074	\$	6,192	\$	(78,874)	\$	1,478,392	17 %
Obligations of states and political subdivisions		1,135,345		1,073,264		20,451		(21,610)		1,072,105	12 %
Mortgage-backed securities and collateralized mortgage obligations		7,103,633		6,638,439		28,558		(387,624)		6,279,373	71 %
Total available for sale securities	\$	9,785,352	\$	9,262,777	\$	55,201	\$	(488,108)	\$	8,829,870	100 %
Held to maturity:											
Mortgage-backed securities and collateralized mortgage obligations	\$	3,564	\$	2,300	\$	725	\$	_	\$	3,025	100 %
Total held to maturity securities	\$	3,564	\$	2,300	\$	725	\$		\$	3,025	100 %
	Ė		Ξ			Dogombo	w 21	2022			
	_			Amortized		Decembe		·			% of
(dollars in thousands)		Current Par		Amortized Cost		Decembe Unrealized Gains		, 2022 Unrealized Losses		Fair Value	% of Portfolio
		<u> </u>				 Unrealized		U nrealized		Fair Value	
(dollars in thousands)		<u> </u>	\$		\$	 Unrealized		U nrealized		Fair Value 936,174	
(dollars in thousands) Available for sale:	\$	Current Par		Cost		 Unrealized		Unrealized Losses			Portfolio
(dollars in thousands) Available for sale: U.S. Treasury and agencies Obligations of states and political	\$	1,007,753		Cost 1,035,532		Unrealized Gains		Unrealized Losses (99,358)		936,174	Portfolio 29 %
(dollars in thousands) Available for sale: U.S. Treasury and agencies Obligations of states and political subdivisions Mortgage-backed securities and collateralized mortgage	\$	1,007,753 289,590		Cost 1,035,532 297,610		Unrealized Gains — 231		Unrealized Losses (99,358) (28,041) (414,950)		936,174 269,800	Portfolio 29 % 8 %
(dollars in thousands) Available for sale: U.S. Treasury and agencies Obligations of states and political subdivisions Mortgage-backed securities and collateralized mortgage obligations	\$	1,007,753 289,590 2,371,329	\$	Cost 1,035,532 297,610 2,405,139	\$	Unrealized Gains 231	\$	Unrealized Losses (99,358) (28,041) (414,950)	\$	936,174 269,800 1,990,192	Portfolio 29 % 8 % 63 %
(dollars in thousands) Available for sale: U.S. Treasury and agencies Obligations of states and political subdivisions Mortgage-backed securities and collateralized mortgage obligations Total available for sale securities Held to maturity: Mortgage-backed securities and collateralized mortgage	\$	1,007,753 289,590 2,371,329 3,668,672	\$	Cost 1,035,532 297,610 2,405,139 3,738,281	\$	Unrealized Gains 231	\$	Unrealized Losses (99,358) (28,041) (414,950)	\$	936,174 269,800 1,990,192 3,196,166	Portfolio 29 % 8 % 63 % 100 %
(dollars in thousands) Available for sale: U.S. Treasury and agencies Obligations of states and political subdivisions Mortgage-backed securities and collateralized mortgage obligations Total available for sale securities Held to maturity: Mortgage-backed securities and	\$	1,007,753 289,590 2,371,329	\$	Cost 1,035,532 297,610 2,405,139	\$	Unrealized Gains 231 3 234	\$	Unrealized Losses (99,358) (28,041) (414,950)	\$	936,174 269,800 1,990,192	Portfolio 29 % 8 % 63 %

The following table presents information regarding the amortized cost, fair value, average yield, and maturity structure of the investment portfolio as of December 31, 2023:

(dollars in thousands)	Amor	tized Cost	Fair Value	Average Yield (1)
U.S. treasury and agencies				
One year or less	\$	59,019	\$ 58,050	2.78 %
One to five years		1,272,107	1,218,008	3.00 %
Five to ten years		219,948	202,334	2.89 %
Over ten years		_		— %
Total U.S. treasury and agencies		1,551,074	1,478,392	2.97 %
Obligations of states and political subdivisions				
One year or less		39,992	39,843	3.71 %
One to five years		403,767	403,595	3.77 %
Five to ten years		390,433	379,242	3.70 %
Over ten years		239,072	249,425	5.24 %
Total obligations of states and political subdivisions		1,073,264	1,072,105	4.09 %
Other Securities				
Mortgage-backed securities and collateralized mortgage obligations		6,640,739	6,282,398	3.77 %
Total debt securities	\$	9,265,077	\$ 8,832,895	3.68 %

⁽¹⁾ Weighted average yields are stated on a federal tax equivalent basis of 21%. Weighted average yields for available for sale investments have been calculated on an amortized cost basis.

The mortgage-related securities in the table above include both pooled mortgage-backed issues and high-quality collateralized mortgage obligation structures, with an average duration of 5.4 years. These mortgage-related securities provide yield spread to U.S. Treasury or agency securities; however, the cash flows arising from them can be volatile due to refinancing of the underlying mortgage loans. We review investment securities on an ongoing basis for the presence of impairment, taking into consideration current market conditions, fair value in relationship to cost, extent and nature of the change in fair value, issuer rating changes and trends, whether we intend to sell a security or if it is more likely than not that we will be required to sell the security before recovery of our amortized cost basis of the investment, which may be maturity, and other factors.

The net unrealized loss on historical Columbia securities was eliminated as of February 28, 2023 as part of the reverse merger method of accounting; however, historical Umpqua Bank balances were not marked as part of the Merger. Gross unrealized losses in the available for sale investment portfolio was \$488.1 million as of December 31, 2023. This consisted primarily of unrealized losses on mortgage-backed securities and collateralized mortgage obligations of \$387.6 million. The unrealized losses were primarily attributable to changes in market interest rates or the widening of market spreads subsequent to the initial purchase of these securities and are not attributable to changes in credit quality. In the opinion of management, no ACL was considered necessary on these debt securities as of December 31, 2023.

RESTRICTED EQUITY SECURITIES

Restricted equity securities were \$179.3 million and \$47.1 million as of December 31, 2023 and 2022, respectively, the majority of which represents the Bank's investment in the FHLB. The increase is attributable to \$101.8 million associated with the Merger, in addition to the purchase of FHLB stock during the period due to increased FHLB borrowing activity. FHLB stock is carried at par and does not have a readily determinable fair value. Ownership of FHLB stock is restricted to the FHLB and member institutions, and can only be purchased and redeemed at par. As of December 31, 2023, the Bank's minimum required investment in FHLB stock was \$178.8 million.

LOANS AND LEASES

Total loans and leases outstanding as of December 31, 2023 increased \$11.3 billion compared to December 31, 2022. The increase was primarily attributable to the addition of \$10.9 billion in net loans acquired through the Merger, noting that net organic growth during the period was partially offset by sales of \$743.9 million in loans for the year ended December 31, 2023 and net charge-offs of \$117.0 million. We elected to sell \$666.3 million in non-relationship jumbo residential mortgage, commercial, and commercial real estate loans during 2023, as these loans were transactional in nature. The loan to deposit ratio as of December 31, 2023 was 90%, as compared to 97% as of December 31, 2022. The decline is primarily related to the Merger as the addition of the historical Columbia loans and deposits during the first quarter of 2023 reduced the ratio to 89% as of March 31, 2023.

The following table presents the concentration distribution of our loan and lease portfolio by major type as of December 31, 2023 and 2022:

	Decembe	er 31, 2023	Decembe	er 31, 2022
(dollars in thousands)	Amount	%	Amount	%
Commercial real estate				
Non-owner occupied term, net	\$ 6,482,940	17 %	\$ 3,894,840	15 %
Owner occupied term, net	5,195,605	14 %	2,567,761	10 %
Multifamily, net	5,704,734	15 %	5,285,791	20 %
Construction & development, net	1,747,302	5 %	1,077,346	4 %
Residential development, net	323,899	1 %	200,838	1 %
Commercial				
Term, net	5,536,765	15 %	3,029,547	12 %
Lines of credit & other, net	2,430,127	6 %	960,054	4 %
Leases & equipment finance, net	1,729,512	5 %	1,706,172	6 %
Residential				
Mortgage, net	6,157,166	16 %	5,647,035	21 %
Home equity loans & lines, net	1,938,166	5 %	1,631,965	6 %
Consumer & other, net	195,735	1 %	154,632	1 %
Total, net of deferred fees and costs	\$ 37,441,951	100 %	\$ 26,155,981	100 %

The following table presents the maturity distribution of our loan portfolios and the rate sensitivity of these loans to changes in interest rates as of December 31, 2023:

		By Maturity										Loans Over One Year by Rate Sensitivity					
(in thousands)		ıe Year r Less	Th	One rough e Years	Tł	Five rough 15 Years		er 15 ears		Total	Fix	ted Rate		Floating/ djustable Rate			
Commercial real estate, net	\$1,0	645,014	\$4,5	38,292	\$8	3,711,135	\$4,5	60,039	\$1	9,454,480	\$5,	741,680	\$1	2,067,786			
Commercial, net	\$3,	395,316	\$3,9	78,575	\$2	2,047,485	\$ 2	75,028	\$	9,696,404	\$4,	121,220	\$	2,179,868			
Residential, net	\$	8,490	\$	10,692	\$	948,039	\$7,1	28,111	\$	8,095,332	\$3,	145,841	\$	4,941,001			
Consumer & other, net	\$	20,506	\$ 1	50.194	\$	24.358	\$	677	\$	195,735	\$	63,060	\$	112,169			

Commercial Real Estate and Commercial Loans

Commercial real estate and commercial loans are the largest classifications within earning assets, representing 40% and 20%, respectively, of average earning assets for the year ended December 31, 2023, as compared to 41% and 18%, respectively for the year ended December 31, 2022. The increase in commercial real estate and commercial loan balances between December 31, 2023 and December 31, 2022 was driven by the Merger, as well as disciplined loan production that was balanced across our market footprint and product lines, partially offset by commercial real estate and commercial loan sales during the period.

Commercial Real Estate Loans

The commercial real estate portfolio includes loans to developers and institutional sponsors supporting income-producing or for-sale commercial real estate properties. We mitigate our risk on these loans by requiring collateral values that exceed the loan amount and underwriting the loan with projected cash flow in excess of the debt service requirement.

As of December 31, 2023, commercial real estate loans held in our loan portfolio were \$19.5 billion, an increase of \$6.4 billion compared to December 31, 2022. The increase reflects an increase in loans acquired through the Merger, partially offset by sales in transactional commercial real estate loans during the year. Commercial real estate concentrations are managed with a goal of optimizing geographic and business diversity, primarily in our footprint. Delinquency and non-accrual loan movements over the year suggest a move toward a more normalized credit environment following a phase of exceptional high quality.

Loans secured by office properties represent approximately 8% of our total loan portfolio at December 31, 2023, with a breakout of 57% non-owner occupied, 39% owner occupied, and 4% construction loans. Construction loans represent approximately 29% of office loans repricing in 2024, and excluding these balances, only 12% of our office portfolio reprices through 2025. Office properties located in suburban markets secure the majority of our office portfolio as only 6% of non-owner occupied loans are located in downtown core business districts.

Loans secured by multifamily properties, including construction, represent approximately 19% of the total loan portfolio. These assets continue to perform well due to demand for rental properties in our geographical footprint. Although management believes such concentrations have no more than the normal risk of collectability, a substantial decline in the economy in general, material increases in interest rates, changes in tax policies, tightening credit or refinancing markets, or a decline in real estate values in the Bank's primary market areas in particular, could have an adverse impact on the repayment of these loans.

The following table provides detail on commercial real estate loans by property type:

	Decembe	r 31	, 2023	Decembe	, 2022	
(in thousands)	Outstanding		Non-accrual	Outstanding	Non-accrual	
Commercial real estate loans by property type:						
Multifamily	\$ 6,978,498	\$		\$ 6,024,199	\$	_
Office	2,980,240		13,335	1,794,254		647
Industrial	2,812,295		2,053	1,523,576		421
Retail	2,083,960		3,715	1,288,377		756
Special Purpose	1,348,343		4,566	573,317		122
Hotel/Motel	755,132		2,622	377,019		2,933
Other	2,496,012		2,398	1,445,834		132
Total commercial real estate loans	\$ 19,454,480	\$	28,689	\$ 13,026,576	\$	5,011

Commercial Loans

Commercial loans are made to commercial customers for use in normal business operations to finance working capital needs, equipment purchases, or other projects. We focus on borrowers doing business within our geographic markets. Commercial loans are generally underwritten individually and secured with the assets of the company and/or the personal guarantee of the business owners. Lease and equipment financing products are designed to address the diverse financing needs of small to large companies, primarily for the acquisition of equipment. As of December 31, 2023, commercial loans held in our loan portfolio were \$9.7 billion, an increase of \$4.0 billion compared to December 31, 2022. The increase reflects loans acquired through the Merger, partially offset by commercial loan sales of \$499.4 million during 2023, as these loans were transactional in nature.

The leases and equipment finance portfolio represents approximately 18% of the commercial portfolio and 5% of the total loan portfolio. The leasing portfolio has elevated non-performing and charge-offs centered in the trucking or transportation portion of the portfolio. Delinquency and non-accrual loan movements in the transportation and trucking portfolio over the year were anticipated and a slow recovery is expected for this portfolio.

The following table provides detail on commercial loans by industry type:

		D 1 21 2022						
		Decembe	r 31, 2	2023		Decembe	<u>r 31,</u>	2022
(in thousands)	O	utstanding	g Non-accrual			utstanding	Non-accrual	
Commercial loans by industry type:								
Agriculture	\$	829,555	\$	2,167	\$	252,324	\$	652
Contractors		733,531		6,143		453,602		3,721
Dentist		715,348		886		_		_
Finance/Insurance		754,115		3		371,716		6
Gaming		532,698				394,623		
Healthcare		312,788		2,062		190,221		1,870
Manufacturing		736,298		2,636		481,268		2,411
Professional		445,455		3,113		337,113		1,176
Public Admin		649,895		7		450,123		_
Rental and Leasing		692,101		165		312,567		283
Retail		225,223		1,276		175,145		276
Support Services		411,565		1,047		278,299		913
Transportation/Warehousing		852,735		21,951		850,869		11,609
Wholesale		673,349		396		511,958		333
Other		1,131,748		3,830		635,945		2,441
Total commercial portfolio	\$	9,696,404	\$	45,682	\$	5,695,773	\$	25,691

Residential Real Estate Loans

Residential real estate loans represent mortgage loans and lines of credit to consumers for the purchase or refinance of a residence. These loans are generally financed over a 15-year to 30-year term, and in most cases, are extended to borrowers to finance their primary residence. As of December 31, 2023, residential real estate loans held in our loan portfolio were \$8.1 billion, an increase of \$816.3 million as compared to December 31, 2022. The growth due to the inclusion of loans from the Merger was partially offset by the sale of \$159.2 million in non-relationship jumbo residential mortgage loans during 2023, as these loans were transactional in nature. Future decreases in interest rates could result in an increase in the level of refinancing and new originations of residential real estate loans.

Consumer Loans

Consumer loans, including secured and unsecured personal loans, home equity and personal lines of credit, and motor vehicle loans, increased \$41.1 million to \$195.7 million as of December 31, 2023, as compared to December 31, 2022, reflecting an increase in direct loans directly correlated to the Merger.

ASSET QUALITY AND NON-PERFORMING ASSETS

The following table summarizes our non-performing assets and restructured loans, as of December 31, 2023 and 2022:

(dollars in thousands)	Dece	mber 31, 2023	Dec	ember 31, 2022
Loans and leases on non-accrual status				
Commercial real estate, net	\$	28,689	\$	5,011
Commercial, net		45,682		25,691
Total loans and leases on non-accrual status		74,371		30,702
Loans and leases past due 90 days or more and accruing				
Commercial real estate, net		870		1
Commercial, net		8,232		7,909
Residential, net (1)		29,102		19,894
Consumer & other, net		326		134
Total loans and leases past due 90 days or more and accruing (1)		38,530		27,938
Total non-performing loans and leases		112,901		58,640
Other real estate owned		1,036		203
Total non-performing assets	\$	113,937	\$	58,843
Allowance for credit losses on loans and leases	\$	440,871	\$	301,135
Reserve for unfunded commitments		23,208		14,221
Allowance for credit losses	\$	464,079	\$	315,356
Asset quality ratios:				
Non-performing assets to total assets (1)		0.22 %		0.18 %
Non-performing loans and leases to total loans and leases (1)		0.30 %		0.22 %
Non-accrual loans and leases to total loans and leases		0.20 %		0.12 %
ACL on loan and lease losses to total loans and leases		1.18 %		1.15 %
ACL to total loans and leases		1.24 %		1.21 %
ACL to non-accrual loans and leases		624 %		1,027 %
ACL to total non-performing loans and leases		411 %		538 %
(1)				

Excludes government guaranteed GNMA mortgage loans that Columbia has the right but not the obligation to repurchase that are past due 90 days or more totaling \$1.0 million as of December 31, 2023.

As of December 31, 2023, there were approximately \$138.1 million of loans and leases, or 0.37% of total loans and leases, modified due to borrowers experiencing financial difficulties, which was accounted for under the guidance per ASU 2022-02 that was adopted in January 2023. Prior to the adoption, as of December 31, 2022, loans of \$6.8 million were classified as accruing restructured loans.

A decline in economic conditions and other factors could adversely impact individual borrowers or the loan portfolio in general. Accordingly, there can be no assurance that loans will not become 90 days or more past due, placed on non-accrual status, restructured, or transferred to other real estate owned in the future. As of December 31, 2023, there was an increase in non-performing loans as compared to December 31, 2022, which is representative of a more normalized credit environment.

ALLOWANCE FOR CREDIT LOSSES

The ACL totaled \$464.1 million as of December 31, 2023, an increase of \$148.7 million from the \$315.4 million as of December 31, 2022. The following table shows the activity in the ACL for the years ended December 31, 2023 and 2022:

,	C	3			
(dollars in thousands)				2023	2022
Allowance for credit losses on lo	oans and leases				
Balance, beginning of period				\$ 301,135	\$ 248,412
Initial ACL recorded for PCD	loans acquired during the peri	od		26,492	_
Provision for credit losses on lo	oans and leases (1)			209,979	83,605
Charge-offs:					
Commercial real estate, net				(803)	(136)
Commercial, net				(109,862)	(41,073)
Residential, net				(547)	(224)
Consumer & other, net			_	(5,762)	(3,556)
Total loans charged-off			_	(116,974)	(44,989)
Recoveries:					
Commercial real estate, net				333	384
Commercial, net				16,884	11,029
Residential, net				1,123	662
Consumer & other, net				1,899	2,032
Total recoveries			_	20,239	14,107
Net (charge-offs) recoveries:					
Commercial real estate, net				(470)	248
Commercial, net				(92,978)	(30,044)
Residential, net				576	438
Consumer & other, net			_	(3,863)	(1,524)
Total net charge-offs			_	(96,735)	(30,882)
Balance, end of period				\$ 440,871	\$ 301,135
Reserve for unfunded commitm	nents		_		
Balance, beginning of period				\$ 14,221	\$ 12,767
Initial ACL recorded for unf	unded commitments acquired	during the period		5,767	_
Provision for credit losses or	n unfunded commitments		_	3,220	1,454
Balance, end of period				23,208	14,221
Total allowance for credit losses	S			\$ 464,079	\$ 315,356
As a percentage of average loans	and leases (annualized):		_		
Net charge-offs				0.27 %	0.13 %
Commercial real esta	ate, net			— %	— %
Commercial, net				1.04 %	0.56 %
Residential, net				(0.01)%	(0.01)%
Consumer & other, n	net			1.93 %	0.90 %
Provision for credit losses				0.60 %	0.35 %
Recoveries as a percentage of cha	arge-offs			17.30 %	31.36 %
(1) -				 	

⁽¹⁾ For the year ended December 31, 2023, the provision for credit losses on loans and leases includes \$88.4 million initial provision related to non-PCD loans acquired during the period.

The provision for credit losses includes the provision for credit losses on loans and leases and the provision for unfunded commitments. The increase in the provision is due to the initial provision for historical Columbia non-PCD loans, organic growth in the loan and lease portfolios, updates to the economic forecasts used in credit models, and portfolio migration trends.

The following table sets forth the allocation of the ACLLL and percent of loans and leases in each category to total loans and leases, net of deferred fees, as of December 31 for each of the last two years:

	December	31, 2023	December 31, 2022				
(dollars in thousands)	Amount	%	Amount	%			
Commercial real estate	\$ 125,888	52 %	\$ 77,813	50 %			
Commercial	244,821	26 %	167,135	22 %			
Residential	62,004	21 %	50,329	27 %			
Consumer & other	8,158	1 %	5,858	1 %			
Allowance for credit losses on loans and leases	\$ 440,871		\$ 301,135				

The following table shows the change in the ACL from December 31, 2022 to December 31, 2023:

(dollars in thousands)	D	December 31, 2022		2023 net charge-offs) recoveries	R	eserve build	D	ecember 31, 2023	% of loans and leases, net outstanding
Commercial real estate	\$	85,020	\$	(470)	\$	52,508	\$	137,058	0.70 %
Commercial		170,184		(92,978)		175,456		252,662	2.61 %
Residential		53,525		576		10,843		64,944	0.80 %
Consumer & other		6,627		(3,863)		6,651		9,415	4.81 %
Total allowance for credit losses	\$	315,356	\$	(96,735)	\$	245,458	\$	464,079	1.24 %
% of loans and leases outstanding		1.21 %						1.24 %	

To calculate the ACL, the CECL models use a forecast of future economic conditions and are dependent upon specific macroeconomic variables that are relevant to each of the Bank's loan and lease portfolios. For the fourth quarter of 2023, the Bank used Moody's Analytics' November 2023 baseline economic forecast, which shows a worsening economic situation from the forecast used in the prior quarter. Refer to Note 6 - *Allowance for Credit Losses* for further information on key components of the forecast. The models for calculating the ACL are sensitive to changes to economic variables, which could result in volatility as these assumptions change over time.

We believe that the ACL as of December 31, 2023 is sufficient to absorb losses inherent in the loan and lease portfolio and in credit commitments outstanding as of that date based on the information available. If the economic conditions decline, the Bank may need additional provisions for credit losses in future periods.

RESIDENTIAL MORTGAGE SERVICING RIGHTS

The following table presents the key elements of our residential mortgage servicing rights asset as of December 31, 2023, 2022, and 2021:

(dollars in thousands)	2023	2022	2021
Balance, beginning of period	\$ 185,017	\$ 123,615	\$ 92,907
Additions for new MSR capitalized	5,347	24,137	38,522
Sale of MSR assets	(57,305)	_	_
Changes in fair value:			
Changes due to collection/realization of expected cash flows over time	(17,694)	(20,272)	(18,903)
Changes due to valuation inputs or assumptions (1)	(6,122)	57,537	11,089
Balance, end of period	\$ 109,243	\$ 185,017	\$ 123,615

⁽¹⁾ The changes in valuation inputs and assumptions principally reflect changes in discount rates and prepayment speeds, which are primarily affected by changes in interest rates.

Information related to our serviced loan portfolio as of December 31, 2023 and 2022 were as follows:

(dollars in thousands)	December 31, 2023	December 31, 2022
Balance of loans serviced for others	\$ 8,175,664	\$ 13,020,189
MSR as a percentage of serviced loans	1.34 %	1.42 %

Residential MSR are adjusted to fair value quarterly with the change recorded in residential mortgage banking revenue on the Consolidated Statements of Operations. The value of servicing rights can fluctuate based on changes in interest rates and other factors. Generally, as interest rates decline and borrowers are able to take advantage of a refinance incentive, prepayments increase, and the total value of existing servicing rights declines as expectations of future servicing fee collections decline. Historically, the fair value of our residential MSR will increase as market rates for mortgage loans rise and decrease if market rates fall.

Due to changes to inputs in the valuation model including changes in discount rates and prepayment speeds, the fair value of the MSR asset decreased by \$6.1 million for the year ended December 31, 2023, as compared to an increase of \$57.5 million for the year ended December 31, 2022. In September 2023, the Company closed the sale of \$57.3 million in mortgage servicing rights associated with \$4.3 billion of residential mortgage loans serviced for others.

The fair value of the MSR asset decreased by \$17.7 million due to the passage of time, including the impact of regularly scheduled repayments, paydowns, and payoffs, as compared to a decrease of \$20.3 million in 2022.

GOODWILL AND OTHER INTANGIBLE ASSETS

As of December 31, 2023, the Company had \$1.0 billion in goodwill due to the Merger, compared to no goodwill at December 31, 2022. Goodwill is recorded in connection with business combinations and represents the excess of the purchase price over the estimated fair value of the net assets acquired. Goodwill is reviewed for potential impairment annually, on October 31, or more frequently if events or circumstances indicate a potential impairment. For the year ended December 31, 2023 there were no goodwill impairment losses recognized.

As of December 31, 2023, we had other intangible assets of \$603.7 million, compared to \$4.7 million as of December 31, 2022. The increase is as a result of the core deposit intangible asset of \$710.2 million associated with the Merger, partially offset by amortization of \$111.3 million during the year ended December 31, 2023. As part of a business acquisition, the fair value of identifiable intangible assets such as core deposits, which includes all deposits except certificates of deposit, was recognized at the Merger Date. Intangible assets with definite useful lives are amortized to their estimated residual values over their respective estimated useful lives. The core deposit intangible assets recorded are amortized on an accelerated basis over a period of 10 years using the sum-of-the-years-digits method. Intangible assets are evaluated for impairment if events and circumstances indicate a possible impairment. No impairment losses have been recognized in the periods presented.

DEPOSITS

Total deposits were \$41.6 billion as of December 31, 2023, an increase of \$14.5 billion, or 54%, compared to year-end 2022. The increase is mainly attributable to the addition of \$15.2 billion in deposits related to the Merger, partially offset by lower customer balances due primarily to the impact of inflation and market liquidity tightening. The deposit portfolio mix also reflects a migration from non-interest bearing to interest-bearing accounts and alternative investments, as customers evaluated the interest rate earned on excess cash balances in the higher interest rate environment.

The following table presents the deposit balances by major category as of December 31, 2023 and 2022:

	December 31, 2023			December 31, 2022			
(dollars in thousands)		Amount	%	Amount	%		
Non-interest bearing demand	\$	14,256,452	34 %	\$ 10,288,849	38 %		
Interest-bearing demand		8,044,432	19 %	4,080,469	15 %		
Money market		10,324,454	25 %	7,721,011	29 %		
Savings		2,754,113	7 %	2,265,052	8 %		
Time, greater than \$250,000		1,034,094	2 %	582,838	2 %		
Time, \$250,000 or less		5,193,475	13 %	2,127,393	8 %		
Total deposits	\$	41,607,020	100 %	\$ 27,065,612	100 %		

The following table presents the time deposits in excess of the FDIC insurance limit, which is currently \$250,000, by time remaining until maturity as of December 31, 2023:

(in thousands)	Amount
Three months or less	\$ 268,543
Over three months through six months	255,113
Over six months through twelve months	457,554
Over twelve months	 52,884
Uninsured deposits, greater than \$250,000	\$ 1,034,094

The Company's total core deposits, which are deposits less time deposits greater than \$250,000 and all brokered deposits, were \$37.4 billion as of December 31, 2023, compared to \$25.6 billion as of December 31, 2022. The Company's total brokered deposits were \$3.1 billion or 8% of total deposits as of December 31, 2023, compared to \$866.9 million or 3% of total deposits as of December 31, 2022, primarily due to increases in brokered CDs to fund loan growth and liquidity needs.

The FDIC generally provides a standard amount of insurance of \$250,000 per depositor for each account ownership category defined by the FDIC. Depositors may qualify for coverage of accounts over \$250,000 if they have funds in different ownership categories and all FDIC requirements are met. All deposits that an account owner has in the same ownership category at the same bank are added together and insured up to the standard insurance amount. As of December 31, 2023 and December 31, 2022, approximately \$28.1 billion, or 68%, and \$17.0 billion, or 63%, respectively, of the Bank's deposits were estimated to be insured. Uninsured deposits as of December 31, 2023, totaled \$13.5 billion, as compared to \$10.1 billion as of December 31, 2022. The increase was primarily driven by balances added with the Merger. Uninsured deposits are an estimated amount based on the methodologies and assumptions used for the Bank's regulatory requirements. We reviewed our methodologies and assumptions following the industry events that brought the level of uninsured deposits into focus during the first half of 2023, which resulted in the reclassification of select balances. As of December 31, 2023, total available liquidity was \$18.7 billion, or 138% of uninsured deposits.

BORROWINGS

As of December 31, 2023, the Bank had outstanding securities sold under agreements to repurchase of \$252.1 million, a decrease of \$56.7 million from December 31, 2022. As of December 31, 2023, the Bank had no outstanding federal funds purchased balances. The Bank had outstanding borrowings consisting of FHLB advances of \$3.8 billion and FRB BTFP borrowings of \$200.0 million as of December 31, 2023. Total borrowings increased \$3.0 billion since December 31, 2022, primarily due to borrowings added through the Merger, general liquidity management, and loan and lease growth that outpaced deposit growth during 2023 when acquired balances are excluded. The FHLB advances have fixed rates ranging from 5.5% to 5.7% and are set to mature in 2024. FHLB advances are secured by investment securities and loans secured by real estate. The FRB borrowing has a fixed rate of 4.8% and matures in 2024, although the Company has the ability to refinance or repay balances without penalty. The FRB borrowings are secured by investment securities.

JUNIOR AND OTHER SUBORDINATED DEBENTURES

We had junior and other subordinated debentures with carrying values of \$424.3 million and \$411.5 million as of December 31, 2023 and 2022, respectively. The increase is mainly due to the addition of \$10.0 million in subordinated debt and \$10.3 million in junior subordinated debt due to the Merger, partially offset by a \$7.9 million decrease in fair value for the junior subordinated debentures elected to be carried at fair value. The change in fair value was due to a decrease in the implied forward curve and the spot curve shifting higher, partially offset by a decrease in credit spread. As of December 31, 2023, substantially all of the junior subordinated debentures had interest rates that are adjustable on a quarterly basis based on a spread over three-month term SOFR. These instruments are covered under federal legislation, and the Federal Reserve's regulations implementing that legislation, which allowed us to replace the LIBOR index with forward term SOFR, plus the statutorily prescribed tenor spread adjustment. Accordingly, these instruments transitioned from LIBOR to SOFR as of July 1, 2023.

LIQUIDITY AND SOURCES OF FUNDS

The principal objective of our liquidity management program is to maintain the Bank's ability to meet the day-to-day cash flow requirements of our customers who either wish to withdraw funds or to draw upon credit facilities to meet their cash needs. The Bank's liquidity strategy includes maintaining a sufficient on-balance sheet liquidity position to provide flexibility, to grow deposit balances and fund growth in lending and investment portfolios, as well as to deleverage non-deposit liabilities as economic conditions permit. As a result, the Company believes that it has sufficient cash and access to borrowings to effectively manage through the current economic conditions, as well as meet its working capital and other needs. The Company will continue to prudently evaluate and maintain liquidity sources, including the ability to fund future loan growth and manage our borrowing sources.

We monitor the sources and uses of funds daily to maintain an acceptable liquidity position. One source of funds includes public deposits. Individual state laws require banks to collateralize public deposits, typically as a percentage of their public deposit balance in excess of FDIC insurance. Public deposits represented 7% of total deposits at both December 31, 2023 and 2022. The amount of collateral required varies by state and may also vary by institution within each state, depending on the individual state's risk assessment of depository institutions. Changes in the pledging requirements for uninsured public deposits may require pledging additional collateral to secure these deposits, drawing on other sources of funds to finance the purchase of assets that would be available to be pledged to satisfy a pledging requirement, or could lead to the withdrawal of certain public deposits from the Bank.

The Company's diversified deposit base provides a sizeable source of relatively stable and low-cost funding, while reducing the Company's reliance on the wholesale markets. Total deposits were \$41.6 billion as of December 31, 2023, compared with \$27.1 billion as of December 31, 2022. The Bank also has liquidity from excess bond collateral of \$5.1 billion.

In addition to liquidity from core deposits and the repayments and maturities of loans and investment securities, the Bank can sell securities under agreements to repurchase, issue brokered certificates of deposit, or utilize off-balance sheet funding sources.

The Bank maintains a substantial level of total available liquidity in the form of off-balance sheet funding sources. These liquidity sources include capacity to borrow from uncommitted lines of credit, advances from the FHLB, the Federal Reserve Bank's Discount Window and the BTFP. The ability to take new advances under the BTFP ends in March 2024. Availability of the uncommitted lines of credit is subject to federal funds balances available for loan and continued borrower eligibility. These lines are intended to support short-term liquidity needs, and the agreements may restrict consecutive day usage.

The following table presents total off-balance sheet liquidity as of the date presented:

	December 31, 2023						
(dollars in thousands)	Gro	Gross Availability		Utilization		Net Availability	
FHLB lines	\$	11,995,003	\$	3,769,833	\$	8,225,170	
Federal Reserve Discount Window		1,588,131				1,588,131	
Federal Reserve BTFP		1,478,716		200,000		1,278,716	
Uncommitted lines of credit		600,000				600,000	
Total off-balance sheet liquidity	\$	15,661,850	\$	3,969,833	\$	11,692,017	

The following table presents total available liquidity as of the date presented:

(dollars in thousands)	Dec	December 31, 2023	
Total off-balance sheet liquidity	\$	11,692,017	
Cash and cash equivalents, less reserve requirements		1,910,219	
Excess bond collateral		5,124,585	
Total available liquidity	\$	18,726,821	

The Company is a separate entity from the Bank and must provide for its own liquidity. Substantially all of the Company's revenues are obtained from dividends declared and paid by the Bank. There were \$353.0 million of dividends paid by the Bank to the Company in 2023. There are statutory and regulatory provisions that limit the ability of the Bank to pay dividends to the Company. FDIC and Oregon Division of Financial Regulation approval is required for quarterly dividends from Umpqua Bank to the Company.

Although we expect the Bank's and the Company's liquidity positions to remain satisfactory during 2024, it is possible that our deposit balances may not be maintained at previous levels due to pricing pressure or customers' behavior in the current economic environment. In addition, in order to generate deposit growth, our pricing may need to be adjusted in a manner that results in increased interest expense on deposits. We may utilize borrowings or other funding sources, which are generally more costly than deposit funding, to support our liquidity levels.

Commitments and Other Contractual Obligations - The Company participates in many different contractual arrangements which may or may not be recorded on its balance sheet, under which the Company has an obligation to pay certain amounts, provide credit or liquidity enhancements, or provide market risk support. Our material contractual obligations are primarily for time deposits and borrowings. As of December 31, 2023, time deposits totaled \$6.2 billion, of which \$6.0 billion matures in a year or less. Total borrowings as of December 31, 2023 were \$4.0 billion, all of which mature within one year. These arrangements also include off-balance sheet commitments to extend credit, letters of credit and various forms of guarantees. As of December 31, 2023, our loan commitments were \$11.3 billion. A portion of the commitments will eventually result in funded loans and increase our profitability through net interest income when drawn and unused commitment fees prior to being drawn. Refer to Note 18 - Commitments and Contingencies for further information. Financing commitments, letters of credit and deferred purchase commitments are presented at contractual amounts and do not necessarily reflect future cash outflows as many are expected to expire unused or partially used.

CONCENTRATIONS OF CREDIT RISK

Information regarding Concentrations of Credit Risk is included in Notes 3, 5, and 18 of the *Notes to Consolidated Financial Statements* in Item 8 below.

CAPITAL RESOURCES

Shareholders' equity as of December 31, 2023 and 2022 was \$5.0 billion and \$2.5 billion, respectively. The fluctuation in shareholders' equity during the year ended December 31, 2023 was principally due to the increase in common stock of \$2.3 billion as a result of the Merger and net income of \$348.7 million during the period, partially offset by cash dividends paid of \$272.5 million for the year ended December 31, 2023.

The Federal Reserve Board has guidelines in place for risk-based capital requirements applicable to U.S. banks and bank/ financial holding companies. These risk-based capital guidelines take into consideration risk factors, as defined by regulation, associated with various categories of assets, both on and off-balance sheet. Refer to the discussion of the capital adequacy requirements in *Supervision and Regulation* in *Item 1* of this 10-K.

Under the Basel III guidelines, capital strength is measured in three tiers, which are used in conjunction with risk-adjusted assets to determine the risk-based capital ratios. The guidelines require an 8% total risk-based capital ratio, of which 6% must be Tier 1 capital and 4.5% must be CET1. Our CET1 capital primarily includes shareholders' equity less certain deductions for goodwill and other intangibles, net of taxes, net unrealized gains (losses) on AFS securities, net of tax, net unrealized gains (losses) related to fair value of liabilities, net of tax, and certain deferred tax assets that arise from tax loss and credit carry-forwards, and totaled \$3.9 billion as of December 31, 2023. Tier 1 capital is primarily comprised of common equity Tier 1 capital, less certain additional deductions applied during the phase-in period, and totaled \$3.9 billion as of December 31, 2023. Tier 2 capital components include all, or a portion of, the ACL in excess of Tier 1 statutory limits and combined trust preferred security debt issuances. The total of Tier 1 capital plus Tier 2 capital components is referred to as Total Risk-Based Capital and was \$4.8 billion as of December 31, 2023.

A minimum leverage ratio is required in addition to the risk-based capital standards and is defined as period-end shareholders' equity, less accumulated other comprehensive income, goodwill and deposit-based intangibles, divided by average assets as adjusted for goodwill and other intangible assets. Although a minimum leverage ratio of 4% is required for the highest-rated financial holding companies that are not undertaking significant expansion programs, the Federal Reserve Board may require a financial holding company to maintain a leverage ratio greater than 4% if it is experiencing or anticipating significant growth or is operating with less than well-diversified risks in the opinion of the Federal Reserve Board. The Federal Reserve Board uses the leverage and risk-based capital ratios to assess capital adequacy of banks and financial holding companies.

The following table sets forth the Company's and the Bank's capital ratios as of December 31, 2023 and 2022:

	Company	,	Bank			
	2023	2022	2023	2022		
CET1 risk-based capital ratio	9.64 %	11.02 %	10.52 %	11.92 %		
Tier 1 risk-based capital ratio	9.64 %	11.02 %	10.52 %	11.92 %		
Total risk-based capital ratio	11.86 %	13.71 %	11.57 %	12.92 %		
Leverage ratio	7.60 %	9.14 %	8.30 %	9.89 %		

Basel III also requires all banking organizations to maintain a 2.50% capital conservation buffer above the minimum risk-based capital requirements to avoid certain limitations on capital distributions, stock repurchases and discretionary bonus payments to executive officers. The capital conservation buffer is exclusively comprised of common equity Tier 1 capital, and it applies to each of the three risk-based capital ratios but not to the leverage ratio. The common equity Tier 1, Tier 1, and total capital ratio minimums inclusive of the capital conservation buffer were 7.00%, 8.50%, and 10.50%, respectively. As of December 31, 2023, the Company and Bank were in compliance with the capital conservation buffer requirements.

As of December 31, 2023, the most recent notification from the FDIC categorized the Bank as "well-capitalized" under the regulatory framework for prompt corrective action. There are no conditions or events since that notification that management believes have changed the Bank's regulatory capital category.

Along with enactment of the CARES Act, the federal bank regulatory authorities issued an interim final rule to provide banking organizations that are required to implement CECL before the end of 2020 the option to delay the estimated impact on regulatory capital by up to two years, with a three-year transition period to phase out the cumulative benefit to regulatory capital provided during the two-year delay. The Company elected this capital relief and delayed the estimated regulatory capital impact of adopting CECL, relative to the incurred loss methodology's effect on regulatory capital.

As of December 31, 2023, all four of the capital ratios of the Bank exceeded the minimum ratios required by federal regulation. Management monitors these ratios on a regular basis to ensure that the Bank remains within regulatory guidelines.

The Company's dividend policy considers, among other things, earnings, regulatory capital levels, the overall payout ratio and expected asset growth to determine the amount of dividends declared, if any, on a quarterly basis. There is no assurance that future cash dividends on common shares will be declared or increased. We cannot predict the extent of the economic decline that could result in inadequate earnings, regulatory restrictions and limitations, changes to our capital requirements, or a decision to increase capital by retention of earnings, that may result in the inability to pay dividends at previous levels, or at all

During the first quarter of 2023 and before the Merger's close, Columbia declared a cash dividend of \$0.30 per common share and UHC declared a cash dividend of \$0.21 per common share. Upon the closing of the Merger, which was accounted for as a reverse merger using the acquisition method of accounting, as described in Note 2 - *Business Combination*, all preclosing financial data, including the dividend per common share, reflect historical UHC data, adjusted as described in Note 2. As such, the cash dividend for the first quarter of 2023 is reported as \$0.35 per common share. Columbia declared a cash dividend of \$0.36 per common share for all remaining quarters of 2023. These dividends were made pursuant to our existing dividend policy and in consideration of, among other things, earnings, regulatory capital levels, the overall payout ratio, and expected asset growth.

The payment of future cash dividends is at the discretion of our Board and subject to a number of factors, including results of operations, general business conditions, growth, financial condition, and other factors deemed relevant by the Board. Further, our ability to pay future cash dividends is subject to certain regulatory requirements and restrictions discussed in the *Supervision and Regulation* section in Item 1 above.

The following table presents cash dividends declared and dividend payout ratios (dividends declared per common share divided by basic earnings per common share) for the years ended December 31, 2023, 2022, and 2021:

	2023		2022		2021
Dividend declared per common share (1)	\$ 1.43	\$	1.40	\$	1.40
Dividend payout ratio	80%		54%		44%

⁽¹⁾ Periods prior to February 28, 2023 have been restated as a result of the adjustment to common shares outstanding based on the exchange ratio from the Merger of 0.5958.

As of December 31, 2023, the Company does not have a share repurchase authorization from its Board of Directors. The Company did not repurchase any shares during either 2023 or 2022. The timing and amount of future repurchases will depend upon the market price for our common stock, securities laws restricting repurchases, asset growth, earnings, our capital plan, and bank or bank holding company regulatory approvals. In addition, our stock plans provide that award holders may pay for the exercise price and tax withholdings in part or entirely by tendering previously held shares.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk management is an integral part of our risk culture. Our Enterprise Risk Management group is a risk management function that partners with the line of business to identify, measure, and monitor market risks throughout the company. It ensures transparency of significant market risks, monitoring compliance with Board established risk appetite limits and escalates limit exceptions to appropriate executive management and the Board. The various business units are responsible for identification, acceptance, and ownership of the risks and for ensuring that market risk exposures are well-managed and prudent. Market risk is monitored through various measures, such as simulations, and through routine stress testing, sensitivity, and scenario analysis.

Market risk is the risk that movements in market risk factors, including interest rates, credit spreads and volatilities will reduce our income and the value of our portfolios. These factors influence prospective yields, values, or prices associated with the instrument. Our market risk arises primarily from credit risk and interest rate risk inherent in our investment, lending, and financing activities.

To manage our credit risk, we rely on various controls, including our underwriting standards and loan policies, internal loan monitoring, and periodic credit reviews, as well as our ACL methodology. Additionally, the Company's Enterprise Risk Management Committee provides board oversight over the Company's loan portfolio risk management functions, and the Audit Committee provides board oversight of the ACL process and reviews and approves the ACL methodology. The Company's Board provides oversight over the Company's investment portfolio and hedging risk management functions.

Interest rate risk is the potential for loss resulting from adverse changes in the level of interest rates on the Company's net interest income. The absolute level and volatility of interest rates can have a significant impact on our profitability. The objective of interest rate risk management is to identify and manage the sensitivity of net interest income to changing interest rates to achieve our overall financial objectives. We manage exposure to fluctuations in interest rates through actions that are established by the Asset/Liability Management Committee. The ALCO meets monthly and has responsibility for developing asset/liability management policy, formulating and implementing strategies to improve balance sheet positioning and earnings, and reviewing interest rate sensitivity. The Company's Board provides oversight of the asset/liability management process, reviews the results of the interest rate risk analyses prepared for the ALCO, and approves the asset/liability policy on an annual basis.

We measure our interest rate risk position monthly. The primary tools we use to measure our interest rate risk are net interest income simulation analyses and economic value of equity (fair value of financial instruments) modeling. The results of these analyses are reviewed by the ALCO monthly. If hypothetical changes to interest rates cause changes to our simulated net interest income simulation or economic value of equity modeling outside of our pre-established internal limits, we may adjust the asset and liability size or mix in an effort to bring our interest rate risk exposure within our established limits.

Net Interest Income Simulation

Interest rate sensitivity is a function of the repricing characteristics of our interest earning assets and interest-bearing liabilities. These repricing characteristics are the time frames within which the interest-bearing assets and liabilities are subject to change in interest rates either at replacement, repricing, or maturity during the life of the instruments. Interest rate sensitivity management focuses on the maturity structure of assets and liabilities and their repricing characteristics during periods of changes in market interest rates.

An interest rate simulation model is used to estimate the sensitivity of net interest income to changes in market interest rates. This model has inherent limitations, and these results are predicated on assumptions for interest rates, loan and investment pricing, loan and investment prepayments, deposit decay and deposit rate movements. Our primary analysis assumes a static balance sheet, both in terms of the total size and mix of our balance sheet, meaning cash flows from the maturity or repricing of assets and liabilities are redeployed in the same instrument at modeled rates. We employ estimates based upon assumptions for each scenario, including changes in the size or mix of the balance sheet, new volume rates for new balances, the rate of prepayments, and the correlation of pricing to changes in the interest rate environment. For example, for interest-bearing deposit balances we utilize a repricing "beta" assumption, which is an estimate for the change in interest-bearing deposit costs given a change in the short-term market interest rates.

Our simulation beta estimates in both rising and falling rate environments are generally consistent with cumulative betas utilized in the current rising rate cycle. The following table shows the beta realized in the current rising rate market cycle.

Deposit and Funding Repricing Betas During the Current Rising-Rate Cycle (1)											
		Cost of Combined Company (1)									
	Effective Federal Funds Target Rate (Daily Avg.)	Interest-Bearing Deposits	Total Deposits	Total Funding							
Three months ending 12/31/2023	5.33 %	2.54 %	1.63 %	2.05 %							
Three months ending 12/31/2022	3.65 %	0.62 %	0.35 %	0.51 %							
Three months ending 12/31/2021	0.08 %	0.10 %	0.05 %	0.09 %							
Variance: Peak (Peak value less Q4 2021)	+5.25%	+2.44%	+1.58%	+1.96%							
Repricing Beta: Cycle-to-Date		47 %	30 %	37 %							

⁽¹⁾ Deposit and funding repricing data present combined company results as if historical Columbia and historical UHC were one Company for all periods through December 2022, for presentation purposes.

Loan repricing characteristics are a significant component of interest rate sensitivity. Variable and adjustable-rate loans may or may not contain a rate floor, which impacts the sensitivity of the instrument based on repricing timing and the magnitude of the change in interest rate. The following tables show certain pricing characteristics including rate type, maturity, and floor detail of the loan portfolio as of December 31, 2023:

Loan Re	pric	cing Detai	l ^{(1),(2)}		1	Loa	an Mat	uri	ties as	of I	Decemb	oer	31, 20	23			
(\$ in millions)		Q4 2023	% Total				<=6	7	to 12	1.	3 to 24	25	5 to 36	37	to 60	61+	
Fixed	\$	15,557	41 %	(\$ in millions)			Mos		Mos		Mos		Mos	N	Mos	Mos	Total
				Fixed		\$	1,849	\$	224	\$	645	\$	887	\$	2,294	\$ 9,658	\$ 15,557
Prime		2,868	8 %	Floating			1,620		1,140		1,280		778		1,611	4,814	11,243
1 Month		8,375	22 %	Adjustable			62		61		234		264		697	9,863	11,181
Floating		11,243	30 %	Total		\$	3,531	\$	1,425	\$	2,159	\$	1,929	\$ 4	4,602	\$24,335	\$37,981
Prime		377	1 %														
1 month		180	— %	Floors:	Floating	g ai	nd Adjı	ust	able Ra	ıte	Loans	as (of Deco	emb	er 31,	2023 (3)	
6 months		5,939	16 %	(\$ in millions)	No l	Flo	or		At I	loc	or		Above	e Flo	or	7	otal
1 Year		1,259	3 %	Floating	\$6	,90	0		\$	34			\$4,	,309		\$1	1,243
3 Year		205	1 %	Adjustable	1,	736	5		7	79			9,3	366		\$1	1,181
5 Year		2,272	6 %	Total	\$8	,63	6		\$1	13			\$13	,675	5	\$2	2,424
10 Year		949	2 %	% of Total	3	9%	,		1	%			6	1%		1	00%
Adjustable		11,181	29 %														
Total	\$	37,981	100 %														

⁽¹⁾ Index rates are mapped to the closest material index.

⁽²⁾ Loan balances reported here are customer principal book balances and exclude items such as deferred fees and costs.

⁽³⁾ Loans were grouped into three buckets: (1) No Floor: no contractual floor on the loan; (2) At Floor: current rate = floor; (3) Above Floor: current rate exceeds floor. The amount above the floor was based on the current margin plus the current index assuming the loan repriced on December 31, 2023. The adjustable loans may not reprice until well into the future, depending on the timing and size of interest rate changes.

Changes that could vary significantly from our assumptions include loan and deposit growth or contraction, changes in the mix of our earning assets or funding sources, and future asset/liability management decisions, all of which may have significant effects on our net interest income. Also, some of the assumptions made in the simulation model may not materialize and unanticipated events and circumstances may occur. In addition, the simulation model does not take into account actions management could undertake to mitigate the impact a change in interest rates may have on our credit risk profile, loan prepayment estimates and spread relationships, which can change regularly. Actions we could undertake include, but are not limited to, growing or contracting the balance sheet, changing the composition of the balance sheet, or changing our pricing strategies for loans or deposits.

The estimated impact on our net interest income over a time horizon of one year as of December 31, 2023, 2022, and 2021 are indicated in the table below. For the scenarios shown, the interest rate simulation assumes a parallel and sustained shift in market interest rates ratably over a twelve-month period and no change in the composition or size of the balance sheet. For example, the "up 200 basis points" scenario is based on a theoretical increase in market rates of 16.7 basis points per month for twelve months applied to the balance sheet of December 31 for each respective year.

Interest Rate Simulation Impact on Net Interest Income

As of December 31,	2023	2022	2021
Up 300 basis points	(2.1)%	1.7 %	9.7 %
Up 200 basis points	(1.4)%	1.1 %	6.3 %
Up 100 basis points	(0.7)%	0.6 %	3.0 %
Down 100 basis points	0.6 %	(2.4)%	(1.2)%
Down 200 basis points	1.1 %	(5.1)%	(2.4)%
Down 300 basis points	1.6 %	(7.8)%	(3.1)%

Our interest rate risk sensitivity at December 31, 2023 is minimal. Our projections indicate that in rising and falling interest rate environments the Company's net interest income would decrease or increase by a very modest amount. In 2021 and 2022, we were "asset-sensitive" meaning we expected our net interest income to increase as market rates increased and to decrease as market rates decreased. The change in sensitivity as of December 31, 2023, from the prior year was due to the impact of increasing interest rates resulting from Federal Reserve monetary policy and changes in funding and asset mixes. The mix shift of deposits from non-interest-bearing deposits to higher beta funding sources was a significant contributor of the change.

It should be noted that prior to 2022, although net interest income simulation results are presented for down rate scenarios, most market rates would have reached zero before declining the full 100 basis points, and our simulation floors rates at zero and assumes they do not go negative.

Interest rate sensitivity in the first year of the net interest income simulation for increasing interest rate scenarios is negatively impacted by the cost of non-maturity deposits repricing immediately while interest earnings assets (primarily the loan and leases held for investment portfolio) reprice at a slower rate based upon the instrument repricing characteristics. As a result, interest sensitivity in increasing interest rates scenarios improves in subsequent years as these assets reprice. Conversely, in a declining interest scenario, net interest income is negatively impacted by assets repricing lower. Deposit products reprice lower but certain low interest rate products remain at or hit their floors during the forecast horizon.

Management also prepares and reviews the long-term trends of the net interest income simulation to measure and monitor risk. This analysis assumes the same rate shift over the first year of the scenario as described above and holding steady thereafter. The estimated impact on our net interest income over the first and second-year time horizons as it relates to our balance sheet as of December 31, 2023 is indicated in the table below.

Interest Rate Simulation Impact on Net Interest Income

As of December 31, 2023	Year 1	Year 2
Up 300 basis points	(2.1)%	(1.9)%
Up 200 basis points	(1.4)%	(1.1)%
Up 100 basis points	(0.7)%	(0.5)%
Down 100 basis points	0.6 %	0.1 %
Down 200 basis points	1.1 %	(0.2)%
Down 300 basis points	1.6 %	(0.8)%

In general, we view the net interest income model results as more relevant to the Company's current operating profile (a going concern), and we primarily manage our balance sheet based on this information.

Economic Value of Equity

Another interest rate sensitivity measure we utilize is the quantification of economic value changes for all financial assets and liabilities, given an increase or decrease in market interest rates. This approach provides a longer-term view of interest rate risk, capturing all future expected cash flows. Assets and liabilities with option characteristics are measured based on different interest rate path valuations using statistical rate simulation techniques. The projections are by their nature forward-looking and therefore inherently uncertain and include various assumptions regarding cash flows and discount rates. The table below illustrates the effects of various instantaneous market interest rate changes on the fair values of financial assets and liabilities compared to the corresponding carrying values and fair values:

Interest Rate Simulation Impact on Fair Value of Financial Assets and Liabilities

As of December 31,	2023	2022
Up 300 basis points	(21.9)%	(14.0)%
Up 200 basis points	(14.6)%	(9.4)%
Up 100 basis points	(7.1)%	(4.4)%
Down 100 basis points	6.8 %	0.9 %
Down 200 basis points	12.0 %	0.1 %
Down 300 basis points	15.1 %	(2.5)%

As of December 31, 2023, our economic value of equity analysis indicates a liability sensitive profile. This suggests a sudden or sustained increase in market interest rates would result in a decrease in our estimated economic value of equity, as the decrease in value of our interest earning assets exceeds the economic value change of interest-bearing liabilities. In declining interest rate scenarios, our economic value of equity increases. This occurs as the increase in value of interest earning assets exceeds the decline in economic value of interest-bearing liabilities, including the core deposit intangible. Our overall sensitivity to changes in market interest rates shifted from the prior year, primarily due to the relative level of market interest rates and changes in asset and funding mix during the year. As of December 31, 2023, our estimated economic value of equity (fair value of financial assets and liabilities) was above our book value of equity primarily due to an increase in the economic value core deposit intangible.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Columbia Banking System, Inc. and subsidiaries (the "Company") as of December 31, 2023 and 2022, the related consolidated statements of operations, comprehensive income, changes in shareholders' equity, and cash flows, for each of the three years in the period ended December 31, 2023, and the related notes (collectively referred to as the "financial statements").

We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control* — *Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Because management's assessment and our audit were conducted to meet the reporting requirements of Section 112 of the Federal Deposit Insurance Corporation Improvement Act (FDICIA), management's assessment and our audit of the Company's internal control over financial reporting included controls over the preparation of the schedules equivalent to the basic financial statements in accordance with the instructions for the Consolidated Financial Statements for Bank Holding Companies (Form FR Y-9C).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023, and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the US 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, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

Critical Audit Matters

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

Fair Value of Acquired Loans Held for Investment and Core Deposit Intangible Recognized as Part of the Merger with Umpqua Holdings Corporation — Refer to Notes 1 and 2 to the consolidated financial statements.

Critical Audit Matter Description

On February 28, 2023, Umpqua Holdings Corporation ("UHC") merged with and into Columbia. Promptly following the Merger ("the Merger"), Columbia's wholly owned bank subsidiary, Columbia State Bank, merged with and into UHC's wholly owned bank subsidiary, Umpqua Bank, with Umpqua Bank as the surviving bank.

The Merger was accounted for as a reverse merger using the acquisition method of accounting; therefore, UHC was deemed the acquirer for financial reporting purposes, with Columbia as the legal acquirer. Under the reverse acquisition method of accounting, the assets and liabilities of Columbia as of February 28, 2023 were recorded at their respective fair values. Accordingly, the purchase consideration was allocated to the tangible and intangible assets acquired and liabilities assumed based on the estimated fair values as of the acquisition date, which are measured in accordance with fair value measurement principles. The allocation of the total purchase consideration to the estimated fair values of the acquired loans held for investment ("acquired loans") and core deposit intangible assets acquired was \$10.9 billion and \$710.2 million at the Merger Date, respectively.

The valuation of acquired loans was performed by a third party, utilizing a discounted cash flow methodology, as of the Merger Date to assess the fair value. The assumptions include credit loss expectations, discount rates, and prepayment speeds.

The valuation of core deposit intangible assets was performed by a third party, utilizing a discounted cash flow methodology, as of the Merger Date to assess the fair value. The assumptions include expected customer attrition rates, net maintenance cost of the deposit base, alternative cost of funds, and the interest costs associated with customer deposits.

We identified the fair value of the acquired loans and the core deposit intangible assets as part of the Merger as a critical audit matter because a high degree of auditor judgement and an increased extent of effort, including the involvement of our valuation specialists, was required to evaluate the reasonableness of the methodologies and certain assumptions used by management to determine the fair values. Specifically, the (i) credit loss expectations and (ii) discount rates used for acquired loans, and the (iii) discount rate, (iv) expected customer attrition rates, (v) net maintenance cost of the deposit base, (vi) alternative cost of funds, and (vii) the interest costs associated with customer deposits for core deposit intangible assets.

Our audit procedures related to the methodologies and certain assumptions used by management to determine the fair values of the acquired loans and the core deposit intangible asset as part of the Merger included the following, among others:

- We tested the effectiveness of controls over the purchase accounting allocation, including those over the valuation methodologies and assumptions utilized.
- We evaluated, with the assistance of our fair value specialists, the appropriateness of the (i) valuation methodologies, (ii) credit loss expectations and discount rates used for acquired loans, and the discount rate, expected customer attrition rates, net maintenance cost of the deposit base, alternative cost of funds, and the interest costs associated with customer deposits for core deposit intangible assets, as well as the (iii) mathematical accuracy of the valuation calculations.
- We tested the completeness and accuracy of the certain underlying loan and deposit information used in the valuation of the acquired loans and the core deposit intangible assets, respectively.

Allowance for Credit Losses on Loans and Leases—Refer to Notes 1 and 6 to the consolidated financial statements

Critical Audit Matter Description

The Bank's estimate of current expected credit losses for loans and leases is based on relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amounts.

Management judgement is required to determine which loss estimation methods are appropriate for their circumstances.

The allowance for credit losses on loans and leases ("ACLLL") is measured on a collective (pool) basis when similar characteristics exist. The Company has selected models at the portfolio level using a risk-based approach, with larger, more complex portfolios having more complex models. These models calculate two predictive metrics: the probability of default ("PD") and loss given default ("LGD"). These models estimate the PD and LGD for loans utilizing inputs that include forecasted future economic conditions and that are dependent upon specific macroeconomic variables relevant to each of the Bank's loan and lease portfolios. All loans and leases that have not been modeled receive a loss rate via an extrapolated rate methodology. The loans and leases receiving an extrapolated rate include certain loans acquired through the Merger, newly originated loans and leases and loans and leases without the granularity of data necessary to be modeled.

For ACLLL calculation purposes, the Bank considered the financial and economic environment at the time of assessment and economic scenarios that differed in the levels of severity and sensitivity to the ACLLL results. At each measurement date, the Bank selects the scenario that reflects its view of future economic conditions and is determined to be the most probable outcome. Along with the quantitative factors produced by the models, management also considers qualitative factors when determining the ACLLL.

Given the size of the ACLLL, the complexity of the models, and the management judgements required for the selection of appropriate models, forecasting economic conditions, and determining qualitative adjustments, performing audit procedures to evaluate the ACLLL requires a high degree of auditor judgment and an increased extent of effort, including the need to involve our credit specialists.

We have identified the ACLLL estimate for certain loan portfolios as a critical audit matter based upon the above factors, which includes the economic forecast selection, model applicability, and assessment of qualitative adjustments.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the ACLLL included the following, among others:

- We tested the effectiveness of controls over model applicability, the selection of forecasted economic assumptions used in the models, data transfers in to and out of the models, and overall model results.
- We involved credit specialists to assist us in evaluating the reasonableness and conceptual soundness of the methodologies applied in the credit loss estimation models.
- We tested the completeness and accuracy of certain data elements used in the models.
- We tested the reasonableness of the (i) extrapolation model, including assessment of the applicability of loss rates on acquired loans, (ii) the economic scenario selected by management for use in the models, and (iii) certain qualitative adjustments within the ACLLL estimate.

/s/ Deloitte & Touche LLP

Portland, Oregon February 27, 2024

We have served as the Company's auditor since 2018.

CONSOLIDATED BALANCE SHEETS December 31, 2023 and 2022

(in thousands, except shares)	D	ecember 31, 2023	Г	December 31, 2022
ASSETS				
Cash and due from banks	\$	498,496	\$	327,313
Interest-bearing cash and temporary investments		1,664,038		967,330
Total cash and cash equivalents		2,162,534	_	1,294,643
Investment securities				
Equity and other, at fair value		76,995		72,959
Available for sale, at fair value		8,829,870		3,196,166
Held to maturity, at amortized cost		2,300		2,476
Loans held for sale		30,715		71,647
Loans and leases (at fair value: \$275,140 and \$285,581)		37,441,951		26,155,981
Allowance for credit losses on loans and leases		(440,871)		(301,135
Net loans and leases		37,001,080		25,854,846
Restricted equity securities		179,274		47,144
Premises and equipment, net		338,970		176,016
Operating lease right-of-use assets		115,811		78,598
Goodwill		1,029,234		_
Other intangible assets, net		603,679		4,745
Residential mortgage servicing rights, at fair value		109,243		185,017
Bank-owned life insurance		680,948		331,759
Deferred tax asset, net		347,203		132,823
Other assets		665,740		399,800
Total assets	\$	52,173,596	\$	31,848,639
LIABILITIES AND SHAREHOLDERS' EQUITY				
Deposits				
Non-interest-bearing	\$	14,256,452	\$	10,288,849
Interest-bearing		27,350,568		16,776,763
Total deposits		41,607,020		27,065,612
Securities sold under agreements to repurchase		252,119		308,769
Borrowings		3,950,000		906,175
Junior subordinated debentures, at fair value		316,440		323,639
Junior and other subordinated debentures, at amortized cost		107,895		87,813
Operating lease liabilities		130,576		91,694
Other liabilities		814,512		585,111
Total liabilities		47,178,562		29,368,813
COMMITMENTS AND CONTINGENCIES (NOTE 18)				
SHAREHOLDERS' EQUITY				
Preferred Stock, no par value, shares authorized: 2,000,000, issued and outstanding: 0		_		_
Common stock, no par value, shares authorized: $520,000,000$ in 2023 and $238,320,000^{(1)}$ in 2022 ; issued and outstanding: $208,584,667$ in 2023 and $129,320,962^{(1)}$ in 2022		5,802,747		3,450,493
Accumulated deficit		(467,571)		(543,803
Accumulated other comprehensive loss		(340,142)		(426,864
Total shareholders' equity		4,995,034		2,479,826
Total liabilities and shareholders' equity	\$	52,173,596	\$	31,848,639
			_	

⁽¹⁾ Periods prior to February 28, 2023 have been restated as a result of the adjustment to common shares outstanding based on the exchange ratio from the Merger of 0.5958.

CONSOLIDATED STATEMENTS OF OPERATIONS For the Years Ended December 31, 2023, 2022, and 2021

(in thousands, except per share amounts) INTEREST INCOME		2023		2022		2021
Interest and fees on loans and leases	\$	2,113,615	\$	1,050,258	\$	890,515
Interest and dividends on investment securities:	Ψ	2,113,013	Ψ	1,030,230	Ψ	070,313
Taxable		276,841		72,264		60,399
Exempt from federal income tax		24,109		5,351		5,947
Dividends		13,103		438		1,318
Interest on temporary investments and interest-bearing deposits		111,659		19,706		3,864
Total interest income INTEREST EXPENSE		2,539,327		1,148,017		962,043
Interest on deposits		461,654		48,195		27,151
Interest on securities sold under agreement to repurchase and federal funds purchased		3,923		997		280
Interest on borrowings		242,914		8,920		2,838
Interest on junior and other subordinated debentures		37,665		19,889		12,127
Total interest expense		746,156		78,001		42,396
Net interest income		1,793,171		1,070,016		919,647
PROVISION (RECAPTURE) FOR CREDIT LOSSES		213,199		84,016		(42,651
Net interest income after provision (recapture) for credit losses NON-INTEREST INCOME		1,579,972		986,000		962,298
Service charges on deposits		65,525		48,365		42,086
Card-based fees		55,263		37,370		36,114
Financial services and trust revenue		13,471		90		5,112
Residential mortgage banking revenue, net		16,789		106,859		186,811
Gain on sale of debt securities, net		13		2		8
Gain (loss) on equity securities, net		2,300		(7,099)		(1,511)
Gain on loan and lease sales, net		4,414		6,696		15,715
Bank owned life insurance income		15,624		8,253		8,302
Other income (loss)		30,528		(1,008)		63,681
Total non-interest income NON-INTEREST EXPENSE		203,927		199,528		356,318
Salaries and employee benefits		616,103		441,226		480,820
Occupancy and equipment, net		183,480		138,451		137,546
Communications		16,252		10,429		11,564
Marketing		11,399		6,540		7,381
Services		57,641		51,323		48,800
FDIC assessments		71,402		13,964		9,238
Intangible amortization		111,296		4,095		4,520
Merger-related expenses		171,659		17,356		15,183
Other expenses		73,468		51,566		45,404
Total non-interest expense		1,312,700		734,950		760,456
Income before provision for income taxes		471,199		450,578		558,160
Provision for income taxes		122,484		113,826		137,860
Net income	\$	348,715	\$	336,752	\$	420,300
Earnings per common share ⁽¹⁾ :						
Basic	\$	1.79	\$	2.60	\$	3.22
Diluted Weighted groups of common charge outstanding(1):	\$	1.78	\$	2.60	\$	3.21
Weighted average number of common shares outstanding ⁽¹⁾ :		105 204		129,277		130,499
Basic		195,304				
Diluted		195,871		129,732		131,030

⁽¹⁾ Periods prior to February 28, 2023 have been restated as a result of the adjustment to common shares outstanding based on the exchange ratio from the Merger of 0.5958.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME For the Years Ended December 31, 2023, 2022, and 2021

(in thousands)	2023	2022	2021
Net income	\$ 348,715	\$ 336,752	\$ 420,300
Available for sale securities:			
Unrealized gains (losses) arising during the period	109,221	(548,193)	(124,970)
Income tax (expense) benefit related to unrealized gains (losses)	(28,411)	140,995	32,142
Reclassification adjustment for net realized gains in earnings	(13)	(2)	(8)
Income tax expense related to realized gains	3	1	2
Net change in unrealized gains (losses) for available for sale securities	80,800	(407,199)	(92,834)
Junior subordinated debentures, at fair value:			
Unrealized gains (losses) arising during the period	7,866	(28,842)	(37,899)
Income tax (expense) benefit related to unrealized gains (losses)	(2,045)	7,418	9,747
Net change in unrealized gains (losses) for junior subordinated debentures, at fair value	5,821	(21,424)	(28,152)
Pension plan liability adjustment:			
Amortization of unrecognized net actuarial gain included in net periodic pension cost	136	_	_
Income tax expense related to unrecognized actuarial loss	(35)	<u> </u>	_
Net change in pension plan liability adjustment	101	_	_
Other comprehensive income (loss), net of tax	86,722	(428,623)	(120,986)
Comprehensive income (loss)	\$ 435,437	\$ (91,871)	\$ 299,314

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY For the Years Ended December 31, 2023, 2022, and 2021

	Comm	on S	Stock	()	Retained Earnings	Accumulated Other	
(in thousands, except shares)	Shares		Amount	(A	ccumulated Deficit)	omprehensive ncome (Loss)	Total
Balance at January 1, 2021	131,210,850	\$	3,514,599	\$	(932,767)	\$ 122,745	\$ 2,704,577
Net income					420,300		420,300
Other comprehensive loss, net of tax						(120,986)	(120,986)
Stock-based compensation			10,906				10,906
Stock repurchased and retired	(2,477,567)		(80,690)				(80,690)
Issuances of common stock under stock plans	332,193		34				34
Cash dividends on common stock (\$1.40 per share) (1)					(184,871)		(184,871)
Balance at December 31, 2021	129,065,476	\$	3,444,849	\$	(697,338)	\$ 1,759	\$ 2,749,270
Net income					336,752		336,752
Other comprehensive loss, net of tax						(428,623)	(428,623)
Stock-based compensation			9,753				9,753
Stock repurchased and retired	(120,380)		(4,163)				(4,163)
Issuances of common stock under stock plans	375,866		54				54
Cash dividends on common stock (\$1.40 per share) (1)					(183,217)		(183,217)
Balance at December 31, 2022	129,320,962	\$	3,450,493	\$	(543,803)	\$ (426,864)	\$ 2,479,826
Net income					348,715		348,715
Other comprehensive income, net of tax						86,722	86,722
Stock-based compensation			18,073				18,073
Stock repurchased and retired	(263,835)		(6,282)				(6,282)
Issuances of common stock under stock plans	605,988		_				_
Issuances of common stock under the employee stock purchase plan	58,440		1,185				1,185
Stock issued in connection with acquisition	78,863,112		2,339,278				2,339,278
Cash dividends on common stock (\$1.43 per share) (1)					(272,483)		(272,483)
Balance at December 31, 2023	208,584,667	\$	5,802,747	\$	(467,571)	\$ (340,142)	\$ 4,995,034
(1)						 	

⁽¹⁾ Periods prior to February 28, 2023 have been restated as a result of the adjustment to common shares outstanding based on the exchange ratio from the Merger of 0.5958.

CONSOLIDATED STATEMENTS OF CASH FLOW For the Years Ended December 31, 2023, 2022, and 2021

(in thousands)	2023		2022		2021
CASH FLOWS FROM OPERATING ACTIVITIES:					
Net income	\$ 348,715	\$	336,752	\$	420,300
Adjustments to reconcile net income to net cash provided by operating activities:					
Deferred income tax expense	12,895		14,383		40,805
(Accretion) amortization of investment (discounts) premiums, net	(67,702)		6,601		14,404
Gain on sales of investment securities, net	(13)		(2)		(8)
Provision (recapture) for credit losses	213,199		84,016		(42,651)
Change in cash surrender value of bank owned life insurance	(15,962)		(8,353)		(8,402)
Depreciation, amortization, and accretion	144,252		28,305		31,498
Gain on sale of premises and equipment	(31,472)		(2,747)		(574)
Additions to residential mortgage servicing rights carried at fair value	(5,347)		(24,137)		(38,522)
Change in fair value residential mortgage servicing rights carried at fair value	23,816		(37,265)		7,814
Stock-based compensation	18,073		9,753		10,906
Net (increase) decrease in equity and other investments	(448)		1,156		352
(Gain) loss on equity securities, net	(2,300)		7,099		1,511
(Gain) loss on sale of loans and leases, net	(10,200)		1,953		(145,723)
Change in fair value of loans held for sale	341		10,670		21,427
Origination of loans held for sale	(441,568)		(1,839,466)		(4,747,104)
Proceeds from sales of loans held for sale	602,634		2,076,548		4,952,918
Change in other assets and liabilities:					
Net (increase) decrease in other assets	(24,163)		169,540		153,148
Net (decrease) increase in other liabilities	 (94,910)		230,223		(9,376)
Net cash provided by operating activities	 669,840		1,065,029		662,723
CASH FLOWS FROM INVESTING ACTIVITIES:					
Purchases of investment securities available for sale	(926,216)		(276,812)		(1,838,923)
Proceeds from investment securities available for sale	1,694,850		396,100		761,249
Purchases of restricted equity securities	(290,817)		(180,543)		(53)
Redemption of restricted equity securities	260,697		144,315		30,803
Net change in loans and leases	(1,335,189)		(3,744,493)		(735,422)
Proceeds from sales of loans and leases	748,264		148,978		246,667
Change in premises and equipment	40,688		(27,086)		(15,478)
Purchases of bank owned life insurance	(28,243)				
Proceeds from bank owned life insurance death benefits	4,799		4,339		4,127
Proceeds from sale of mortgage servicing rights	57,305				
Net cash received from sale of Umpqua Investments, Inc.	_		_		10,781
Cash received in the Merger	274,587				_
Other	 1,011		2,110		1,974
Net cash provided (used) in investing activities	\$ 501,736	\$	(3,533,092)	\$	(1,534,275)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Net (decrease) increase in deposit liabilities	\$ (651,130)	\$	470,945	\$	1,972,519
Net (decrease) increase in securities sold under agreements to repurchase	(126,675)		(183,478)		116,863
Net decrease in federal funds purchased	(14,000)		_		_
Proceeds from borrowings	17,350,000		1,650,000		_
Repayment of borrowings	(16,586,522)		(750,000)		(765,000)
Net proceeds from issuance of common stock	1,185		54		34
Dividends paid on common stock	(270,261)		(182,273)		(183,734)
Repurchase and retirement of common stock	(6,282)		(4,163)		(80,690)
Net cash (used) provided by financing activities	 (303,685)		1,001,085		1,059,992
Net increase (decrease) in cash and cash equivalents	867,891		(1,466,978)		188,440
Cash and cash equivalents, beginning of period	1,294,643	_	2,761,621	_	2,573,181
Cash and cash equivalents, end of period	\$ 2,162,534	\$	1,294,643	\$	2,761,621

CONSOLIDATED STATEMENTS OF CASH FLOW For the Years Ended December 31, 2023, 2022, and 2021 (Continued)

(in thousands)	2023	2022	2021
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid during the period for:			
Interest	\$ 692,991	\$ 71,209	\$ 42,820
Income taxes	\$ 138,910	\$ 71,804	\$ 105,119
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES:			
Change in unrealized gains and losses on investment securities available for sale, net of taxes	\$ 80,800	\$ (407,199)	\$ (92,834)
Change in unrealized gains and losses on junior subordinated debentures carried at fair value, net of taxes	\$ 5,821	\$ (21,424)	\$ (28,152)
Transfer of loans to loans held for sale	\$ 118,085	\$ _	\$ _
Transfer of loans held for sale to loans	\$ 5,754	\$ 25,057	\$ 315,887
Acquisition:			
Assets acquired	\$ 19,230,586	\$ _	\$ _
Liabilities assumed	(17,920,542)		_
Net assets acquired	\$ 1,310,044	\$	\$

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 – Significant Accounting Policies

Nature of Operations-Columbia Banking System, Inc. is headquartered in Tacoma, Washington, and is engaged primarily in the business of commercial and consumer banking. The Company provides a broad range of banking and other financial services to corporate, institutional, small business, and individual customers through its wholly-owned banking subsidiary Umpqua Bank. The Bank has a wholly-owned subsidiary, Financial Pacific Leasing, Inc., which is a commercial equipment leasing company.

The Company and its subsidiaries are subject to regulation by certain federal and state agencies and undergo periodic examination by these regulatory agencies.

Basis of Financial Statement Presentation-On February 28, 2023, UHC merged with and into Columbia, with Columbia continuing as the surviving legal corporation. Promptly following the Merger, Columbia's wholly-owned bank subsidiary, Columbia State Bank, merged with and into UHC's wholly-owned bank subsidiary, Umpqua Bank, with Umpqua Bank as the surviving bank. Upon completion of the Merger, the combined company became Columbia Banking System, Inc. (together with its direct and indirect subsidiaries, "we," "us," "our," "Columbia" or the "Company"), which is a financial holding company with its wholly-owned banking subsidiary Umpqua Bank (the "Bank").

The Merger was accounted for as a reverse merger using the acquisition method of accounting; therefore, UHC was deemed the acquirer for financial reporting purposes, even though Columbia was the legal acquirer. The Merger was effectively an all-stock transaction and has been accounted for as a business combination. Columbia's financial results for any periods ended prior to February 28, 2023, the Merger Date, reflect UHC results only on a standalone basis. Accordingly, Columbia's reported financial results for the three months ended March 31, 2023 reflect only UHC financial results through the closing of the Merger and may not be directly comparable to the prior or future reported periods. The number of shares issued and outstanding, earnings per share, additional paid-in capital, and all references to share quantities or metrics of Columbia have been retrospectively restated to reflect the equivalent number of shares issued in the Merger as the Merger was accounted for as a reverse acquisition using the acquisition method of accounting. Under the reverse acquisition method of accounting, the assets and liabilities of Columbia were recorded at their respective fair values as of February 28, 2023 ("historical Columbia"). Refer to Note 2 - *Business Combination* for additional information on this acquisition.

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States and with prevailing practices within the banking and securities industries. In preparing such financial statements, management is required to make certain estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the balance sheet and the reported amounts of revenues and expenses for the reporting period. Actual results could differ significantly from those estimates. Material estimates that are particularly susceptible to significant change relate to the determination of the ACL, business combinations, and goodwill.

In connection with the Merger, effective February 28, 2023, the Company realigned its operating segments based on changes in its internal reporting structure and changes to the Company's Chief Operating Decision Maker. The Company now reports as a single reportable segment. Previously, UHC reported two segments: Core Banking and Mortgage Banking; however, in 2022 the mortgage banking segment's scale of mortgage operations was downsized as a smaller impact on the financial statements was expected in the future. The revised presentation of segment data has been applied retroactively for all periods presented in these financial statements.

Consolidation-The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, and the Bank's wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation. The Company has wholly-owned trusts that were formed to issue trust preferred securities and related common securities of the Trusts. The Company has not consolidated the accounts of the Trusts in its consolidated financial statements as they are considered to be variable interest entities for which the Company is not a primary beneficiary. As a result, the junior subordinated debentures issued by the Company to the Trusts are reflected on the Company's consolidated balance sheet as junior subordinated debentures.

Subsequent events-The Company has evaluated events and transactions through the date that the consolidated financial statements were issued for potential recognition or disclosure.

Business Combinations-The Company applies the acquisition method of accounting for business combinations. Under the acquisition method, the acquiring entity recognizes the assets acquired and liabilities assumed at their acquisition date fair values. Management utilizes prevailing valuation techniques appropriate for the asset or liability being measured in determining these fair values. This method often involves estimates based on third-party valuations or internal valuations based on discounted cash flow analyses or other valuation techniques, all of which are inherently subjective. Any excess of the purchase price over the fair value of net assets and other identifiable intangible assets acquired is recorded as goodwill. Assets acquired and liabilities assumed from contingencies must also be recognized at fair value if the fair value can be determined during the measurement period. Acquisition-related costs, including conversion and restructuring charges, are expensed as incurred. Fair values are subject to refinement over the measurement period, not to exceed one year after the closing date.

Cash and Cash Equivalents-Cash and cash equivalents include cash and due from banks and temporary investments which are interest-bearing balances due from other banks. Cash and cash equivalents generally have a maturity of 90 days or less at the time of purchase.

Equity and Other Securities-Equity and other securities are carried at fair value with realized and unrealized gains or losses recorded in non-interest income.

Investment Securities Available for Sale-Debt securities are classified as available for sale if the Company intends and has the ability to hold those securities for an indefinite period of time, but not necessarily to maturity. Any decision to sell a debt security classified as available for sale would be based on various factors, including significant movements in interest rates, changes in the maturity mix of assets and liabilities, liquidity needs, regulatory capital considerations, and other similar factors. Premiums and discounts are amortized or accreted over the life of the related investment security as an adjustment to yield using the effective interest method. Dividend and interest income are recognized when earned.

Securities available for sale are carried at fair value. Realized gains or losses, determined on the basis of the cost of specific securities sold, are included in earnings. Unrealized holding gains or losses are included in other comprehensive income as a separate component of shareholders' equity, net of tax. When the fair value of an available-for-sale debt security falls below the amortized cost basis, it is evaluated to determine if any of the decline in value is attributable to credit loss. Decreases in fair value attributable to credit loss would be recorded directly to earnings with a corresponding ACL, limited by the amount that the fair value is less than the amortized cost basis. If the credit quality subsequently improves, the allowance would be reversed up to a maximum of the previously recorded credit losses. If the Company intends to sell an impaired available-for-sale debt security, or if it is more likely than not that the Company will be required to sell the security prior to recovering the amortized cost basis, the entire fair value adjustment would be immediately recognized in earnings with no corresponding ACL.

Loans Held for Sale-Loans held for sale represent residential mortgage loans intended to be sold in the secondary market and non-mortgage loans that management has an active plan to sell. The Company has elected to account for residential mortgage loans held for sale at fair value and non-mortgage loans at the lower of cost or fair value. Fair value is determined based on quoted secondary market prices for similar loans, including the implicit fair value of embedded servicing rights. The change in fair value of loans held for sale is primarily driven by changes in interest rates subsequent to loan funding, resulting in revaluation adjustments to the recorded fair value. The inputs used in the fair value measurements are considered Level 2 inputs. The use of the fair value option allows the change in the fair value of loans to more effectively offset the change in the fair value of derivative instruments that are used as economic hedges to loans held for sale. Loan origination fees and direct origination costs are recognized immediately in net income. Interest income on loans held for sale is included in interest income on the Consolidated Statements of Operations and recognized when earned. Loans held for sale are placed on non-accrual in a manner consistent with loans held for investment. The Company recognizes the gain or loss on the sale of loans when the sales criteria for derecognition are met.

Originated Loans and Leases-Loans are stated at the amount of unpaid principal, net of unearned income and any deferred fees or costs. All discounts and premiums are recognized over the contractual life of the loan as yield adjustments. Leases are recorded at the amount of minimum future lease payments receivable and estimated residual value of the leased equipment, net of unearned income and any deferred fees. Initial direct costs related to lease originations are deferred as part of the investment in direct financing leases and amortized over their term using the effective interest method. Unearned lease income is amortized over the lease term using the effective interest method.

Acquired Loans and Leases-Loans and leases purchased without more-than-insignificant credit deterioration are recorded at their fair value at the acquisition date. However, loans and leases purchased with more-than-insignificant credit deterioration will be recorded with their applicable ACL to determine the amortized cost basis. The difference between the fair value and principal balance is recognized as an adjustment to the yield over the remaining life of the loan and lease.

Income Recognition on Non-Accrual Loans-Loans are classified as non-accrual if the collection of principal and interest is doubtful. Generally, this occurs when a loan is past due beyond its maturity, principal payment, or interest payment due date by 90 days or more, unless such loans are well-secured and in the process of collection. Loans that are less than 90 days past due may also be classified as non-accrual if repayment in full of principal and/or interest is in doubt.

Generally, when a loan is classified as non-accrual, all uncollected accrued interest is reversed from interest income and the accrual of interest income is discontinued. In addition, any cash payments subsequently received are applied as a reduction of principal outstanding. In cases where the future collectability of the principal balance in full is expected, interest income may be recognized on a cash basis. A loan may be restored to accrual status when the borrower's financial condition improves so that full collection of future contractual payments is considered likely. For those loans placed on non-accrual status due to payment delinquency, return to accrual status will typically not occur until the borrower demonstrates repayment ability over a period of not less than six months.

Allowance for Credit Losses-ASC Topic 326 requires an expected loss model, which encompasses allowances for credit losses expected to be incurred over the life of the portfolio. The CECL model requires the measurement of all expected credit losses for financial assets measured at amortized cost and certain off-balance sheet credit exposures based on historical experience, current conditions, and reasonable and supportable forecasts.

The allowance for credit losses on loans and leases is the combination of the allowance for loan and lease losses and the reserve for unfunded loan commitments. The Bank has elected to exclude accrued interest receivable from the measurement of its ACL given the well-defined non-accrual policies which results in timely reversal of outstanding interest through interest income. Loans are charged-off against the allowance when deemed uncollectible by management. Expected recoveries do not exceed the aggregate of amounts previously charged-off and expected to be charged-off. Fluctuations in the allowance are reported in the statement of operations as a component of provision for credit losses.

The Bank has established an Allowance for Credit Losses Committee, which is responsible for, among other things, regularly reviewing the ACL methodology, including allowance levels, and ensuring that it is designed and applied in accordance with generally accepted accounting principles. CECL is not prescriptive in the methodology used to determine the expected credit loss estimate. Instead, management has flexibility in selecting the methodology. The expected credit losses must be estimated over a financial asset's contractual term, adjusted for prepayments utilizing quantitative and qualitative factors. There are also specific considerations for PCD and CDL.

The estimate of current expected credit losses is based on relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amounts. Historical loss experience is the starting point for estimating expected credit losses. Adjustments are made to historical loss experience to reflect differences in asset-specific risk characteristics, such as underwriting standards, portfolio mix or asset terms, and differences in economic conditions – both current conditions and reasonable and supportable forecasts. When the Company is not able to make or obtain reasonable and supportable forecasts for the entire life of the financial asset, it has estimated expected credit losses for the remaining life using an approach that reverts to historical credit loss information for the longer-term portion of the asset's life. The allowance related to the extrapolated population is based on loan segment, PD credit classification, and vintage year of the modeled loans and leases. A loss factor is calculated and applied to the non-modeled loans and leases.

The Company utilizes complex models to obtain reasonable and supportable forecasts. Most of the models calculate two predictive metrics: the probability of default and loss given default. The PD measures the probability that a loan will default within a given time horizon and primarily measures the adequacy of the debtor's cash flow as the primary source of repayment of the loan or lease. The LGD is the expected loss which would be realized presuming a default has occurred and primarily measures the value of the collateral or other secondary sources of repayment related to the collateral. Acquired and newly originated loans and leases that have not been modeled receive a loss rate via an extrapolated rate methodology.

Management believes that the ACL was adequate as of December 31, 2023. There is, however, no assurance that future loan losses will not exceed the levels provided for in the ACL and could possibly result in additional charges to the provision for credit losses.

Collateral-Dependent Loans -A loan or lease is considered collateral dependent when repayment is expected to be provided substantially through the operation or sale of the collateral when the borrower is experiencing financial difficulty. The Company's classification of CDLs includes: non-homogeneous non-accrual loans and leases; non-homogeneous loans determined by individual credit review; homogeneous non-accrual leases and equipment finance agreements; and homogeneous real estate secured loans that have been charged down to net realizable value or the government guaranteed balance. Except for homogeneous leases and equipment finance agreements, the expected credit losses for CDLs will be measured using the fair value of the underlying collateral, adjusted for costs to sell when applicable, less the amortized cost basis of the financial asset. The Company may also use the loan's observable market price, if available. If the value of the CDL is determined to be less than the recorded amount of the loan, a charge-off will be taken. To determine the expected credit loss for homogeneous leases or equipment finance agreements, the LGD calculated by the CECL model will be utilized. When a homogeneous lease or equipment finance agreement becomes 181 days past due, it is fully charged-off.

Reserve for Unfunded Commitments-A RUC is maintained at a level that, in the opinion of management, is adequate to absorb expected losses associated with the Bank's commitment to lend funds under existing agreements, such as letters or lines of credit. The RUC calculation utilizes the ACLLL rates by segment, and utilization rates based on the economic expectations over the contractual life of the commitment adjusted for qualitative considerations if necessary. The reserve is based on estimates and ultimate losses may vary from the current estimates. These estimates are evaluated on a regular basis and adjustments are reported in earnings in the periods in which they become known. Draws on unfunded commitments that are considered uncollectible at the time funds are advanced are charged to the allowance for credit losses on loans and leases. Provisions for unfunded commitment losses are added to the RUC, which is included in the other liabilities section of the Consolidated Balance Sheets.

Loan and Lease Fees and Direct Loan Origination Costs-Origination and commitment fees and direct loan origination costs for loans and leases held for investment are deferred and recognized as an adjustment to the yield over the life of the loans and leases. The recognition of these net deferred fees is accelerated at loan payoff, if earlier than the life of the loan.

Restricted Equity Securities-Restricted equity securities consists mostly of the Bank's investment in Federal Home Loan Bank of Des Moines stock that is carried at par value, which reasonably approximates its fair value.

As a member of the FHLB system, the Bank is required to maintain a minimum level of investment in FHLB stock based on a specific percentage of total assets, with additional stock requirements based on use of FHLB products. The Bank may request redemption at par value of any stock in excess of the minimum required investment. Stock redemptions are at the discretion of the FHLB.

Premises and Equipment-Premises and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is provided over the estimated useful life of equipment, generally three to ten years, on a straight-line or accelerated basis. Depreciation is provided over the estimated useful life of premises, up to 39 years, on a straight-line or accelerated basis. Generally, leasehold improvements are amortized or accreted over the life of the related lease, or the life of the related asset, whichever is shorter. Expenditures for major renovations and betterments of the Company's premises and equipment are capitalized. The Company purchases, as well as internally develops and customizes, certain software to enhance or perform internal business functions. Software development costs incurred in the preliminary project stages are charged to non-interest expense. Costs associated with designing software configuration, installation, coding programs and testing systems are capitalized and amortized using the straight-line method over three to seven years. Implementation costs incurred for software that is part of a hosting arrangement are capitalized in other assets and amortized on a straight-line basis over the life of the contract. In addition to annual impairment reviews, management reviews long-lived assets anytime a change in circumstance indicates the carrying amount of these assets may not be recoverable.

Operating Leases-The Company leases branch locations, corporate office space, and equipment under non-cancelable leases. Leases with an initial term of 12 months or less are not recorded on the balance sheet. The leases contain various provisions for increases in rental rates, based either on changes in the published Consumer Price Index or a predetermined escalation schedule. Substantially all of the leases provide the Company with one or more options to renew, with renewal terms that can extend the lease term from one to 10 years or more. The exercise of lease renewal options is at management's sole discretion. The depreciable life of assets and leasehold improvements are limited by the expected lease term unless there is a transfer of title or purchase option reasonably certain of exercise. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants. The Company rents or subleases certain real estate to third parties. The Company's sublease portfolio consists of operating leases of mainly former branch locations or excess space in branch or corporate facilities. In addition to annual impairment reviews, management reviews right of use assets anytime a change in circumstances indicates the carrying amount of these assets may not be recoverable.

Goodwill and Other Intangibles-Intangible assets are comprised of goodwill and other intangibles acquired in business combinations. Goodwill is not amortized but instead is periodically tested for impairment. Intangible assets with definite useful lives are amortized to their estimated residual values over their respective estimated useful lives, and also reviewed for impairment. Amortization of intangible assets is included in non-interest expense on the consolidated statement of operations.

The Company performs a goodwill impairment analysis on an annual basis as of October 31. Goodwill is assessed for impairment at the reporting unit level either qualitatively or quantitatively. Additionally, goodwill is evaluated on an interim basis when events or circumstances indicate impairment potentially exists. A significant amount of judgment is involved in determining if an indicator of impairment has occurred.

Mortgage Servicing Rights (MSR)-The Company determines its classes of servicing assets based on the asset type being serviced along with the methods used to manage the risk inherent in the servicing assets, which includes the market inputs used to value servicing assets. Fair value adjustments encompass market-driven valuation changes and the runoff in value that occurs from the passage of time, which are separately disclosed. Under the fair value method, the MSR is carried in the balance sheet at fair value and the changes in fair value are reported in earnings under the caption residential mortgage banking revenue, net in the period in which the change occurs.

The expected life of the loans underlying the MSR can vary from management's estimates due to prepayments by borrowers, especially when rates change significantly. Prepayments outside of management's estimates would impact the recorded value of the residential MSR. The value of the MSR is also dependent upon the discount rate used in the model, which management reviews on an ongoing basis. An increase in the discount rate would reduce the value of the MSR.

SBA/USDA Loans Sales, Servicing, and Commercial Servicing Asset-The Bank, on a limited basis, sells or transfers loans, including the guaranteed portion of SBA and USDA loans (with servicing retained) for cash proceeds. The Bank records a servicing asset when it sells a loan and retains the servicing rights. The servicing asset is recorded at fair value upon sale, and the fair value is estimated by discounting estimated net future cash flows from servicing using discount rates that approximate current market rates and using estimated prepayment rates. Subsequent to initial recognition, the servicing rights are carried at the lower of amortized cost or fair value and are amortized in proportion to, and over the period of, the estimated net servicing income.

Revenue Recognition-The Company's revenue within the contracts with customers guidance are presented within non-interest income and include service charges on deposits, card-based fees, merchant fee income, and financial services, brokerage revenue and trust revenue. These revenues are recognized when obligations under the terms of a contract with customers are satisfied. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services. When the amount of consideration is variable, the Company will only recognize revenue to the extent that it is probable that the cumulative amount recognized will not be subject to a significant reversal in the future. Substantially all of the Company's contracts with customers have expected durations of one year or less and payments are typically due when or as the services are rendered or shortly thereafter. When third parties are involved in providing services to customers, the Company recognizes revenue on a gross basis when it has control over those services being provided to the customer; otherwise, revenue is recognized for the net amount of any fee or commission.

Revenue is segregated based on the nature of product and services offered as part of contractual arrangements. Revenue from contracts with customers is broadly segregated as follows:

- Service charges on deposits consist primarily of fees earned from deposit customers for account maintenance and
 transaction-based and overdraft services. Account maintenance fees consist primarily of account fees and analyzed
 account fees charged on deposit accounts on a monthly basis. The performance obligation is satisfied, and the fees
 are recognized on a monthly basis as the service period is completed. Transaction-based fees on deposit accounts are
 charged to deposit customers for specific services provided to the customer, such as non-sufficient funds fees,
 overdraft fees, and wire fees. The performance obligation is completed as the transaction occurs and the fees are
 recognized at the time each specific service is provided to the customer.
- Card-based fees are comprised of debit and credit card income, ATM fees, and merchant services income. Debit and
 credit card income is primarily comprised of interchange fees earned when the Bank's customers' debit and credit
 cards are processed through card payment networks. The performance obligation is satisfied, and the fees are earned
 when the cost of the transaction is charged to the cardholders' debit or credit card. Certain expenses and rebates
 directly related to the credit and debit card interchange contract are recorded on a net basis with the interchange
 income.
- Financial services and trust revenue consists of brokerage revenue related to third-party revenue share agreements for commissions on brokerage services and trust revenue from trust administration and investment management services. Brokerage revenue is recognized when cash payment is received by the third party based on the net revenues earned on the products and services purchased in the month prior. Trust revenue is recognized monthly and based on the portfolio values at the end of the prior month.
- Other non-interest income includes a variety of other revenue streams including residential mortgage banking, net revenue, security gains and losses, loan sales gain and losses, BOLI income revenue, swap revenue, treasury management, and miscellaneous consumer fees. These revenue streams are not in the scope of revenue from contracts with customers guidance. Revenue is recognized when, or as, the performance obligation is satisfied. Inherent variability in the transaction price is not recognized until the uncertainty affecting the variability is resolved.

Income Taxes-Income taxes are accounted for using the asset and liability method. Under this method, a deferred tax asset or liability is determined based on the enacted tax rates which will be in effect when the differences between the financial statement carrying amounts and tax basis of existing assets and liabilities are expected to be reported in the Company's income tax returns. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established to reduce the net carrying amount of deferred tax assets if it is determined to be more likely than not, that all or some portion of the potential deferred tax asset will not be realized.

Deferred tax assets are recognized subject to management's judgment that realization is "more likely than not." Uncertain tax positions that meet the "more likely than not" recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the DTA will or will not be realized. The Company's ultimate realization of the DTA is dependent upon the generation of future taxable income during the periods in which temporary differences become deductible. Management considers the nature and amount of historical and projected future taxable income, the scheduled reversal of deferred tax assets and liabilities, and available tax planning strategies in making this assessment. The amount of deferred taxes recognized could be impacted by changes to any of these variables.

The Company earns Investment Tax Credits on certain equipment leases and uses the deferral method to account for these tax credits. Under this method, the Investment Tax Credits are recognized as a reduction of depreciation expense over the life of the asset.

Derivatives-The Bank enters into forward delivery contracts to sell residential mortgage loans or mortgage-backed securities to broker/dealers at specific prices and dates in order to hedge the interest rate risk in its portfolio of mortgage loans held for sale and its residential mortgage loan commitments. The commitments to originate mortgage loans held for sale and the related forward delivery contracts are considered derivatives. The Bank also executes interest rate swaps with commercial banking customers to facilitate their respective risk management strategies. Those interest rate swaps are hedged by simultaneously entering into an offsetting interest rate swap that the Bank executes with a third party, such that the Bank minimizes its net risk exposure. The Bank also uses certain derivative financial instruments to offset changes in the value of its MSR. These derivatives consist primarily of interest rate futures and forward settling mortgage-backed securities. The Company considers all free-standing derivatives as economic hedges and recognizes these derivatives as either assets or liabilities in the balance sheet, and the Company requires measurement of those instruments at fair value through adjustments to current earnings. None of the Company's derivatives are designated as hedging instruments.

The fair value of the derivative residential mortgage loan commitments is estimated using the net present value of expected future cash flows. Assumptions used include pull-through rate assumption based on historical information, current mortgage interest rates, the stage of completion of the underlying application and underwriting process, direct origination costs yet to be incurred, the time remaining until the expiration of the derivative loan commitment, and the expected net future cash flows related to the associated servicing of the loan.

Stock-Based Compensation-The Company recognizes expense in its statement of operations for the grant-date fair value of RSUs and RSAs issued over the requisite service period (generally the vesting period). An estimate of expected forfeitures is included in the calculation of stock-based compensation expense, and actual forfeitures are recognized when they occur.

The Company issues RSAs and RSUs which generally vest ratably over three years and are recognized as compensation expense over that same period of time. Certain performance-based awards are subject to performance-based and market-based vesting criteria in addition to a requisite service period and cliff vest based on those conditions at the end of three years and compensation expense is recognized over the service period to the extent the RSUs are expected to vest. Recipients of RSAs have voting rights while recipients of RSUs do not. Unvested RSUs and RSAs accrue dividends, which are paid out when the awards vest and the common shares are issued. The fair value of time-based and performance-based RSAs and RSUs are equal to the fair market value of the Company's common stock on the grant date. The fair value of market-based performance RSUs is estimated on the date of grant using the Monte Carlo simulation model.

Earnings per Common Share-Basic earnings per common share is computed by dividing net income by the weighted average number of common shares outstanding during the period. Diluted earnings per common share is computed in a similar manner, except that first the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares were issued using the treasury stock method. For all periods presented, unvested RSUs and RSAs are potentially dilutive instruments issued by the Company. Undistributed losses are not allocated to the unvested stock-based payment awards as the holders are not contractually obligated to share in the losses of the Company.

Fair Value Measurements-Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. There is a three-level hierarchy for disclosure of assets and liabilities measured or disclosed at fair value. The classification of assets and liabilities within the hierarchy is based on whether the inputs to the valuation methodology used for measurement are observable or unobservable. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs reflect estimates about market data. In general, fair values determined by Level 1 inputs utilize quoted prices for identical assets or liabilities traded in active markets that the Company has the ability to access. Fair values determined by Level 2 inputs utilize inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs other than quoted prices that are observable for the asset or liability, such as interest rates and yield curves that are observable at commonly quoted intervals. Level 3 inputs are unobservable inputs for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level in the fair value hierarchy within which the fair value measurement in its entirety falls has been determined based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment, and considers factors specific to the asset or liability.

Application of new accounting guidance

In October 2021, the FASB issued ASU No. 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*. The amendments in this ASU improve comparability for both the recognition and measurement of acquired revenue contracts with customers at the date of and after a business combination. The ASU specifies for all acquired revenue contracts regardless of their timing of payment (1) the circumstances in which the acquirer should recognize contract assets and contract liabilities that are acquired in a business combination and (2) how to measure those contract assets and contract liabilities. The amendments improve comparability after the business combination by providing consistent recognition and measurement guidance for revenue contracts with customers acquired in a business combination. The Company adopted the guidance on January 1, 2023, and it did not have a material impact on the Company's consolidated financial statements.

In March 2022, the FASB issued ASU No. 2022-02, Financial Instruments - Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures. The ASU addresses areas identified by the FASB as part of its post-implementation review of the credit losses standard (ASU 2016-13) that introduced the CECL model. The amendments eliminate the accounting guidance for troubled debt restructurings by creditors that have adopted CECL and enhance the disclosure requirements for loan refinancings and restructurings made with borrowers experiencing financial difficulty. In addition, the amendments require a public business entity to disclose current-period gross write-offs for financing receivables and net investment in leases by year of origination in the vintage disclosures. The Company adopted the guidance on January 1, 2023, using a prospective methodology, noting that the updates pertain to disclosures but did not have a material impact on the Company's consolidated financial statements. Refer to Note 6 - Allowance for Credit Losses for additional information.

In March 2020, the FASB issued ASU No. 2020-04, *Reference Rate Reform (Topic 848)*: Facilitation of the Effects of Reference Rate Reform on Financial Reporting. This ASU was issued to provide temporary optional guidance to ease the potential burden in accounting for reference rate reform. The guidance provides optional expedients and exceptions for applying generally accepted accounting principles to contract modifications and hedging relationships, subject to meeting certain criteria, that reference London Inter-Bank Offered Rate or another reference rate expected to be discontinued. The last expedient is a one-time election to sell or transfer debt securities classified as held to maturity. The Company fully adopted ASU 2020-04 in July of 2023, and it did not have a material impact on the Company's consolidated financial statements.

In January 2021, the FASB issued ASU No. 2021-01, *Reference Rate Reform (Topic 848): Scope.* The amendments in this Update are elective and apply to all entities that have derivative instruments that use an interest rate for margining, discounting, or contract price alignment that is modified as a result of reference rate reform. The amendments clarify certain optional expedients and exceptions in Topic 848 for contract modifications apply to derivatives that are affected by the discounting transition. In December 2022, the FASB issued ASU No. 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848.* The amendment deferred the sunset date of Topic 848 from December 31, 2022 to December 31, 2024. The Company fully adopted ASU 2021-01 in July of 2023, and it did not have a material impact on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements

In June 2022, the FASB issued ASU No. 2022-03, Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions. The amendments in this ASU clarify that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The amendments also clarify that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. The amendments also update the disclosures for equity securities subject to contractual restrictions. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2023, with early adoption permitted. The amendment will be applied prospectively. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In March 2023, the FASB issued ASU No. 2023-02, *Investments - Equity Method and Joint Ventures (Topic 323):*Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method (a consensus of the Emerging Issues Task Force). The amendments in this ASU permit companies to elect to account for their tax equity investments, regardless of the tax credit program from which the income tax credits are received using the proportional amortization method if certain conditions are met. Under the proportional amortization method, an entity amortizes the initial cost of the investment in proportion to the income tax credits and other income tax benefits received and recognizes the net amortization and income tax credits and other income tax benefits in the statement of operations as a component of income tax expense (benefit). The amendments also require that a reporting entity disclose certain information in annual and interim reporting periods that enable investors to understand the investments that generate income tax credits and other income tax benefits from a tax credit program. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2023, with early adoption permitted. The amendments in the ASU can be applied either on a modified retrospective or a retrospective basis. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In October 2023, the FASB issued ASU No. 2023-06, *Disclosure Improvements*. The amendments in this ASU modify the disclosure or presentation requirements of a variety of Topics in the Codification. The amendments align the requirements in the Codification with the SEC's regulations. Each amendment is effective on the date on which the SEC removes the related disclosure requirement from Regulation S-X or Regulation S-K. For all entities within the scope of the affected Codification subtopics, if by June 30, 2027, the SEC has not removed the applicable requirement from Regulation S-X or Regulation S-K, the pending content of the associated amendment will be removed from the Codification and will not become effective for any entities. The adoption of this ASU is not expected to have a material impact on the Company's consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, *Segment Reporting (Topic 280)*. The amendments improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses. The amendments enhance interim disclosure requirements, clarify circumstances in which an entity can disclose multiple segment measures of profit or loss, provide new segment disclosure requirements for entities with a single reportable segment, and contain other disclosure requirements. The ASU requires that a public entity that has a single reportable segment provide all the disclosures required by the amendments in this ASU and all existing segment disclosures in Topic 280. The amendments in this ASU are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. The Company is currently evaluating the impact of this ASU on the Company's consolidated financial statements.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. The amendments require entities disclose on an annual basis the following information: (1) specific categories in the rate reconciliation and (2) provide additional information for reconciling items that meet a quantitative threshold, if the effect of those reconciling items is equal to or greater than 5 percent of the amount computed by multiplying pretax income by the applicable statutory income tax rate. The amendments in this ASU are effective for annual periods beginning after December 15, 2024. The Company is currently evaluating the impact of this ASU on the Company's consolidated financial statements.

Note 2 – Business Combination

On February 28, 2023, UHC merged with and into Columbia, with Columbia continuing as the surviving legal corporation. Promptly following the Merger, Columbia's wholly-owned bank subsidiary, Columbia State Bank, merged with and into UHC's wholly-owned bank subsidiary, Umpqua Bank, with Umpqua Bank surviving such merger. Refer to Note 1 - *Summary of Significant Accounting Policies* under the Basis of Financial Statement Presentation for more information pertaining to the completed Merger.

The Merger was accounted for as a reverse merger using the acquisition method of accounting; therefore, UHC was deemed the acquirer for financial reporting purposes, even though Columbia was the legal acquirer. The Merger was an all-stock transaction and has been accounted for as a business combination. Pursuant to the Merger Agreement, on the Merger Date, each holder of UHC common stock received 0.5958 of a share (the "Exchange Ratio") of Columbia's common stock for each share of UHC common stock held. Each outstanding share of common stock of Columbia remained outstanding and was unaffected by the Merger. As of the Merger Date and following the exchange of UHC common stock for Columbia common stock, Columbia had approximately 208.2 million shares of common stock outstanding. On the Merger Date, the shares of UHC common stock, which previously traded under the ticker symbol "UMPQ" on Nasdaq, ceased trading on, and were delisted from, Nasdaq. Following the Merger, Columbia common stock continues to trade on Nasdaq with the ticker symbol of "COLB".

As the legal acquirer, Columbia issued approximately 129.4 million shares of Columbia common stock in connection with the Merger, which represented approximately 62.1% of the voting interests in Columbia upon completion of the Merger. The purchase price in a reverse acquisition is determined based on the number of equity interests the legal acquiree would have had to issue to give the owners of the legal acquirer the same percentage equity interest in the combined entity that results from the reverse acquisition. Therefore, the first step in calculating the purchase price in the Merger is to determine the ownership of the combined company following the Merger.

The table below summarizes the ownership of the combined company, Columbia, following the Merger, as well as the market capitalization of the combined company using shares of Columbia and UHC common stock outstanding at February 28, 2023 and Columbia's closing price of \$29.73 on February 28, 2023.

	Columbia Ownership and Market Value Table (Pro Forma)								
(in thousands)	Number of Columbia Outstanding Shares	Market Value							
Columbia shareholders	78,863	37.9 %	\$ 2,344,600						
UHC shareholders	129,378	62.1 %	3,846,408						
Total	208,241	100.0 %	\$ 6,191,008						

Next, the hypothetical number of shares UHC would have to issue to give Columbia shareholders the same percentage ownership in the combined company is calculated in the table below (based on shares of UHC common stock outstanding at February 28, 2023):

	Hypothetical U	HC Ownership				
(in thousands)	Number of UHC Percentag Outstanding Shares Ownershi					
Columbia shareholders	132,365	37.9 %				
UHC shareholders	217,150	62.1 %				
Total	349,515	100.0 %				

Finally, the purchase price for purposes of the transaction accounting adjustments is calculated based on the number of hypothetical shares of UHC common stock issued to Columbia shareholders, multiplied by the share price as demonstrated in the table below (amounts in thousands except per share data):

Number of hypothetical UHC common shares issued to Columbia shareholders	132,365
UHC market price per share as of February 28, 2023	\$ 17.66
Purchase price determination of hypothetical UHC shares issued to Columbia shareholders	\$ 2,337,567
Value of Columbia RSUs hypothetically converted to shares	1,646
Cash in lieu of fractional shares	 65
Purchase price consideration	\$ 2,339,278

The following table provides the purchase price allocation as of the Merger Date and the assets acquired and liabilities assumed at their estimated fair value as of the Merger Date as recorded by the Company. The estimates of fair value were recorded based on initial valuations available at the Merger Date and further adjusted in the second quarter based on additional information. In many cases, the determination of fair value required management to make estimates about discount rates, expected future cash flows, market conditions and other future events that are highly subjective in nature. As of December 31, 2023, the Company completed its review of information relating to events or circumstances existing at the acquisition date.

(in thousands)		February	y 28, 2 0	023
Purchase price consideration				
Total merger consideration			\$	2,339,278
Fair value of assets acquired:				
Cash and due from banks	\$	274,587		
Investment securities		6,226,102		
Loans held for sale		2,358		
Loans and leases		10,884,218		
Restricted equity securities		101,760		
Premises and equipment		203,270		
Other intangible assets		710,230		
Deferred tax asset		256,288		
Other assets		571,773		
Total assets acquired	\$	19,230,586		
Fair value of liabilities assumed:				
Deposits	\$	15,193,474		
Securities sold under agreements to repurchase		70,025		
Borrowings		2,294,360		
Junior and other subordinated debentures		20,310		
Other liabilities		342,373		
Total liabilities assumed	\$	17,920,542		
Net assets acquired	_		\$	1,310,044
Goodwill			\$	1,029,234

In connection with the Merger, the Company recorded approximately \$1.0 billion of goodwill. Goodwill represents the excess of the purchase price over the fair value of the assets acquired, net of fair value of liabilities assumed. Information regarding the allocation of goodwill recorded as a result of the acquisition, as well as the carrying amounts and amortization of core deposit and other intangible assets, are provided in Note 10 - *Goodwill and Other Intangible Assets* of the *Notes to Consolidated Financial Statements*. None of the goodwill recognized is expected to be deductible for income tax purposes.

The following is a description of the methods used to determine the fair values of significant assets and liabilities presented above.

Cash and due from banks: The carrying amount of these assets is a reasonable estimate of fair value based on the short-term nature of these assets.

Investment Securities: Fair values for investment securities are based on quoted market prices, where available. If quoted market prices are not available, fair value estimates are based on observable inputs including quoted market prices for similar instruments, quoted market prices that are not in an active market or other inputs that are observable in the market. In the absence of observable inputs, fair value is estimated based on pricing models and/or discounted cash flow methodologies.

Loans held for sale: The loans held for sale portfolio was recorded at fair value based on quotes or bids from third-party investors.

Loans and leases: A valuation of the loans held for investment portfolio was performed by a third party as of the Merger Date to assess the fair value. The loans held for investment portfolio was segmented into three groups, including performing PCD loans, non-performing PCD loans and non-PCD loans. The loans were further pooled based on loan type and risk rating bands. The loans were valued at the loan level using a discounted cash flow analysis. The analysis included projecting cash flows based on the contractual terms of the loans and the cash flows were adjusted to reflect credit loss expectations along with prepayments. Discount rates were developed based on the relative risk of the cash flows, taking into consideration the loan type, market rates as of the valuation date, recent originations in the portfolio, credit loss expectations, and liquidity expectations. Lastly, cash flows adjusted for credit loss expectations were discounted to present value and summed to arrive at the fair value of the loans.

The Company is required to record PCD assets, defined as a more-than-insignificant deterioration in credit quality since origination or issuance, at the purchase price plus the ACL expected at the time of acquisition. Under this method, there is no credit loss expense affecting net income on acquisition of PCD assets. Changes in estimates of expected credit losses after acquisition are recognized in subsequent periods as provision for credit losses (or recapture of credit losses) arises. Any noncredit discount or premium resulting from acquiring a pool of purchased financial assets with credit deterioration is allocated to each individual asset. At the acquisition date, the initial allowance for credit losses determined on a collective basis is allocated to individual assets to appropriately allocate any non-credit discount or premium. The non-credit discount or premium, after the adjustment for the ACL, is accreted to interest income using the interest method based on the effective interest rate determined after the adjustment for credit losses at the adoption date.

Of the \$10.9 billion net loans acquired, \$402.8 million were identified as PCD assets on the Merger Date. The following table provides a summary of these PCD loans at acquisition:

(in thousands)	Feb	ruary 28, 2023
Principal of PCD loans acquired	\$	478,648
PCD ACL at acquisition		(26,492)
Non-credit discount on PCD loans		(49,337)
Fair value of PCD loans	\$	402,819

Premises and equipment: The fair values of premises are based on a market approach, by obtaining third-party appraisals and broker opinions of value for land, office, and branch space.

Core deposit intangibles: Core deposit intangibles is a measure of certain core deposit products that are acquired in a business combination. The fair value of the core deposit intangibles stemming from any given business combination is based on the present value of the expected cost savings attributable to the core deposit funding relative to an alternative source of funding. The fair value was estimated based on a discounted cash flow methodology that gave consideration to expected customer attrition rates, net maintenance cost of the deposit base, alternative cost of funds, and the interest costs associated with customer deposits. The intangible assets are being amortized over 10 years using the sum-of-years-digits, based upon the period over which estimated economic benefits are estimated to be received.

Deposits: The fair values used for the demand and savings deposits equal the amount payable on demand at the Merger Date. The fair values for time deposits are estimated using a discounted cash flow calculation that applies interest rates currently being offered to the contractual interest rates on such time deposits.

Borrowings: The fair values of long-term debt instruments are estimated based on quoted market prices for the instrument if available, or for similar instruments if not available, or by using discounted cash flow analyses, based on current incremental borrowing rates for similar types of instruments. The Company's operating results for the year ended December 31, 2023 include the operating results of the acquired assets and assumed liabilities of historical Columbia subsequent to the Merger Date. Disclosure of the amount of historical Columbia's revenue and net income (excluding integration costs) included in the Consolidated Statements of Operations is impracticable due to the integration of the operations and accounting for the Merger.

The following table shows the impact of the merger-related expenses for the periods indicated:

	Year Ended					
(in thousands)	Decembe	er 31, 2023	December	31, 2022		
Legal and professional	\$	61,857	\$	6,202		
Personnel		38,265		1,124		
Premises and equipment		45,374		9,374		
Charitable contributions		20,000		_		
Other		6,163		656		
Total merger-related expenses	\$	171,659	\$	17,356		

The following table presents unaudited pro forma information as if the Merger had occurred on January 1, 2022. The pro forma adjustments give effect to any change in interest income due to the accretion of the discount (premium) associated with the fair value adjustments to acquired loans and leases, any change in interest expense due to estimated premium amortization/discount accretion associated with the fair value adjustment to acquired interest-bearing deposits and long-term debt and the amortization of the core deposit intangible that would have resulted had the deposits been acquired as of January 1, 2022. The pro forma information is not indicative of what would have occurred had the Merger occurred as of the beginning of the year prior to the Merger Date. The pro forma amounts below do not reflect the Company's expectations as of the date of the pro forma information of further operating cost savings and other business synergies expected to be achieved, including revenue growth and further cost savings as a result of the Merger. As a result, actual amounts differed from the unaudited pro forma information presented.

	Į	Jnaudited Pro	Forr	na for the	
	Year Ended				
(in thousands)	Decem	ber 31, 2023	Dec	ember 31, 2022	
Net interest income	\$	1,951,561	\$	2,056,167	
Non-interest income	\$	237,764	\$	288,417	
Net income (1)	\$	633,719	\$	550,727	

⁽¹⁾ The 2023 pro forma net income was adjusted to exclude \$199.7 million of merger-related costs, inclusive of historical Columbia merger-related costs, incurred in 2023 and the 2022 pro forma net income was adjusted to include these costs.

Branch divestitures: Prior to the Merger Date, historical Columbia was required to divest certain branches to satisfy regulatory requirements in connection with the Merger. In January 2023, Columbia completed the divestiture of three branches and certain related assets and deposit liabilities to First Northern Bank of Dixon, a wholly-owned subsidiary of First Northern Community Bancorp. In February 2023, Columbia completed the divestiture of another seven branches and certain related assets and deposit liabilities to 1st Security Bank of Washington, a wholly-owned subsidiary of FS Bancorp, Inc. The income and expense associated with the operation of these branches prior to being divested have been excluded from the unaudited pro forma information presented above.

Note 3 – Cash and Cash Equivalents

The Company had restricted cash included in cash and due from banks on the Consolidated Balance Sheets of \$4.2 million and \$5.8 million as of December 31, 2023 and 2022, respectively, relating mostly to collateral required on interest rate swaps as discussed in Note 19 - *Derivatives*. As of December 31, 2023 and 2022, there was \$900,000 and \$4.7 million, respectively, in restricted cash included in interest-bearing cash and temporary investments on the Consolidated Balance Sheets, relating to collateral requirements for derivatives for mortgage banking activities.

Note 4 – Investment Securities

The following tables present the amortized cost, unrealized gains, unrealized losses, and approximate fair values of debt securities as of December 31, 2023 and 2022:

	December 31, 2023							
(in thousands)	Amortized Cost				Unrealized Losses			Fair Value
Available for sale:								
U.S. Treasury and agencies	\$	1,551,074	\$	6,192	\$	(78,874)	\$	1,478,392
Obligations of states and political subdivisions		1,073,264		20,451		(21,610)		1,072,105
Mortgage-backed securities and collateralized mortgage obligations		6,638,439		28,558		(387,624)		6,279,373
Total available for sale securities	\$	9,262,777	\$	55,201	\$	(488,108)	\$	8,829,870
Held to maturity:								
Mortgage-backed securities and collateralized mortgage obligations	\$	2,300	\$	725	\$		\$	3,025
Total held to maturity securities	\$	2,300	\$	725	\$		\$	3,025

	December 31, 2022							
(in thousands)	Amortized Cost		Unrealized Gains		Unrealized Losses			Fair Value
Available for sale:								
U.S. Treasury and agencies	\$	1,035,532	\$	_	\$	(99,358)	\$	936,174
Obligations of states and political subdivisions		297,610		231		(28,041)		269,800
Mortgage-backed securities and collateralized mortgage obligations		2,405,139		3		(414,950)		1,990,192
Total available for sale securities	\$	3,738,281	\$	234	\$	(542,349)	\$	3,196,166
Held to maturity:								
Mortgage-backed securities and collateralized mortgage obligations	\$	2,476	\$	721	\$	<u> </u>	\$	3,197
Total held to maturity securities	\$	2,476	\$	721	\$		\$	3,197

The Company elected to exclude accrued interest receivable from the amortized cost basis of debt securities disclosed throughout this note. Interest accrued on investment securities totaled \$34.1 million and \$10.6 million as of December 31, 2023 and 2022, respectively, and is included in other assets on the Consolidated Balance Sheets.

Debt securities that were in an unrealized loss position as of December 31, 2023 and 2022 are presented in the following tables, based on the length of time individual securities have been in an unrealized loss position.

	December 31, 2023										
	Less than	12 Months	12 Months	or Longer	Total						
(in thousands)	Fair Value	Unrealized Value Losses Fa		Unrealized Losses	Fair Value	Unrealized Losses					
Available for sale:											
U.S. Treasury and agencies	\$ 99,898	\$ (1,074)	\$ 822,245	\$ (77,800)	\$ 922,143	\$ (78,874)					
Obligations of states and political subdivisions	103,256	(580)	169,231	(21,030)	272,487	(21,610)					
Mortgage-backed securities and collateralized mortgage obligations	1,089,640	(10,355)	1,817,768	(377,269)	2,907,408	(387,624)					
Total temporarily impaired securities	\$1,292,794	\$ (12,009)	\$2,809,244	\$ (476,099)	\$4,102,038	\$ (488,108)					

	December 31, 2022										
	Less than	12 Months	12 Months	or Longer	Total						
(in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses					
Available for sale:											
U.S. Treasury and agencies	\$ 734,473	\$ (71,967)	\$ 201,701	\$ (27,391)	\$ 936,174	\$ (99,358)					
Obligations of states and political subdivisions	160,078	(10,037)	60,381	(18,004)	220,459	(28,041)					
Mortgage-backed securities and collateralized mortgage obligations	592,032	(61,813)	1,398,061	(353,137)	1,990,093	(414,950)					
Total temporarily impaired securities	\$1,486,583	\$ (143,817)	\$1,660,143	\$ (398,532)	\$3,146,726	\$ (542,349)					

The number of individual debt securities in an unrealized loss position in the tables above increased to 600 as of December 31, 2023, as compared to 473 as of December 31, 2022. These unrealized losses on the debt securities held by the Company were caused by changes in market interest rates or the widening of market spreads subsequent to the initial purchase of these securities and are not due to the underlying credit of the issuers. Management monitors the published credit ratings of the issuers of the debt securities for material rating or outlook changes. As the decline in fair value of the debt securities is attributable to changes in interest rates or widening market spreads and not credit quality, these investments do not have an ACL as of December 31, 2023.

The following table presents the contractual maturities of debt securities as of December 31, 2023:

		Available For Sale			Held To	turity	
(in thousands)	A	Amortized Cost		Fair Value	Amortized Cost		Fair Value
Due within one year	\$	71,438	\$	70,451	\$ _	\$	_
Due after one year through five years		2,127,299		2,106,753	2		2
Due after five years through ten years		2,388,442		2,323,581	3		67
Due after ten years		4,675,598		4,329,085	2,295		2,956
Total debt securities	\$	9,262,777	\$	8,829,870	\$ 2,300	\$	3,025

The following table presents, as of December 31, 2023, investment securities which were pledged to secure borrowings, public deposits, and repurchase agreements as permitted or required by law:

(in thousands)	An	ortized Cost	Fair Value			
To state and local governments to secure public deposits	\$	1,796,582	\$ 1,657,160			
To secure repurchase agreements		386,989	358,162			
Other securities pledged		1,863,025	1,766,958			
Total pledged securities	\$	4,046,596	\$ 3,782,280			

Note 5 - Loans and Leases

The following table presents the major types of loans and leases, net of deferred fees and costs, as of December 31, 2023 and 2022:

(in thousands)	Decer	nber 31, 2023	Decen	nber 31, 2022
Commercial real estate				
Non-owner occupied term, net	\$	6,482,940	\$	3,894,840
Owner occupied term, net		5,195,605		2,567,761
Multifamily, net		5,704,734		5,285,791
Construction & development, net		1,747,302		1,077,346
Residential development, net		323,899		200,838
Commercial				
Term, net		5,536,765		3,029,547
Lines of credit & other, net		2,430,127		960,054
Leases & equipment finance, net		1,729,512		1,706,172
Residential				
Mortgage, net		6,157,166		5,647,035
Home equity loans & lines, net		1,938,166		1,631,965
Consumer & other, net		195,735		154,632
Total loans and leases, net of deferred fees and costs	\$	37,441,951	\$	26,155,981

The Company elected to exclude accrued interest receivable from the amortized cost basis of loans disclosed throughout this footnote. Interest accrued on loans totaled \$154.9 million and \$86.8 million as of December 31, 2023 and December 31, 2022, respectively, and is included in other assets on the Consolidated Balance Sheets. As of December 31, 2023, loans totaling \$21.2 billion were pledged to secure borrowings and available lines of credit.

Originated loans are reported at the principal amount outstanding, net of unearned interest and deferred fees and costs, and any partial charge-offs recorded. Purchased loans are recorded at fair value at the date of purchase. As of December 31, 2023 and 2022, the net deferred fees and costs were \$71.8 million and \$84.7 million, respectively.

The Company evaluates purchased loans for more-than-insignificant deterioration at the date of purchase. Purchased loans that have experienced more-than-insignificant deterioration from origination are considered PCD loans. All other purchased loans are considered non-PCD loans. Total discounts on acquired loans were \$552.5 million and \$6.1 million as of December 31, 2023 and 2022, respectively. The outstanding contractual unpaid principal balance of PCD loans, excluding acquisition accounting adjustments, was \$331.9 million as of December 31, 2023. The carrying balance of PCD loans was \$300.2 million as of December 31, 2023.

The Bank, through its commercial equipment leasing subsidiary, FinPac, is a provider of commercial equipment leasing and financing. Direct finance leases are included within the lease and equipment finance segment within the loans and leases, net line item. These direct financing leases typically have terms of three to five years. Interest income recognized on these leases was \$18.8 million at both December 31, 2023 and 2022.

Residual values on leases are established at the time equipment is leased based on an estimate of the value of the leased equipment when the Company expects to dispose of the equipment, typically at the termination of the lease. An annual evaluation is also performed each fiscal year by an independent valuation specialist and equipment residuals are confirmed or adjusted in conjunction with such evaluation.

The following table presents the net investment in direct financing leases as of December 31, 2023 and 2022:

(in thousands)	Dece	mber 31, 2023	Dece	mber 31, 2022
Minimum lease payments receivable	\$	362,152	\$	316,823
Estimated guaranteed and unguaranteed residual values		74,880		98,175
Initial direct costs - net of accumulated amortization		5,373		6,033
Unearned income		(48,433)		(41,571)
Net investment in direct financing leases	\$	393,972	\$	379,460

The following table presents the scheduled minimum lease payments receivable as of December 31, 2023:

(in thousands)	
Year	Amount
2024	\$ 112,497
2025	90,557
2026	68,639
2027	47,308
2028	27,955
Thereafter	15,196
Total minimum lease payments receivable	\$ 362,152

In the course of managing the loan and lease portfolio, at certain times, management may decide to sell pools of loans and leases. For the year ended December 31, 2023, the Bank sold a total of \$743.9 million loans from its portfolio, of which \$666.3 million were transactional, non-relationship jumbo residential mortgage, commercial, and commercial real estate loans. For the year ended December 31, 2022, the Bank sold a total of \$142.3 million loans and leases. For the years ended December 31, 2023 and 2022, the above loan sales include SBA loan sales of \$77.6 million and \$105.3 million, respectively.

Note 6 - Allowance for Credit Losses

Allowance for Credit Losses Methodology

The ACL represents management's estimate of lifetime credit losses for assets within its scope, specifically loans and leases and unfunded commitments. To calculate the ACL, management uses models to estimate the PD and LGD for loans utilizing inputs that include forecasted future economic conditions and that are dependent upon specific macroeconomic variables relevant to each of the Bank's loan and lease portfolios. Moody's Analytics, a third party, provided the historical and forward-looking macroeconomic data utilized in the models used to calculate the ACL.

In calculating ACL, the Bank considered the financial and economic environment at the time of assessment and economic scenarios that differed in the levels of severity and sensitivity to the ACL results. At each measurement date, the Bank selects the scenario that reflects its view of future economic conditions and is determined to be the most probable outcome.

All forecasts are updated for each variable where applicable and incorporated as relevant into the ACL calculation. Actual credit loss results and the timing thereof will differ from the estimate of credit losses, either in a strong economy or a recession, as the portfolio will change through time due to growth, risk mitigation actions and other factors. In addition, the scenarios used will differ and change through time as economic conditions change. Economic scenarios might not capture deterioration or improvement in the economy timely enough for the Bank to be able to adequately address the impact to the ACL.

Select macroeconomic variables are projected over the forecast period, and they could have a material impact in determining the ACL. As the length of the forecast period increases, information about the future becomes less readily available and projections are inherently less certain.

The following is a discussion of the changes in the factors that influenced management's current estimate of expected credit losses. The changes in the ACL estimate for all portfolio segments, during the year ended December 31, 2023, reflect portfolio mix changes and credit migration trends. Because of the uncertain economic environment, the Bank opted to use Moody's Analytics' November 2023 baseline economic forecast for estimating the ACL as of December 31, 2023.

In the baseline scenario selected, the probability that the economy will perform better than this baseline is equal to the probability that it will perform worse and included the following factors:

- U.S. real GDP average annualized growth of 1.7% in 2024, 1.7% in 2025, 2.3% in 2026, and 2.4% in 2027;
- U.S. unemployment rate average of 4.0% in 2024, 4.1% in 2025, 4.0% in 2026, and 3.9% in 2027; and
- The average federal funds rate is expected to be 5.1% in 2024, 4.2% in 2025, 3.2% in 2026, and 2.9% in 2027.

The Bank uses an additional scenario that differs in terms of severity within the variables, both favorable and unfavorable, to assess the sensitivity in the ACL results and to inform qualitative adjustments. The Bank selected the Moody's Analytics November 2023 S2 scenario for this analysis. In the scenario selected, there is a 75% probability that the economy will perform better, broadly speaking, and a 25% probability that it will perform worse; and the scenario includes the following factors:

- Because the Federal Reserve remains concerned about inflation, it keeps the federal funds rate elevated in the first quarter of 2024 despite the weakening economy;
- The combination of the risk of a federal shutdown, rising political tensions, still-elevated inflation, still-elevated interest rates, and reduced credit availability causes the economy to fall into a mild recession starting in the first quarter of 2024. The decline lasts for three quarters and the peak-to-trough decline is 1%. The unemployment rate rises to a peak of 6.5% in the fourth quarter of 2024;
- The stock market falls by 20% from the fourth quarter of 2023 through the third quarter of 2024;
- Declines in European economies hurt U.S. exports and also corporate earnings from European subsidiaries;
- U.S. real GDP average annualized growth of 0.2% in 2024, 1.5% in 2025, 2.9% in 2026, and 2.8% in 2027;
- U.S. unemployment rate average of 5.7% in 2024, 5.3% in 2025, 4.0% in 2026, and 4.0% in 2027; and
- The average federal funds rate is expected to be 4.6% in 2024, 2.5% in 2025, 2.4% in 2026, and 2.9% in 2027.

The results using the comparison scenario in addition to changes to the macroeconomic variables subsequent to selected scenarios for sensitivity analysis were reviewed by management and were considered when evaluating the qualitative factor adjustments.

The ACL is measured on a collective (pool) basis when similar characteristics exist. The Company has selected models at the portfolio level using a risk-based approach, with larger, more complex portfolios having more complex models. Except as noted below, the macroeconomic variables that are inputs to the models are reasonable and supportable over the life of the loans in that they reasonably project the key economic variables in the near term and then converge to a long-run equilibrium trend. These models produce reasonable and supportable estimates of loss over the life of the loans as the projected credit losses will also converge to a steady state in line with the variables applied. The Company measures the ACL using the following methods:

Commercial Real Estate: Non-owner occupied commercial real estate, multifamily, and construction loans are analyzed using a model that uses four primary property variables: net operating income, property value, property type, and location. For PD estimation, the model simulates potential future paths of net operating income given commercial real estate market factors determined from macroeconomic and regional commercial real estate forecasts. Using the resulting expected debt service coverage ratios, together with predicted loan-to-values and other variables, the model estimates PD from the range of conditional possibilities. In addition, the model estimates maturity PD capturing refinance default risk to produce a total PD for the loan. The model estimates LGD, inclusive of principal loss and liquidation expenses, empirically using predicted loan-to-value as well as certain market and other factors. The LGD calculation also includes a separate maturity risk component. The primary economic drivers in the model are GDP growth, U.S. unemployment rate, and 10-Year Treasury yield. These economic drivers are translated into a forecast provided by Moody's Analytics' REIS of real estate metrics, such as rental rates, vacancies, and cap rates. The model produces PD and LGD on a quarter-by-quarter basis for the life of loan.

The owner occupied commercial real-estate portfolio utilizes a top-down macroeconomic model using linear regression. This model produces portfolio level quarterly net charge-off rates for 10 years and carries forward the last quarter's expected loss percentage projection to remaining periods. The primary economic drivers for this model are commercial real estate price index and a five-state average unemployment rate.

Commercial: Non-homogeneous commercial loans and leases and residential development loans are analyzed in a multi-step process. An initial PD is estimated using a model driven by an obligor's selected financial statement ratios, together with cycle-adjusting information based on the obligor's state and industry. An initial LGD is derived separately based on collateral type using collateral value and a haircut to reflect the loss in liquidation. Another model then applies an auto-regression technique to the initial PD and LGD metrics to estimate the PD and LGD curves according to the macroeconomic scenario over a one-year reasonable and supportable forecast. The primary economic drivers in the model are the S&P 500 Stock Price Index, S&P 500 Market Volatility Index, U.S. unemployment rate, as well as appropriate yield curves and credit spreads. This model utilizes output reversion methodology, which, after one year, reverts on a straight-line basis over two years to long-term PD estimated using financial statement ratios of each obligor.

The model for the homogeneous lease and equipment finance agreement portfolio uses lease and equipment finance agreement information, such as origination and performance, as well as macroeconomic variables to calculate PD and LGD values. The PD calculation is based on survival analysis while LGD is calculated using a two-step regression. The model calculates LGD using an estimate of the probability that a defaulted lease or equipment finance agreement will have a loss, and an estimate of the loss amount. The primary economic drivers for the model are GDP, U.S. unemployment rate, and a home price growth index. The model produces PD and LGD curves at the lease or equipment finance agreement level for each month in the forecast horizon.

Residential: The models for residential real estate and HELOCs utilize loan level variables, such as origination and performance, as well as macroeconomic variables to calculate PD and LGD. The U.S. unemployment rate and home price growth rate indexes are primary economic drivers in both the residential real estate and HELOC models. In addition, the prime rate is also a primary driver in the HELOC model. The models focus on establishing an empirical relationship between default probabilities and a set of loan-level, borrower, and macroeconomic credit risk drivers. The LGD calculation for residential real estate is based on an estimate of the probability that a defaulted loan will have a loss, and then an estimate of the loss amount. HELOCs utilize the same model using residential real estate LGD values to assign loans to cohorts based on FICO scores and loan age. The model produces PD and LGD curves at the loan level for each quarter in the forecast horizon.

Consumer: Historical net charge-off information as well as economic forecast assumptions are used to project loss rates for the Consumer segment.

All loans and leases that have not been modeled receive a loss rate via an extrapolated rate methodology. The loans and leases receiving an extrapolated rate include loans acquired through the Merger, newly originated loans and leases, and loans and leases without the granularity of data necessary to be modeled. Based on the vintage year, credit classification, and reporting category of the modeled loans and leases, a loss factor is calculated and applied to the non-modeled loans and leases. The results are evaluated qualitatively to ensure reasonability and compliance with CECL.

Along with the quantitative factors produced by the above models, management also considers prepayment speeds and qualitative factors when determining the ACL. The Company uses a prepayment model that forecasts the constant prepayment rates based on institution specific data for the commercial real estate, commercial and industrial and consumer portfolios and a forward curve approach that changes with macro-economic input variables for the residential and leases portfolios. Below are the nine qualitative factors considered where applicable:

- Changes in lending policies and procedures, including changes in underwriting standards and collection, charge-off, and recovery practices not considered elsewhere in estimating credit losses.
- Changes in national, regional, and local economic and business conditions and developments that affect the collectability of the portfolio, including the condition of various market segments.
- Changes in the nature and volume of the portfolio and in the terms of loans and leases.
- Changes in the experience, ability, and depth of lending management and other relevant staff.
- Changes in the volume and severity of past due loans and leases, the volume of non-accrual loans and leases, and the volume and severity of adversely classified or graded loans and leases.
- Changes in the quality of the Bank's credit review system.
- Changes in the value of the underlying collateral for collateral-dependent loans and leases.
- The existence and effect of any concentrations of credit, and changes in the level of such concentrations.

• The effect of other external factors such as competition and legal and regulatory requirements on the level of estimated credit losses in the Bank's existing portfolio.

The Company evaluated each qualitative factor as of December 31, 2023 and concluded that the models adequately reflected the significant changes in credit conditions and overall portfolio risk. The qualitative adjustments in the ACL during 2023 were primarily related to loans acquired through the Merger. As of December 31, 2023, the ACL was \$464.1 million, compared to the December 31, 2022 balance of \$315.4 million. The increase in the ACL was primarily driven by loan portfolio growth, largely reflective of loans acquired through the Merger, and changes in the economic forecasts used in credit models. As a result of the Merger, the ACL increased, which reflects a \$32.3 million upward adjustment due to acquired PCD loans and acquired unfunded commitments, in addition to an \$88.4 million provision expense due to acquired non-PCD loans.

Loss factors from the models, prepayment speeds, and qualitative factors are input into the Company's CECL accounting application, which aggregates the information. The Company then uses two methods to calculate the current expected credit loss: 1) the DCF method, which is used for all loans except lines of credit and 2) the non-DCF method, which is used for lines of credit due to the difficulty of calculating an effective interest rate when lines have yet to be drawn on. The DCF method utilizes the effective interest rate of individual assets to discount the expected credit losses adjusted for prepayments. The difference in the net present value and the amortized cost of the asset will result in the required allowance. The non-DCF method uses the exposure at default, along with the expected credit losses adjusted for prepayments to calculate the required allowance.

The following tables summarize activity related to the ACL by portfolio segment for the periods indicated:

	Year Ended December 31, 2023									
(i., 4b	Commercial Real Estate		Commercial			Residential		Consumer & Other		Total
(in thousands)	K	eai Estate	Cor	mmerciai	1	Residential	-	Other	-	1 Otal
Allowance for credit losses on loans and leases										
Balance, beginning of period	\$	77,813	\$	167,135	\$	50,329	\$	5,858	\$	301,135
Initial ACL on PCD loans acquired during the period		8,736		17,204		454		98		26,492
Provision for credit losses for loans and leases (1)		39,809		153,460		10,645		6,065		209,979
Charge-offs		(803)		(109,862)		(547)		(5,762)		(116,974)
Recoveries		333		16,884		1,123		1,899		20,239
Net (charge-offs) recoveries		(470)		(92,978)		576		(3,863)		(96,735)
Balance, end of period	\$	125,888	\$	244,821	\$	62,004	\$	8,158	\$	440,871
Reserve for unfunded commitments										
Balance, beginning of period	\$	7,207	\$	3,049	\$	3,196	\$	769	\$	14,221
Initial ACL recorded for unfunded commitments acquired during the period		2,257		3,066		268		176		5,767
Provision (recapture) for credit losses on unfunded commitments		1,706		1,726		(524)		312		3,220
Balance, end of period		11,170		7,841		2,940		1,257		23,208
Total allowance for credit losses	\$	137,058	\$	252,662	\$	64,944	\$	9,415	\$	464,079

⁽¹⁾ Includes \$88.4 million initial provision related to non-PCD loans acquired during the first quarter of 2023.

	Year Ended December 31, 2022									
(in thousands)	Commercial Real Estate		Commercial		Residential		Consumer & Other			Total
Allowance for credit losses on loans and leases										
Balance, beginning of period	\$	99,075	\$	117,573	\$	29,068	\$	2,696	\$	248,412
(Recapture) provision for credit losses for loans and leases		(21,510)		79,606		20,823		4,686		83,605
Charge-offs		(136)		(41,073)		(224)		(3,556)		(44,989)
Recoveries		384		11,029		662		2,032		14,107
Net recoveries (charge-offs)		248		(30,044)		438		(1,524)		(30,882)
Balance, end of period	\$	77,813	\$	167,135	\$	50,329	\$	5,858	\$	301,135
Reserve for unfunded commitments										
Balance, beginning of period	\$	8,461	\$	2,028	\$	1,957	\$	321	\$	12,767
(Recapture) provision for credit losses on unfunded commitments		(1,254)		1,021		1,239		448		1,454
Balance, end of period		7,207		3,049		3,196		769		14,221
Total allowance for credit losses	\$	85,020	\$	170,184	\$	53,525	\$	6,627	\$	315,356

Asset Quality and Non-Performing Loans and Leases

The Bank manages asset quality and controls credit risk through diversification of the loan and lease portfolio and the application of policies designed to promote sound underwriting and loan and lease monitoring practices. The Bank's Credit Quality Administration department is charged with monitoring asset quality, establishing credit policies and procedures, and enforcing the consistent application of these policies and procedures across the Bank. Reviews of non-performing, past due loans and leases and larger credits, designed to identify potential charges to the ACL, and to determine the adequacy of the allowance, are conducted on an ongoing basis. These reviews consider such factors as the financial strength of borrowers, the value of the applicable collateral, loan and lease loss experience, estimated loan and lease losses, growth in the loan and lease portfolio, prevailing economic conditions, and other factors.

Loans and Leases Past Due and Non-Accrual Loans and Leases

Typically, loans in a non-accrual status will not have an ACL as they will be written down to their net realizable value or charged-off. However, the net realizable value for homogeneous leases and equipment finance agreements is determined by the LGD calculated by the CECL model and therefore leases and equipment finance agreements on non-accrual will have an ACL until they become 181 days past due, at which time they are charged-off. The Company recognized no interest income on non-accrual loans and leases during the years ended December 31, 2023 and 2022.

The following tables present the carrying value of the loans and leases past due, by loan and lease class, as of December 31, 2023 and 2022:

	December 31, 2023									
(in thousands)	Greater than 30 to 59 Days Past Due	60 to 89 Days Past Due	90 Days or More and Accruing	Total Past Due	Non- Accrual	Current and Other	Total Loans and Leases			
Commercial real estate										
Non-owner occupied term, net	\$ 1,270	\$ 3,312	\$ 437	\$ 5,019	\$ 4,359	\$ 6,473,562	\$ 6,482,940			
Owner occupied term, net	3,078	2,191	433	5,702	24,330	5,165,573	5,195,605			
Multifamily, net	_	_	_	_	_	5,704,734	5,704,734			
Construction & development, net	_	_	_	_	_	1,747,302	1,747,302			
Residential development, net	_	_	_	_	_	323,899	323,899			
Commercial										
Term, net	6,341	2,101	202	8,644	14,519	5,513,602	5,536,765			
Lines of credit & other, net	1,647	1,137	66	2,850	2,760	2,424,517	2,430,127			
Leases & equipment finance, net	22,217	24,178	7,965	54,360	28,403	1,646,749	1,729,512			
Residential										
Mortgage, net (1)	282	9,410	26,331	36,023	_	6,121,143	6,157,166			
Home equity loans & lines, net	4,401	2,373	3,782	10,556	_	1,927,610	1,938,166			
Consumer & other, net	778	519	326	1,623		194,112	195,735			
Total, net of deferred fees and costs	\$ 40,014	\$ 45,221	\$ 39,542	\$124,777	\$ 74,371	\$37,242,803	\$37,441,951			

⁽¹⁾ Includes government guaranteed mortgage loans that the Bank has the right but not the obligation to repurchase that are past due 90 days or more, totaling \$1.0 million as of December 31, 2023.

			Б	ecember 31,	2022		
(in thousands)	Greater than 30 to 59 Days Past Due	60 to 89 Days Past Due	90 Days or More and Accruing	Total Past Due	Non- Accrual	Current and Other	Total Loans and Leases
Commercial real estate							
Non-owner occupied term, net	\$ 811	\$ 538	\$ —	\$ 1,349	\$ 2,963	\$ 3,890,528	\$ 3,894,840
Owner occupied term, net	168	50	1	219	2,048	2,565,494	2,567,761
Multifamily, net		_	_	_	_	5,285,791	5,285,791
Construction & development, net	_	_	_	_	_	1,077,346	1,077,346
Residential development, net	_	_	_	_	_	200,838	200,838
Commercial							
Term, net	1,241	1,489	19	2,749	5,303	3,021,495	3,029,547
Lines of credit & other, net	514	419	4	937	_	959,117	960,054
Leases & equipment finance, net	19,929	23,288	7,886	51,103	20,388	1,634,681	1,706,172
Residential							
Mortgage, net (1)	847	10,619	24,943	36,409	_	5,610,626	5,647,035
Home equity loans & lines, net	2,808	1,526	1,569	5,903	_	1,626,062	1,631,965
Consumer & other, net	446	200	134	780		153,852	154,632
Total, net of deferred fees and costs	\$ 26,764	\$ 38,129	\$ 34,556	\$ 99,449	\$ 30,702	\$26,025,830	\$26,155,981

⁽¹⁾ Includes government guaranteed mortgage loans that the Bank has the right but not the obligation to repurchase that are past due 90 days or more, totaling \$6.6 million as of December 31, 2022.

The following table summarizes the amortized cost of non-accrual loans for which there was no related ACL as of December 31, 2023 and 2022:

(in thousands)	Decem	ber 31, 2023	Decem	ber 31, 2022
Commercial real estate				
Non-owner occupied term, net	\$	52	\$	
Owner occupied term, net		1,352		279
Commercial				
Term, net		3,497		_
Total non-accrual loans with no related ACL	\$	4,901	\$	279

Collateral-Dependent Loans and Leases

Loans are classified as collateral-dependent when it is probable that the Bank will be unable to collect the scheduled payments of principal and interest when due, and repayment is expected to be provided substantially through the operation or sale of the collateral. The following table summarizes the amortized cost basis of the collateral-dependent loans and leases by the type of collateral securing the assets as of December 31, 2023:

(in thousands)	dential Estate	Commerc Real Esta		General Business Assets	Other	Total
Commercial real estate						
Non-owner occupied term, net	\$ _	\$ 4,	250	\$ _	\$ _	\$ 4,250
Owner occupied term, net	_	22,	076	_	_	22,076
Commercial						
Term, net	_		271	8,602	301	9,174
Line of credit & other, net	_	1,	566	_	_	1,566
Leases & equipment finance, net	_		_	28,403	_	28,403
Residential						
Mortgage, net	55,381		_	_	_	55,381
Home equity loans & lines, net	2,740			_	_	2,740
Total, net of deferred fees and costs	\$ 58,121	\$ 28,	163	\$ 37,005	\$ 301	\$ 123,590

Loan and Lease Modifications Made to Borrowers Experiencing Financial Difficulty

In January 2023, the Company adopted ASU 2022-02, which eliminated the accounting guidance for troubled debt restructurings while enhancing disclosure requirements for certain loan refinancing and restructurings by creditors when a borrower is experiencing financial difficulty. This guidance was applied on a prospective basis. Upon adoption of this guidance, the Company no longer establishes a reserve for modifications to borrowers experiencing financial difficulty. Instead, these modifications are included in their respective cohort and a historical loss rate is applied to the current loan balance to arrive at the quantitative baseline portion of the allowance. Loans associated with borrowers experiencing financial difficulty can be classified as either accrual or non-accrual loans.

Modifications to borrowers in financial difficulty may include term extensions, interest rate reductions, principal or interest forgiveness, or an other-than-insignificant payment delay. In some cases, the Company provides multiple types of concessions on one loan. Typically, one type of concession, such as a term extension, is granted initially. If the borrower continues to experience financial difficulty, another concession, such as principal forgiveness, may be granted. For the loans and leases included in the "combination" columns below, multiple types of modifications have been made on the same loan within the current reporting period. The combination is at least two of the following: term extension, principal forgiveness, an other-than-insignificant payment delay, or an interest rate reduction.

The following table presents the amortized cost basis of loans and leases as of December 31, 2023 that were both experiencing financial difficulty and modified during the year ended December 31, 2023, by class and type of modification. The percentage of the amortized cost basis of loans and leases that were modified to borrowers in financial distress as compared to the amortized cost basis of each class of financing receivable is also presented below.

				Decembe	er 31, 2023		
(in thousands)	Interest Rate Reduction	1	Term Extension	ther -Than- ssignificant Payment Delay	Combination - Term Extension and Other-than- Insignificant Payment Delay	Total	% of total class of financing receivable
Commercial real estate							
Non-owner occupied term, net	\$	\$	32,461	\$ _	\$ —	\$ 32,461	0.50 %
Owner occupied term, net	666		507	568	_	1,741	0.03 %
Commercial							
Term, net	377		4,409	_	_	4,786	0.09 %
Lines of credit & other, net	_		13,152	30,804	_	43,956	1.81 %
Leases & equipment finance, net	_		1,495	_	_	1,495	0.09 %
Residential							
Mortgage, net	_		562	 46,012	7,101	53,675	0.87 %
Total loans and leases experiencing financial difficulty	\$ 1,043	\$	52,586	\$ 77,384	\$ 7,101	\$138,114	0.37 %

	Decer	nber 31, 2023
Loan Type	Types of Modification	Financial Effect
Non-owner occupied term, net	Term extension	Added a weighted average of 17 months to the life of the loans.
Owner occupied term, net	Interest rate reduction, term extension, and other-than-insignificant payment delays	Reduced weighted average interest rate by 4.00% from interest rate reductions, added a weighted average of 2 months to the life of the loans from term extensions, and deferred \$22,000 of principal payments from other-than-insignificant payment delays.
Term, net	Interest rate reduction and term extension	Reduced weighted average interest rate by 4.15% from interest rate reductions and added a weighted average of 3 months to the life of the loans from term extensions.
Lines of credit & other, net	Term extension and other- than-insignificant payment delays	Added a weighted average of 11 months to the life of the loans from term extensions and deferred \$30.1 million of principal and interest payments from other-than-insignificant payment delays.
Leases & equipment finance, net	Term extension	Added a weighted average of 8 months to the life of the leases.
Mortgage, net	Term extension, other-than- insignificant payment delays, and combination	Added a weighted average of 7.4 years to the life of the loans from term extensions, deferred \$3.0 million of principal and interest payments from other-than-insignificant payment delays.
		Added a weighted average of 12.3 years and deferred \$357,000 of principal and interest payments from combination modifications.

The Company closely monitors the performance of loans and leases that are modified for borrowers experiencing financial difficulty to understand the effectiveness of its modification efforts. Loans and leases are considered to be in payment default at 90 or more days past due. The following table presents the performance of such loans and leases that have been modified for the year ended December 31, 2023:

		December	31, 2023			
Loan Type	Current	Greater than 30 to 59 Days Past Due	60 to 89 Days Past Due	90 Days or More Past Due	Non-accrual	Total
(in thousands)						
Commercial real estate						
Non-owner occupied term, net	\$ 30,338	\$ —	\$ 2,123	\$ —	\$ —	\$ 32,461
Owner occupied term, net	1,075	_	_	_	666	1,741
Commercial						
Term, net	3,784	_	_	_	1,002	4,786
Lines of credit & other, net	42,263	_	_	_	1,693	43,956
Leases & equipment finance, net	915	181	119	179	101	1,495
Residential						
Mortgage, net	50,540	_	1,125	2,010		53,675
Total loans and leases, net of deferred fees and costs	\$ 128,915	\$ 181	\$ 3,367	\$ 2,189	\$ 3,462	\$ 138,114

The following table presents the amortized cost of loan and lease modifications and type of concession that were modified in the previous twelve months and subsequently had a payment default, as of December 31, 2023:

		Decer	mber 31, 20	23	
(in thousands)	Term tension	Insi P	er -Than- ignificant ayment Delay	Term and O Insig	bination - Extension ther-than- gnificant eent Delay
Commercial					
Lines of credit & other, net	\$ 1,422	\$		\$	
Leases & equipment finance, net	280		_		_
Residential					
Mortgage, net	 _		977		1,033
Total loans and leases experiencing financial difficulty with a subsequent default	\$ 1,702	\$	977	\$	1,033

Troubled Debt Restructuring

Prior to the adoption of ASU 2022-02, loans were accounted for as TDRs if concessions granted in response to borrower financial difficulties, and generally provided for a temporary modification of loan repayment terms. There were no available commitments for troubled debt restructuring outstanding as of December 31, 2022.

The following tables presents TDR loans by accrual versus non-accrual status and by portfolio segment as of December 31, 2022:

				December	r 31, í	2022	
(in thousands)	Accru	al Status	No	on-Accrual Status	M	Total odification	# of Contracts
Commercial real estate, net	\$	279	\$	23	\$	302	3
Commercial, net		188		_		188	1
Residential, net		6,291		_		6,291	40
Consumer & other, net		9		_		9	2
Total, net of deferred fees and costs	\$	6,767	\$	23	\$	6,790	46

The following table presents loans that were determined to be TDRs during the year ended December 31, 2022:

(in thousands)	2022
Commercial real estate, net	\$ 278
Commercial, net	188
Residential, net	 6,046
Total, net of deferred fees and costs	\$ 6,512

For the period presented in the table above, the outstanding recorded investment was the same pre and post-modification and all modifications were combination modifications.

Credit Quality Indicators

Management regularly reviews loans and leases in the portfolio to assess credit quality indicators and to determine appropriate loan classification and grading. In addition, the Company's board of directors reviews and approves the credit quality indicators each year. The Bank differentiates its lending portfolios into homogeneous and non-homogeneous loans and leases. Homogeneous loans and leases are initially risk rated on a single risk rating scale based on the past due status of the loan or lease. Homogeneous loans and leases that have risk-based modifications or forbearances enter into an alternative elevated risk rating scale that freezes the elevated risk rating and requires six consecutive months of scheduled payments without delinquency before the loan or lease can return to the delinquency-based risk rating scale. Homogeneous loans and leases with other defined risk factors such as confirmed bankruptcy, business closure, death of a guarantor or fraud will be set to a floor substandard rating.

The Bank's risk rating methodology for its non-homogeneous loans and leases uses a dual risk rating approach to assess the credit risk. This approach uses two scales to provide a comprehensive assessment of credit default risk and recovery risk. The probability of default scale measures a borrower's credit default risk using risk ratings ranging from 1 to 16, where a higher rating represents higher risk. For non-homogeneous loans and leases, PD ratings of 1 through 9 are "pass" grades, while PD ratings of 10 and 11 are "watch" grades. PD ratings of 12-16 correspond to the regulatory-defined categories of special mention (12), substandard (13-14), doubtful (15), and loss (16). The loss given default scale measures the amount of loss that may not be recovered in the event of a default, using six alphabetic ratings from A-F, where a higher rating represents higher risk. The LGD scale quantifies recovery risk associated with an event of default and predicts the amount of loss that would be incurred on a loan or lease if a borrower were to experience a major default and includes variables that may be external to the borrower, such as industry, geographic location, and credit cycle stage. It could also include variables specific to the loan or lease, including collateral valuation, covenant structure and debt type. The product of the borrower's PD and a loan or lease LGD is the loan or lease expected loss, expressed as a percentage. This provides a common language of credit risk across different loans.

The PD scale estimates the likelihood that a borrower will experience a major default on any of its debt obligations within a specified time period. Examples of major defaults include payments 90 days or more past due, non-accrual classification, bankruptcy filing, or a full or partial charge-off of a loan or lease. As such, the PD scale represents the credit quality indicator for non-homogeneous loans and leases.

The credit quality indicator rating categories follow regulatory classification and can be generally described by the following groupings for loans and leases:

Pass/Watch—A pass loan or lease is a loan or lease with a credit risk level acceptable to the Bank for extending credit and maintaining normal credit monitoring. A watch loan or lease is considered pass rated but has a heightened level of unacceptable default risk due to an emerging risk element or declining performance trend. Watch ratings are expected to be temporary, with issues resolved or manifested to the extent that a higher or lower risk rating would be appropriate within a short period of time.

Special Mention—A special mention loan or lease has potential weaknesses that deserve management's close attention. If left uncorrected, these potential weaknesses may result in deterioration of the repayment prospects for the asset or in the institution's credit position at some future date. These borrowers have an elevated PD but not to the point of a substandard classification.

Substandard—A substandard loan or lease is inadequately protected by the current net worth and paying capacity of the borrower or of the collateral pledged, if any. Loans and leases classified as substandard have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt. They are characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected.

Doubtful—Loans or leases classified as doubtful have all the weaknesses inherent in those classified as substandard with the added characteristic that the weaknesses make collection or liquidation in full, based on currently existing facts, conditions, and values, highly questionable and improbable.

Loss—Loans or leases classified as loss are considered uncollectible and of such little value that their continuance as bankable assets is not warranted.

The following tables represent the amortized costs basis of the loans and leases by credit classification and vintage year by loan and lease class of financing receivable as of December 31, 2023 and 2022:

								31, 2023					R	evolving	to Re	evolving o Non- evolving		
(in thousands)		1	`ern	1 Loans A	mo	rtized Cos	st E	Basis by Or	igi	nation Yea	ır		Aı	Loans mortized		Loans iortized		
December 31, 2023		2023		2022		2021		2020		2019		Prior		ost Basis		Cost		Total
Commercial real estate:																		
Non-owner occupied term,	net																	
Credit quality indicator:																		
Pass/Watch	\$	582,178	\$1	,307,143	\$1	,182,485	\$	615,021	\$	764,821	\$1	,832,231	\$	41,194	\$	_	\$	6,325,073
Special mention		_		317		3,478		1,337		2,480		16,352		_		_		23,964
Substandard		32,461		749		_		1,090		35,214		64,304		_		_		133,818
Loss												85						85
Total non-owner occupied term, net	\$	614,639	\$1	,308,209	\$1	,185,963	\$	617,448	\$	802,515	\$1	,912,972	\$	41,194	\$		\$	6,482,940
Current YTD period:																		
Gross charge-offs	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Owner occupied term, net																		
Credit quality indicator:																		
Pass/Watch	\$	532,482	\$1	,067,388	\$	972,130	\$	448,569	\$	581,616	\$1	,351,172	\$	67,063	\$	_	\$	5,020,420
Special mention		1,575		5,950		6,175		4,945		14,610		15,513		1,932		_		50,700
Substandard		4,034		7,707		48,281		17,275		10,513		35,216		_		_		123,026
Doubtful		_		_		_		_		_		90		_		_		90
Loss		_		963		_		404		_		2		_		_		1,369
Total owner occupied term, net	\$	538,091	\$1	,082,008	\$1	,026,586	\$	471,193	\$	606,739	\$1	,401,993	\$	68,995	\$	_	\$	5,195,605
Current YTD period:																		
Gross charge-offs	\$	_	\$	16	\$	_	\$	_	\$	_	\$	787	\$	_	\$	_	\$	803
Multifamily, net																		
Credit quality indicator:																		
Pass/Watch	\$	272,084	\$1	,982,075	\$1	,660,492	\$	400,280	\$	590,379	\$	745,705	\$	51,480	\$	_	\$	5,702,495
Special mention				_		1,278				961						_		2,239
Total multifamily, net	•	272,084	¢1	082 075	\$ 1	661 770	•	400,280	•	591,340	•	745,705	\$	51,480	\$		•	5,704,734
Current YTD period:	Ф	272,004	\$1	,962,073	\$1	,001,770	Φ	400,280	Φ	391,340	Ф	743,703	Φ	31,460	Ф		Ф	3,704,734
Gross charge-offs	\$		\$		\$		\$		\$		\$		\$		\$		\$	
Construction & developme		not —	Ф		Ф	_	Ф	_	Ф	_	Ф	_	Ф	_	Ф	_	Ф	_
Credit quality indicator:	ш,	псі																
1 2	¢.	248,623	e.	716 207	¢.	520.205	¢.	106 600	¢.	21,990	•	10.729	¢.	21 200	¢.		¢.	1 745 922
Pass/Watch	\$	240,023	Ф	716,207	Ф	530,305	Þ	186,680	\$	21,990	\$	10,738	\$	31,289	\$		Þ	1,745,832
Special mention Total construction & development, net	_	248,623	_	717,677	_	530,305	_	186,680	<u> </u>	21,990	\$	10,738	\$	31,289	\$	<u> </u>	_	1,470 1,747,302
Current YTD period:	Ψ	210,023	Ψ	, 1 , 5 / /	Ψ	230,303	Ψ	100,000	Ψ	21,770	Ψ	10,750	Ψ	31,207	Ψ		Ψ	.,,,,,,,,,,,
Gross charge-offs	\$		\$		\$		\$		\$		\$	_	\$		\$		\$	_
Residential development, n			Ψ		Ψ		Ψ		Ψ		Ψ		Ψ		4		Ψ	
Credit quality indicator:																		
Pass/Watch	\$	90,241	\$	86,078	\$	22,271	\$		\$		\$	1,329	\$	116,490	\$	6,149	\$	322,558
Special mention	Ψ		Ψ		Ψ		Ψ	_	Ψ	_	Ψ		Ψ	1,341	Ψ	-0,177	Ψ	1,341
Total residential development, net	\$	90,241	\$	86,078	\$	22,271	\$		\$		\$	1,329	<u>\$</u>	117,831	\$	6,149	\$	323,899
Current YTD period:	Ψ	7,5,271	Ψ	55,576	Ψ	,-/1	Ψ		Ψ		Ψ	1,527	Ψ	117,031	Ψ	0,117	Ψ	0_0,077
Gross charge-offs	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_
Total commercial real estate	\$1	,763,678	\$5	,176,047	\$4	,426,895	\$	1,675,601	\$2	2,022,584	\$4	1,072,737	\$	310,789	\$	6,149	\$1	9,454,480

(in thousands)		7	[eri	m Loans A	mc	ortized Co	st I	Basis by Or	·iσi	nation Ve	ar			evolving Loans	t R	evolving o Non- evolving Loans		
December 31, 2023		2023		2022	1110	2021	3t I	2020	151	2019	(4.1	Prior	Aı	nortized ost Basis		nortized Cost		Total
Commercial:	-	2020	-		-	2021		2020		201)	-	11101		JSC DUSIS	-		-	Total
Term, net																		
Credit quality indicator:																		
Pass/Watch	\$	835,662	\$	1,215,539	\$	933,970	\$	391,735	\$	271,974	\$	560,595	\$1	,097,630	\$	50,874	\$	5,357,979
Special mention		23,250		14,875		29,128		109		3,340		16,476		_		_		87,178
Substandard		2,911		13,862		13,981		3,068		7,385		7,859		31,399		4,139		84,604
Doubtful		_		1,329		335		796		197		699		_		_		3,356
Loss		_		415		_		648		51		2,534		_		_		3,648
Total term, net	\$	861,823	\$	1,246,020	\$	977,414	\$	396,356	\$	282,947	\$	588,163	\$1	,129,029	\$	55,013	\$	5,536,765
Current YTD period:																		
Gross charge-offs	\$	3,000	\$	1,418	\$	_	\$	415	\$	389	\$	886	\$	44	\$	808	\$	6,960
Lines of credit & other, net																		
Credit quality indicator:																		
Pass/Watch	\$	105,360	\$	105,791	\$	58,441	\$	12,266	\$	10,927	\$	16,108	\$1	,922,115	\$	5,676	\$	2,236,684
Special mention		476		635		394		_		_		80		61,927		403		63,915
Substandard		7,807		4,161		_		_		_		593		83,304		32,509		128,374
Doubtful		_		_		_		_		_		_		48		211		259
Loss		_		693		200		_		1		1				_		895
Total lines of credit & other, net	\$	113,643	\$	111,280	\$	59,035	\$	12,266	\$	10,928	\$	16,782	\$2	,067,394	\$	38,799	\$	2,430,127
Current YTD period:																		
Gross charge-offs	\$	30	\$	168	\$	_	\$	47	\$	144	\$	45	\$	1,058	\$	1,809	\$	3,301
Leases & equipment finance	e, n	et																
Credit quality indicator:																		
Pass/Watch	\$	682,866	\$	501,867	\$	200,499	\$	92,402	\$	61,065	\$	33,908	\$	_	\$		\$	1,572,607
Special mention		46,806		15,962		6,182		1,688		7,224		77		_		_		77,939
Substandard		7,094		15,274		6,704		2,163		1,246		1,161		_		_		33,642
Doubtful		5,833		22,566		9,036		3,161		1,700		208		_		_		42,504
Loss	_	395		1,485	_	581	_	292	_	58	_	9			_		_	2,820
Total leases & equipment finance, net	\$	742,994	\$	557,154	\$	223,002	\$	99,706	\$	71,293	\$	35,363	\$		\$		\$	1,729,512
Current YTD period:																		
Gross charge-offs	\$	2,324	\$	47,116	\$	31,569	\$	9,111	\$	6,394	\$	3,087	\$	_	\$	_	\$	99,601
Total commercial	\$1	,718,460	\$1	1,914,454	\$	1,259,451	\$	508,328	\$	365,168	\$	640,308	\$3	,196,423	\$	93,812	\$	9,696,404

										D	, .	t	evolving o Non-					
(in thousands)		1	[ern	Loans A	mor	tized Cos	st B	Basis by Or	igi	nation Yea	ır			evolving Loans		evolving Loans		
December 31, 2023		2023		2022		2021		2020		2019		Prior		mortized ost Basis	Aı	nortized Cost		Total
Residential:																		
Mortgage, net																		
Credit quality indicator:																		
Pass/Watch	\$	221,207	\$1	,845,395	\$2,	,355,420	\$	521,177	\$	443,152	\$	735,801	\$	_	\$	_	\$	6,122,152
Special mention		1,125		916		1,737		651		1,156		4,109		_		_		9,694
Substandard		1,851		2,617		2,826		787		1,759		8,746		_		_		18,586
Loss		159		2,724		970		851		220		1,810		_		_		6,734
Total mortgage, net	\$	224,342	\$1	,851,652	\$2,	,360,953	\$	523,466	\$	446,287	\$	750,466	\$	_	\$	_	\$	6,157,166
Current YTD period:																		
Gross charge-offs	\$	_	\$		\$		\$	_	\$	_	\$	6	\$	_	\$		\$	6
Home equity loans & lines,	net																	
Credit quality indicator:																		
Pass/Watch	\$	562	\$	1,242	\$	1,056	\$	100	\$	896	\$	35,677	\$1	,870,270	\$	17,807	\$	1,927,610
Special mention		_		_		_		_		114		378		5,052		1,230		6,774
Substandard		_		_		_		_		137		190		1,278		174		1,779
Loss		14				_		_		_		85		1,286		618		2,003
Total home equity loans & lines, net	\$	576	\$	1,242	\$	1,056	\$	100	\$	1,147	\$	36,330	\$1	,877,886	\$	19,829	\$	1,938,166
Current YTD period:																		
Gross charge-offs	\$	_	\$	_	\$	12	\$	29	\$	_	\$	52	\$	448	\$	_	\$	541
Total residential	\$	224,918	\$1	,852,894	\$2,	,362,009	\$	523,566	\$	447,434	\$	786,796	\$1	,877,886	\$	19,829	\$	8,095,332
Consumer & other, net:																		
Credit quality indicator:																		
Pass/Watch	\$	39,977	\$	14,919	\$	7,132	\$	4,953	\$	3,441	\$	5,022	\$	118,125	\$	543	\$	194,112
Special mention		138		52		5		13		52		122		779		135		1,296
Substandard		_		_		_		_		3		1		251		63		318
Loss												7		2				9
Total consumer & other, net	\$	40,115	\$	14,971	\$	7,137	\$	4,966	\$	3,496	\$	5,152	\$	119,157	\$	741	\$	195,735
Current YTD period:																		
Gross charge-offs	\$	3,313	\$	132	\$	23	\$	20	\$	29	\$	288	\$	1,485	\$	472	\$	5,762
Grand total	\$3	,747,171	\$8	,958,366	\$8,	,055,492	\$2	2,712,461	\$2	2,838,682	\$3	5,504,993	\$5	5,504,255	\$	120,531	\$3	7,441,951

(in thousands)	1	Term Loans A	.mortized Cos	st Basis by O	rigination Yea	ır	Revolving Loans	Revolving to Non- Revolving Loans	
December 31, 2022	2022	2021	2020	2019	2018	Prior	Amortized Cost Basis	Amortized Cost	Total
Commercial real estate:				2017	2010	11101	- C 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		10001
Non-owner occupied term,	net								
Credit quality indicator:									
Pass/Watch	\$ 726,865	\$ 746,833	\$ 389,476	\$ 590,571	\$ 404,905	\$ 968,254	\$ 4,327	\$ 4,442	\$ 3,835,673
Special mention	1,185	_	1,482	4,597	4,002	4,603	_	_	15,869
Substandard	452	_	_	311	34,393	8,129	_	_	43,285
Loss	_	_	_	_	_	13	_	_	13
Total non-owner occupied term, net	\$ 728,502	\$ 746,833	\$ 390,958	\$ 595,479	\$ 443,300	\$ 980,999	\$ 4,327	\$ 4,442	\$ 3,894,840
Owner occupied term, net									
Credit quality indicator:									
Pass/Watch	\$ 660,479	\$ 544,011	\$ 183,996	\$ 307,944	\$ 211,539	\$ 585,740	\$ 4,552	\$ 117	\$ 2,498,378
Special mention	2,091	20,328	239	3,279	9,527	19,562	_	_	55,026
Substandard	_	_	404	660	1,356	11,833	_	_	14,253
Loss						104			104
Total owner occupied term, net	\$ 662,570	\$ 564,339	\$ 184,639	\$ 311,883	\$ 222,422	\$ 617,239	\$ 4,552	\$ 117	\$ 2,567,761
Multifamily, net									
Credit quality indicator:									
Pass/Watch	\$1,944,714	\$1,556,986	\$ 364,306	\$ 618,523	\$ 219,260	\$ 496,628	\$ 82,467	\$ 2,907	\$ 5,285,791
Total multifamily, net	\$1,944,714	\$1,556,986	\$ 364,306	\$ 618,523	\$ 219,260	\$ 496,628	\$ 82,467	\$ 2,907	\$ 5,285,791
Construction & developme	nt, net			•					
Credit quality indicator:									
Pass/Watch	\$ 248,437	\$ 505,680	\$ 205,577	\$ 83,808	\$ —	\$ 18,183	\$ 2,393	\$ —	\$ 1,064,078
Special mention		13,268							13,268
Total construction & development, net	\$ 248,437	\$ 518,948	\$ 205,577	\$ 83,808	<u> </u>	\$ 18,183	\$ 2,393	<u>\$</u>	\$ 1,077,346
Residential development, n	et								
Credit quality indicator:									
Pass/Watch	\$ 38,662	\$ 20,609	\$ 417	<u>\$</u>	<u>\$</u>	<u>\$</u>	\$ 141,150	<u>\$</u>	\$ 200,838
Total residential development, net	\$ 38,662	\$ 20,609	\$ 417	<u>\$</u>	\$	<u> </u>	\$ 141,150	\$	\$ 200,838
Total commercial real estate	\$3,622,885	\$3,407,715	\$1,145,897	\$1,609,693	\$ 884,982	\$2,113,049	\$ 234,889	\$ 7,466	\$13,026,576
Commercial:									
Term, net									
Credit quality indicator:									
Pass/Watch	\$ 792,764	\$ 643,930	\$ 174,188	\$ 156,068	\$ 130,309	\$ 278,695	\$ 744,193	\$ 44,033	\$ 2,964,180
Special mention	_	1,138	3	100	1,488	935	_	411	4,075
Substandard	16,424	1,403	1,362	1,358	10,619	2,211	27,240		60,617
Doubtful			675						675
Total term, net	\$ 809,188	\$ 646,471	\$ 176,228	\$ 157,526	\$ 142,416	\$ 281,841	\$ 771,433	\$ 44,444	\$ 3,029,547

(in thousands)			Гегі	n Loans A	mo	ortized Cos	st B	asis by O	rigi	nation Yea	ır			evolving Loans mortized	R	evolving to Non- evolving Loans mortized		
December 31, 2022		2022		2021		2020		2019		2018		Prior		ost Basis	Al	Cost		Total
Lines of credit & other, net																		
Credit quality indicator:																		
Pass/Watch	\$	57,715	\$	6,271	\$	4,660	\$	13,304	\$	8,653	\$	1,257	\$	813,110	\$	36,573	\$	941,543
Special mention		_		_		_		_		_		_		5,833		1,933		7,766
Substandard		_		314		_		_		_		1,102		6,031		3,294		10,741
Doubtful		_		_		_		_		_		_		_		1		1
Loss		_		_		_		_		_		_		3		_		3
Total lines of credit & other, net	\$	57,715	\$	6,585	\$	4,660	\$	13,304	\$	8,653	\$	2,359	\$	824,977	\$	41,801	\$	960,054
Leases & equipment finance	e, ı	net																
Credit quality indicator:																		
Pass/Watch	\$	812,537	\$	362,612	\$	190,507	\$	149,667	\$	62,292	\$	40,328	\$	_	\$	_	\$	1,617,943
Special mention		9,840		8,403		2,902		2,423		665		182						24,415
Substandard		11,531		8,165		3,452		2,697		1,477		177		_		_		27,499
Doubtful		11,822		13,034		4,326		3,419		1,211		197		_		_		34,009
Loss		1,243		505		275		236		28		19		_		_		2,306
Total leases & equipment finance, net	\$	846,973	\$	392,719	\$	201,462	\$	158,442	\$	65,673	\$	40,903	\$	_	\$	_	\$	1,706,172
Total commercial	\$	1,713,876	\$	1,045,775	\$	382,350	\$	329,272	\$	216,742	\$	325,103	\$1	,596,410	\$	86,245	\$	5,695,773
Residential:																		
Mortgage, net																		
Credit quality indicator:																		
Pass/Watch	\$	1,465,067	\$2	2,389,861	\$	485,576	\$	471,416	\$	143,611	\$	661,715	\$	_	\$	_	\$	5,617,246
Special mention	-	307	-	1,351	-	1,203	-	2,365	4	752	-	5,487	*	_	•	_	*	11,465
Substandard		_		1,664		1,041		2,693		2,015		9,907		_		_		17,320
Loss		_		561				193		193		57		_		_		1,004
Total mortgage, net	\$	1.465.374	\$2	2,393,437	\$	487.820	\$	476,667	\$	146,571	\$		\$	_	\$	_	\$	5,647,035
Home equity loans & lines,	net	t	Ť	,,		,	_	,	Ť		_		_		_			- , ,
Credit quality indicator:																		
Pass/Watch	\$	1,117	\$	630	\$	_	\$	_	\$	16	\$	7,320	\$1	,584,200	\$	32,778	\$	1,626,061
Special mention				_		_		_		_		79		3,208		1,047		4,334
Substandard								_				53		557		154		764
Loss		_		_		_		_		_		_		357		449		806
Total home equity loans & lines, net	\$	1,117	\$	630	\$		\$	_	\$	16	\$	7,452	\$1	,588,322	\$	34,428	\$	1,631,965
Total residential	\$	1,466,491	\$2	2,394,067	\$	487,820	\$	476,667	\$	146,587	\$	684,618	\$1	,588,322	\$	34,428	\$	7,279,000
Consumer & other, net:																		
Credit quality indicator:																		
Pass/Watch	\$	22,959	\$	7,990	\$	6,701	\$	6,232	\$	2,626	\$	4,436	\$	102,465	\$	442	\$	153,851
Special mention		6				27		14		42		66		371		122		648
Substandard		_		9		1		9		_		32		47		25		123
Loss	_		_		_		_		_		_	7	_	3	_		_	10
Total consumer & other, net	\$	22,965	\$	7,999	\$	6,729	\$	6,255	\$	2,668	\$	4,541	\$	102,886	\$	589	\$	154,632
Grand total	\$0	6,826,217	\$6	5,855,556	\$2	2,022,796	\$2	2,421,887	\$1	1,250,979	\$3	3,127,311	\$3	,522,507	\$	128,728	\$2	26,155,981

Note 7 - Premises and Equipment

The following table presents the major components of premises and equipment as of December 31, 2023 and 2022:

(in thousands)	Decen	nber 31, 2023	Dece	ember 31, 2022	Estimated useful life
Land	\$	91,072	\$	33,031	
Buildings and improvements		288,189		203,519	7 - 39 years
Furniture, fixtures, and equipment		140,241		142,209	4 - 20 years
Software		110,726		105,355	3 - 7 years
Construction in progress and other		24,094		16,878	
Total premises and equipment		654,322		500,992	
Less: Accumulated depreciation and amortization		(315,352)		(324,976)	
Premises and equipment, net	\$	338,970	\$	176,016	

During 2023, the Company recorded \$203.3 million of premises and equipment associated with the Merger. Refer to Note 2 - *Business Combination* for more information pertaining to the completed Merger.

Depreciation and amortization expense totaled \$29.3 million, \$22.9 million, and \$25.7 million for the years ended December 31, 2023, 2022, and 2021, respectively.

Note 8 - Leases

The Company leases branch locations, corporate office space, and equipment under non-cancelable operating leases. The following table presents the balance sheet information related to leases as of December 31, 2023 and 2022:

(in thousands)				
Leases	Decemb	er 31, 2023	December	31, 2022
Operating lease right-of-use assets	\$	115,811	\$	78,598
Operating lease liabilities	\$	130,576	\$	91,694

The following table presents the weighted-average operating lease term and weighted-average discount rate as of December 31, 2023 and 2022:

	December 31, 2023	December 31, 2022
Weighted-average remaining lease term (years)	6.1	5.7
Weighted-average discount rate	4.08%	2.86%

The following table presents the components of lease expense for the years ended December 31, 2023, 2022, and 2021:

(in thousands)			
Lease Costs	2023	2022	2021
Operating lease costs	\$ 36,378	\$ 30,383	\$ 29,694
Short-term lease costs	1,367	421	609
Variable lease costs	13	26	22
Sublease income	 (3,173)	(2,504)	(2,626)
Net lease costs	\$ 34,585	\$ 28,326	\$ 27,699

The Company performs impairment assessments for ROU assets when events or changes in circumstances indicate that their carrying values may not be recoverable. For the years ended December 31, 2023 and 2022, there were \$2.6 million and \$1.8 million, respectively, in ROU asset impairments recorded in other expenses. The impairments were due to the closures or consolidations of leased locations.

The following table presents the supplemental cash flow information related to leases for the year ended December 31, 2023, 2022, and 2021:

(in thousands)			
Cash Flows	2023	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	\$ 38,384	\$ 30,420	\$ 31,697
Right of use assets obtained in exchange for new operating lease liabilities	\$ 73,252	\$ 24,954	\$ 15,033

The following table presents the maturities of lease liabilities as of December 31, 2023:

(in thousands)	Operating
Year	Leases
2024	\$ 33,857
2025	28,574
2026	23,394
2027	16,988
2028	13,457
Thereafter	33,367
Total lease payments	149,637
Less: imputed interest	(19,061)
Total lease liabilities	\$ 130,576

Note 9 – Residential Mortgage Servicing Rights

The Company measures its MSR asset at fair value with changes in fair value reported in residential mortgage banking revenue, net. The following table presents the changes in the Company's residential MSR for the years ended December 31, 2023, 2022, and 2021:

(in thousands)	2023	2022	2021
Balance, beginning of period	\$ 185,017	\$ 123,615	\$ 92,907
Additions for new MSR capitalized	5,347	24,137	38,522
Sale of MSR assets	(57,305)	_	_
Changes in fair value:			
Changes due to collection/realization of expected cash flows over time	(17,694)	(20,272)	(18,903)
Changes due to valuation inputs or assumptions (1)	 (6,122)	57,537	11,089
Balance, end of period	\$ 109,243	\$ 185,017	\$ 123,615

⁽¹⁾ The changes in valuation inputs and assumptions principally reflect changes in discount rates and prepayment speeds, which are primarily affected by changes in interest rates.

Information related to the serviced loan portfolio as of December 31, 2023, 2022, and 2021 is as follows:

(dollars in thousands)	Dec	ember 31, 2023	De	cember 31, 2022	De	cember 31, 2021	
Balance of loans serviced for others	\$	8,175,664	\$	13,020,189	\$	12,755,671	
MSR as a percentage of serviced loans		1.34%		1.42%		0.97%	

The amount of contractually specified servicing fees, late fees and ancillary fees earned, recorded in residential mortgage banking revenue, were \$33.4 million, \$37.4 million, and \$36.8 million for the years ended December 31, 2023, 2022, and 2021, respectively.

During the year, the Company closed the sale of \$57.3 million in residential mortgage servicing rights associated with \$4.3 billion of residential mortgage loans serviced for others, which relates to the non-relationship component of the serviced loan portfolio.

Key assumptions used in measuring the fair value of MSR as of December 31, 2023, 2022, and 2021 were as follows:

	December 31, 2023	December 31, 2022	December 31, 2021
Constant prepayment rate	6.78%	6.39%	12.75%
Discount rate	10.25%	10.06%	9.57%
Weighted average life (years)	8.3	8.7	5.9

A sensitivity analysis of the current fair value to changes in discount and prepayment speed assumptions as of December 31, 2023 and 2022 is as follows:

	Decem	ber 31, 2023	Dece	mber 31, 2022
Constant prepayment rate				
Effect on fair value of a 10% adverse change	\$	(2,858)	\$	(4,870)
Effect on fair value of a 20% adverse change	\$	(5,575)	\$	(9,518)
Discount rate				
Effect on fair value of a 100 basis point adverse change	\$	(4,620)	\$	(8,229)
Effect on fair value of a 200 basis point adverse change	\$	(8,888)	\$	(15,807)

The sensitivity analysis presents the hypothetical effect on fair value of the MSR, due to the change in assumptions. The effect of such hypothetical change in assumptions generally cannot be extrapolated because the relationship of the change in an assumption to the change in fair value is not linear. Additionally, in the analysis, the impact of an adverse change in one assumption is calculated independent of any impact on other assumptions. In reality, changes in one assumption may change another assumption. The Company has entered into a fair value hedge by purchasing interest rate futures and forward settling mortgage-backed securities to hedge the interest rate risk of MSRs. Refer to *Note 19 - Derivatives* for further information.

Note 10 – Goodwill and Other Intangible Assets

As of December 31, 2023, there was \$1.0 billion in goodwill, as compared to no goodwill as of December 31, 2022. Goodwill represents the excess of the total acquisition price paid over the fair value of the assets acquired, net of fair value of liabilities assumed. Additional information on the Merger and purchase price allocations is provided in Note 2 - *Business Combinations*. Goodwill is not amortized but is evaluated for potential impairment on an annual basis or whenever events or changes in circumstances indicate the carrying value may not be recoverable. The Company performed its annual impairment assessment as of October 31, 2023 and concluded that there was no impairment. As of December 31, 2023, it was determined there were no events or circumstances which would more likely than not reduce the fair value of our reporting unit below its carrying amount.

During 2023, the Company recorded \$710.2 million of core deposit intangibles associated with the Merger. Core deposit intangible asset values were determined based on the present value of the expected cost savings attributable to the core deposit funding relative to an alternative source of funding. The fair value was estimated based on a discounted cash flow methodology that gave consideration to expected customer attrition rates, net maintenance cost of the deposit base, alternative cost of funds, and the interest costs associated with customer deposits. The intangible assets are being amortized on an accelerated basis over a period of 10 years. No impairment losses separate from the scheduled amortization have been recognized in the periods presented.

The following table summarizes the changes in the Company's other intangible assets as of December 31, 2023 and 2022:

(in thousands)	Gr	oss Carrying Amount	Accumulated Amortization	Net Carrying Amount
As of December 31, 2023	\$	764,791	\$ (161,112) \$	603,679
As of December 31, 2022	\$	54,561	\$ (49,816) \$	4,745

As of December 31, 2023, all of the Company's intangible assets were being amortized. Amortization expense recognized on intangible assets was \$111.3 million, \$4.1 million, and \$4.5 million for the years ended December 31, 2023, 2022, and 2021, respectively.

The table below presents the forecasted amortization expense for intangible assets as of December 31, 2023:

(in thousands)		
Year	Expected	d Amortization
2024	\$	119,431
2025		105,458
2026		92,545
2027		79,632
2028		66,719
Thereafter		139,894
Total intangible assets	\$	603,679

Note 11 - Investment Tax Credits

The Company's tax credit investments promote qualified affordable housing projects, some of which also support the Company's regulatory compliance with the Community Reinvestment Act. The Company's investments in these entities generate a return primarily through the realization of federal income tax credits and other tax benefits, such as tax deductions from operating losses of the investments, over specified time periods. These tax credits and deductions are recognized as a reduction to income tax expense.

The Company records the investments in affordable housing partnerships as a component of other assets on the Consolidated Balance Sheets and uses the proportional amortization method to account for the investments. Amortization related to these investments is recorded as a component of the provision for income taxes on the Consolidated Statements of Operations. The Company's unfunded capital commitments to these investments is included in other liabilities on the Consolidated Balance Sheets.

The Company recorded \$47.2 million of affordable housing investments and \$40.9 million of related unfunded capital commitments associated with the Merger.

The following table presents the Company's tax credit investments, which consisted entirely of affordable housing tax credit investments and related unfunded capital commitments as of December 31, 2023 and 2022:

(in thousands)	December 31, 2023	December 31, 2022
Other Assets:		
Affordable housing tax credit investments	\$ 210,873	\$ 143,719
Other Liabilities:		
Unfunded affordable housing tax credit commitments	\$ 114,082	\$ 81,632

The following table presents other information relating to the Company's affordable housing tax credit investments for the years ended December 31, 2023, 2022, and 2021:

(in thousands)	2023	2022	2021
Proportional amortization	16,777	12,026	10,003
Tax credit investment credits and tax benefits	20,932	14,553	12,253

There was no impairment recognized for the years ended December 31, 2023, 2022, and 2021.

Note 12 – Income Taxes

The following table presents the components of income tax provision for the years ended December 31, 2023, 2022, and 2021:

(in thousands)	2023	2022	2021
Current Expense:			
Federal	\$ 72,224	\$ 70,982	\$ 71,969
State	37,365	28,461	25,086
Total current tax expense	\$ 109,589	\$ 99,443	\$ 97,055
Deferred tax expense:			
Federal	\$ 6,794	\$ 11,636	\$ 32,099
State	6,101	2,747	8,706
Total deferred tax expense	12,895	14,383	40,805
Total	\$ 122,484	\$ 113,826	\$ 137,860

The following table presents a reconciliation of income taxes computed at the Federal statutory rate to the actual effective rate for the years ended December 31, 2023, 2022, and 2021:

	2023	2022	2021
Statutory Federal income tax rate	21.0 %	21.0 %	21.0 %
State tax, net of Federal benefit	6.2 %	5.8 %	5.6 %
Non-deductible FDIC Premiums	1.7 %	0.4 %	0.2 %
Net tax-exempt interest income	(2.2)%	(1.5)%	(0.9)%
Other	(0.7)%	(0.4)%	(1.2)%
Effective income tax rate	26.0 %	25.3 %	24.7 %

The following table reflects the effects of temporary differences that give rise to the components of the net deferred tax asset as of December 31, 2023 and 2022:

(in thousands)	Dece	mher 31 2023	December 31, 2022
Deferred tax assets:	Dece	111111111111111111111111111111111111111	December 51, 2022
Net unrealized losses on investment securities	\$	303,465	\$ 140,227
Acquired loans		146,315	4,644
Allowance for credit losses		115,777	79,312
Accrued severance and deferred compensation		39,904	16,523
Operating lease liabilities		33,956	23,603
Other		54,181	35,459
Total gross deferred tax assets		693,598	299,768
Deferred tax liabilities:			
Other intangible assets		155,642	156
Direct financing leases		42,825	41,120
Deferred loan fees and costs		34,402	25,676
Residential mortgage servicing rights		31,259	49,681
Operating lease right-of-use asset		30,117	20,235
Premises and equipment		20,579	1,575
Fair market value adjustment on junior subordinated debentures		17,287	15,081
Other		14,284	13,421
Total gross deferred tax liabilities		346,395	166,945
Net deferred tax asset	\$	347,203	\$ 132,823

As of December 31, 2023 and 2022, the Company's gross deferred tax assets included \$2.4 million and \$689,000, respectively, of NOL carryforwards expiring in tax years 2024-2032. As of December 31, 2023, the Company has determined there is sufficient positive evidence to conclude that it is more likely than not that the benefit from certain of its federal and state NOL and tax carryforwards will be realized. The Company has determined that no valuation allowance for the deferred tax assets is required as management believes it is more likely than not that future taxable income will be sufficient to realize the remaining gross deferred tax assets of \$693.6 million and \$299.8 million at December 31, 2023 and 2022, respectively.

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction, as well as the majority of states. The Company no longer files income tax returns in Canada. The Company is no longer subject to U.S. and Canadian income tax examinations for years before 2020, and is no longer subject to state income tax examinations for years prior to 2019.

The Company periodically reviews its income tax positions based on tax laws and regulations and financial reporting considerations, and records adjustments as appropriate. This review takes into consideration the status of current taxing authorities' examinations of the Company's tax returns, recent positions taken by the taxing authorities on similar transactions, if any, and the overall tax environment.

The Company had no gross unrecognized tax benefits as of December 31, 2023 and December 31, 2022. Interest on unrecognized tax benefits is reported by the Company as a component of tax expense. There were no amounts related to interest and penalties recognized for the years ended December 31, 2023 and December 31, 2022.

Note 13 - Interest-Bearing Deposits

The following table presents the major types of interest-bearing deposits as of December 31, 2023 and 2022:

(in thousands)	Dece	mber 31, 2023	Dec	December 31, 2022			
Interest-bearing demand	\$	8,044,432	\$	4,080,469			
Money market		10,324,454		7,721,011			
Savings		2,754,113		2,265,052			
Time, greater than \$250,000		1,034,094		582,838			
Time, \$250,000 or less		5,193,475		2,127,393			
Total interest-bearing deposits	\$	27,350,568	\$	16,776,763			

Approximately \$6.0 billion in time deposits are scheduled to mature in 2024, including \$2.6 billion in brokered time deposits. As of December 31, 2023, brokered time deposits had a weighted average interest rate of 5.53% compared to the weighted average interest rate on all other time deposits that mature in 2024 and thereafter of 3.93%. The following table presents the scheduled maturities of all time deposits as of December 31, 2023:

(in thousands) Year	Amount	Weighted Average Interest Rate
2024	\$ 6,049,079	4.66 %
2025	110,413	1.09 %
2026	43,357	0.42 %
2027	16,651	0.12 %
2028	5,789	0.12 %
Thereafter	2,280	1.05 %
Total time deposits	\$ 6,227,569	4.55 %

Note 14 – Securities Sold Under Agreements to Repurchase

The following table presents information regarding securities sold under agreements to repurchase as of December 31, 2023 and 2022:

(dollars in thousands)	I	Repurchase Amount	Weighted Average Interest Rate	Carrying Value of Underlying Assets			rket Value of Underlying Assets
December 31, 2023	\$	252,119	2.38 %	\$	358,162	\$	358,162
December 31, 2022	\$	308,769	0.19 %	\$	456,922	\$	456,922

The securities underlying agreements to repurchase entered into by the Bank are for the same securities originally sold, which are U.S. agencies, obligations of states and political subdivisions, mortgage-backed securities, and collateralized mortgage obligations, with a one-day maturity. In all cases, the Bank maintains control over the securities. Investment securities are pledged as collateral in an amount equal to or greater than the repurchase agreements.

The following table presents the average and maximum balances for the years ended December 31, 2023, 2022, and 2021:

(dollars in thousands)	2023	2022	2021
Average balance during the period	\$ 267,688	\$ 451,612	\$ 454,992
Maximum month end balance during period	\$ 304,605	\$ 532,449	\$ 537,581

Note 15 – Borrowings

The Bank had outstanding FHLB advances and FRB borrowings as of December 31, 2023 and 2022 with carrying values of \$4.0 billion and \$906.2 million, respectively.

The Bank's FHLB advances, excluding acquisition accounting adjustments, were \$3.8 billion as of December 31, 2023, all of which mature within one year. The weighted average rate of these FHLB advances was 5.6% as of December 31, 2023. As of December 31, 2023, the Company had FRB BTFP borrowings of \$200.0 million that carried a rate of 4.8%, which matures within one year.

The following table presents the average outstanding, maximum, and year end balances and average interest rates on FHLB advances for the years ended December 31, 2023, 2022, and 2021:

	2023	2022	2021
Average balance during period	\$ 4,458,463	\$ 225,411	\$ 194,575
Maximum month end balance during period	\$ 6,400,000	\$ 905,000	\$ 645,000
Weighted average rate during period	5.3 %	4.1 %	1.6 %
Weighted average rate at December 31	5.6 %	4.7 %	7.1 %

The FHLB requires the Bank to maintain a required level of investment in FHLB and sufficient collateral to qualify for secured advances. The Bank has pledged as collateral for these secured advances all FHLB stock, all funds on deposit with the FHLB, investment and commercial real estate portfolios, accounts, general intangibles, equipment and other property in which a security interest can be granted by the Bank to the FHLB. Total value of loans and securities pledged to the FHLB were \$19.1 billion as of December 31, 2023.

The Bank also has access to the FRB BTFP, subject to certain collateral requirements, namely the amount of pledged investment securities. Total value of securities pledged to the BTFP were \$1.4 billion as of December 31, 2023. The average FRB borrowings outstanding during 2023 was \$31.9 million. The ability to take new advances under this program ends in March 2024.

At December 31, 2023 and 2022, the Company had no outstanding federal funds purchased balances. The Bank had available lines of credit with the FHLB totaling \$8.2 billion as of December 31, 2023, subject to certain collateral requirements. The Bank had available lines of credit with the Federal Reserve including the BTFP with an available line of credit of \$1.3 billion and Discount Window line of credit totaling \$1.6 billion subject to certain collateral requirements, namely the amount of certain pledged loans as of December 31, 2023. The Bank had uncommitted federal funds line of credit agreements with additional financial institutions totaling \$600.0 million as of December 31, 2023. Availability of the lines is subject to federal funds balances available for loan and continued borrower eligibility and are reviewed and renewed periodically throughout the year. These lines are intended to support short-term liquidity needs, and the agreements may restrict consecutive day usage.

Note 16 – Junior and Other Subordinated Debentures

Following is information about the Company's wholly-owned Trusts as of December 31, 2023:

dollars in thousands)		Issued	Carrying		Effective	Maturit
Trust Name T FAIR VALUE:	Issue Date	Amount	Value (1)	Rate (2)	Rate (3)	Date
Umpqua Statutory Trust II	October 2002	\$ 20,619	\$ 19,401	Floating rate, SOFR + 0.26161% plus 3.35%, adjusted quarterly	9.57 %	October 2032
Umpqua Statutory Trust III	October 2002	30,928	29,203	Floating rate, SOFR + 0.26161% plus 3.45%, adjusted quarterly	9.63 %	Novemb 2032
Umpqua Statutory Trust IV	December 2003	10,310	9,319	Floating rate, SOFR + 0.26161% plus 2.85%, adjusted quarterly	9.41 %	January 2034
Umpqua Statutory Trust V	December 2003	10,310	9,146	Floating rate, SOFR + 0.26161% plus 2.85%, adjusted quarterly	9.57 %	March 20
Umpqua Master Trust I	August 2007	41,238	30,557	Floating rate, SOFR + 0.26161% plus 1.35%, adjusted quarterly	9.44 %	Septemb 2037
Umpqua Master Trust IB	September 2007	20,619	17,644	Floating rate, SOFR + 0.26161% plus 2.75%, adjusted quarterly	9.81 %	Decemb 2037
Sterling Capital Trust III	April 2003	14,433	13,506	Floating rate, SOFR + 0.26161% plus 3.25%, adjusted quarterly	9.5 %	April 20
Sterling Capital Trust IV	May 2003	10,310	9,489	Floating rate, SOFR + 0.26161% plus 3.15%, adjusted quarterly	9.55 %	May 202
Sterling Capital Statutory Trust V	May 2003	20,619	18,955	Floating rate, SOFR + 0.26161% plus 3.25%, adjusted quarterly	9.65 %	June 20
Sterling Capital Trust VI	June 2003	10,310	9,397	Floating rate, SOFR + 0.26161% plus 3.20%, adjusted quarterly	9.71 %	Septemb 2033
Sterling Capital Trust VII	June 2006	56,702	43,599	Floating rate, SOFR + 0.26161% plus 1.53%, adjusted quarterly	9.33 %	June 20
Sterling Capital Trust VIII	September 2006	51,547	39,773	Floating rate, SOFR + 0.26161% plus 1.63%, adjusted quarterly	9.43 %	Decemb 2036
Sterling Capital Trust IX	July 2007	46,392	35,166	Floating rate, SOFR + 0.26161% plus 1.40%, adjusted quarterly	9.31 %	Octobe 2037
Lynnwood Financial Statutory Trust I	March 2003	9,279	8,464	Floating rate, SOFR + 0.26161% plus 3.15%, adjusted quarterly	9.62 %	March 2
Lynnwood Financial Statutory Trust II	June 2005	10,310	8,253	Floating rate, SOFR + 0.26161% plus 1.80%, adjusted quarterly	9.30 %	June 20
Klamath First Capital Trust I	July 2001	15,464	14,568	Floating rate, SOFR + 0.42826% plus 3.75%, adjusted semiannually	10.22 %	July 20
otal junior subordinated debentures at fair va	alue	379,390	316,440			
Humboldt Bancorp Statutory Trust II	December 2001	10,310	10,735	Floating rate, SOFR + 0.26161% plus 3.60%, adjusted quarterly	8.37 %	December 2031
Humboldt Bancorp Statutory Trust III	September 2003	27,836	29,041	Floating rate, SOFR + 0.26161% plus 2.95%, adjusted quarterly	7.79 %	Septem 2033
CIB Capital Trust	November 2002	10,310	10,693	Floating rate, SOFR + 0.26161% plus 3.45%, adjusted quarterly	8.35 %	Novemb 2032
Western Sierra Statutory Trust I	July 2001	6,186	6,186	Floating rate, SOFR + 0.26161% plus 3.58%, adjusted quarterly	9.22 %	July 20
Western Sierra Statutory Trust II	December 2001	10,310	10,310	Floating rate, SOFR + 0.26161% plus 3.60%, adjusted quarterly	9.24 %	December 2031
Western Sierra Statutory Trust III	September 2003	10,310	10,310	Floating rate, SOFR + 0.26161% plus 2.90%, adjusted quarterly	8.56 %	Octobe 2033
NV + C' C+++ T + NV	September 2003	10,310	10,310	Floating rate, SOFR + 0.26161% plus 2.90%, adjusted quarterly	8.56 %	Septemb 2033
Western Sierra Statutory Trust IV						
Bank of Commerce Holdings Trust II	July 2005	10,310	10,310	Floating rate, SOFR + 0.26161% plus 1.58%, adjusted quarterly	7.23 %	Septem 2035
·	July 2005	95,882	97,895		7.23 %	Septemb 2035

Includes acquisition accounting adjustments, net of accumulated amortization, for junior subordinated debentures assumed in connection with previous mergers as well as fair value adjustments related to trusts recorded at fair value.

⁽²⁾ Contractual interest rate of junior subordinated debentures.

⁽³⁾ Effective interest rate based upon the carrying value as of December 31, 2023.

Through the Merger, the Company assumed \$10.0 million in aggregate principal amount of fixed-to-floating rate subordinated debentures. Interest on the subordinated debentures will be paid at a variable rate equal to the sum of forward term SOFR, the statutorily prescribed tenor spread adjustment plus 5.26%, payable quarterly until the maturity date of December 10, 2025.

The Company also assumed \$10.3 million of trust preferred obligations, which is included in the table above.

The Trusts are reflected as junior subordinated debentures, either at fair value or at amortized cost. The common stock issued by the Trusts is recorded in other assets and totaled \$14.3 million and \$14.0 million as of December 31, 2023 and 2022, respectively. As of December 31, 2023, all of the junior subordinated debentures were redeemable at par, at their applicable quarterly or semiannual interest payment dates.

The Company selected the fair value measurement option for junior subordinated debentures originally issued by UHC prior to the Merger (the Umpqua Statutory Trusts) and for junior subordinated debentures acquired by UHC from Sterling Financial Corporation prior to the Merger. Based on a decrease in the implied forward curve and the spot curve shifting higher, partially offset by a decrease in credit spread, the fair value of the junior subordinated debentures decreased during the year. A gain of \$7.9 million for the year ended December 31, 2023, as compared to the loss of \$28.8 million for the year ended December 31, 2022, was recorded in other comprehensive income.

Note 17 – Employee Benefit Plans

Employee Savings Plan

Substantially all of the Company's employees are eligible to participate in the Umpqua Bank 401(k) and Profit Sharing Plan, a defined contribution and profit sharing plan sponsored by the Company. Employees may elect to have a portion of their salary contributed to the plan in conformity with Section 401(k) of the Internal Revenue Code. At the discretion of the Company's Board of Directors, the Company may elect to make matching and/or profit sharing contributions to the Umpqua Bank 401(k) and Profit Sharing Plan based on profits of the Bank. The Company's contributions charged to expense including the match and profit sharing amounted to \$20.9 million, \$10.6 million, and \$10.9 million for the years ended December 31, 2023, 2022, and 2021, respectively.

Employee Stock Purchase Plan

The Company maintains an ESP Plan in which substantially all employees of historical Columbia were eligible to participate, prior to the Merger. The ESP Plan provided participants the opportunity to purchase common stock of the Company at a discounted price. Under the ESP Plan, participants purchased common stock of the Company for 90% of the lowest price on either the first or last day in the look-back period of six months from January 1st through June 30th of 2023. A 10% discount was recognized by the Company as compensation expense and did not have a material impact on net income or earnings per common share. Participants of the ESP Plan purchased 58,440 shares for \$1.2 million in 2023. At December 31, 2023, there were 27,206 shares available for purchase under the ESP Plan.

Supplemental Retirement/Deferred Compensation Plans

The Company has established a Supplemental Retirement & Deferred Compensation Plan, a nonqualified deferred compensation plan to help supplement the retirement income of certain highly compensated executives selected by resolution of the Board. The SRP/DCP has two components, a supplemental retirement plan and a deferred compensation plan. The Company may make discretionary contributions to the SRP. The SRP balances as of December 31, 2023 and 2022 were \$517,000 and \$568,000, respectively, and are recorded in other liabilities on the Consolidated Balance Sheets. Under the DCP, eligible officers may elect to defer up to 50% of their salary into a plan account. The DCP balance was \$13.1 million and \$9.7 million at December 31, 2023 and 2022, respectively. In addition, the Company has established a supplemental retirement plan for the former Executive Chairman of the Board of Directors. The balance for this plan was \$16.7 million and \$8.7 million as of December 31, 2023 and 2022, respectively.

Supplemental Executive Retirement Plan

In connection with the Merger, the Company assumed a SERP, which is unsecured and unfunded and there are no program assets. The SERP projected benefit obligation, which represents the vested net present value of future payments to individuals under the plan, is accrued over the estimated remaining term of employment of the participants and has been determined by actuarial valuation using a discount rate of 5.02% for 2023. Additional assumptions and features of the plan are a normal retirement age of 65 and a 2% annual cost of living benefit adjustment. The projected benefit obligation of \$18.8 million is included in other liabilities on the Consolidated Balance Sheets.

Acquired Plans

In connection with prior acquisitions, the Bank assumed liability for certain salary continuation, supplemental retirement, and deferred compensation plans for key employees, retired employees, and directors of acquired institutions. Subsequent to the effective date of these acquisitions, no additional contributions were made to these plans. These plans are unfunded and provide for the payment of a specified amount on a monthly basis for a specified period (generally 10 to 20 years) after retirement. In the event of a participant employee's death prior to or during retirement, the Bank, in certain cases, is obligated to pay to the designated beneficiary the benefits set forth under the plans. As of December 31, 2023 and 2022, liabilities recorded for the estimated present value of future plan benefits totaled \$49.0 million and \$25.6 million, respectively, and are recorded in other liabilities on the Consolidated Balance Sheets. For the years ended December 31, 2023, 2022, and 2021, expense recorded for these benefits totaled \$4.8 million, \$1.5 million, and \$2.2 million, respectively.

Rabbi Trusts

The Bank has established, for the SRP/DCP plan noted above, and sponsors, for some deferred compensation plans assumed in connection with prior mergers, irrevocable trusts commonly referred to as rabbi trusts. The trust assets (generally trading assets) are consolidated in the Company's balance sheets and the associated liability (which equals the related asset balances) is included in other liabilities on the Consolidated Balance Sheets. The asset and liability balances related to these trusts as of December 31, 2023 and 2022 were \$13.7 million and \$11.4 million, respectively.

Bank-Owned Life Insurance

The Bank has purchased, or acquired through mergers, life insurance policies in connection with the implementation of certain executive supplemental income, salary continuation and deferred compensation retirement plans. These policies provide protection against the adverse financial effects that could result from the death of a key employee and provide tax-exempt income to offset expenses associated with the plans. It is the Bank's intent to hold these policies as a long-term investment. However, there will be an income tax impact if the Bank chooses to surrender certain policies. Although the lives of individual current or former management-level employees are insured, the Bank is the owner and sole or partial beneficiary. As of December 31, 2023 and 2022, the cash surrender value of these policies was \$680.9 million and \$331.8 million, respectively. As of December 31, 2023 and 2022, the Bank also had liabilities for post-retirement benefits payable to other partial beneficiaries under some of these life insurance policies of \$6.3 million and \$4.0 million, respectively. The Bank is exposed to credit risk to the extent an insurance company is unable to fulfill its financial obligations under a policy. In order to mitigate this risk, the Bank uses a variety of insurance companies and regularly monitors their financial condition.

Note 18 - Commitments and Contingencies

Financial Instruments with Off-Balance Sheet Risk — The Company's financial statements do not reflect various commitments and contingent liabilities that arise in the normal course of the Bank's business and involve elements of credit, liquidity, and interest rate risk.

The following table presents a summary of the Bank's commitments and contingent liabilities:

(in thousands)	Decen	nber 31, 2023
Commitments to extend credit	\$	11,278,324
Forward sales commitments	\$	39,500
Commitments to originate residential mortgage loans held for sale	\$	20,588
Standby letters of credit	\$	212,525

The Bank is a party to financial instruments with off-balance sheet credit risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit, standby letters of credit and financial guarantees. Those instruments involve elements of credit and interest-rate risk similar to the risk involved in onbalance sheet items. The contract or notional amounts of those instruments reflect the extent of the Bank's involvement in particular classes of financial instruments.

The Bank's exposure to credit loss in the event of non-performance by the other party to the financial instrument for commitments to extend credit and standby letters of credit, and financial guarantees written, is represented by the contractual notional amount of those instruments. The Bank uses the same credit policies in making commitments and conditional obligations as it does for on-balance sheet instruments.

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any covenant or condition established in the applicable contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. While most standby letters of credit are not utilized, a significant portion of such utilization is on an immediate payment basis. The Bank evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if it is deemed necessary by the Bank upon extension of credit, is based on management's credit evaluation of the counterparty. Collateral varies but may include cash, accounts receivable, inventory, premises and equipment and income-producing commercial properties.

Standby letters of credit and written financial guarantees are conditional commitments issued by the Bank to guarantee the performance of a customer to a third party. These guarantees are primarily issued to support public and private borrowing arrangements, including international trade finance, commercial paper, bond financing, and similar transactions. The credit risk involved in issuing letters of credit is essentially the same as that involved in extending loan facilities to customers. The Bank holds cash, marketable securities, or real estate as collateral supporting those commitments for which collateral is deemed necessary. There were no financial guarantees in connection with standby letters of credit that the Bank was required to perform on for the years ended December 31, 2023 and 2022. As of December 31, 2023, approximately \$198.5 million of standby letters of credit expire within one year, and \$14.0 million expire thereafter. During the years ended December 31, 2023 and 2022, the Bank recorded approximately \$2.5 million and \$1.9 million, respectively, in fees associated with standby letters of credit.

Residential mortgage loans sold into the secondary market are sold with limited recourse against the Company, meaning that the Company may be obligated to repurchase or otherwise reimburse the investor for incurred losses on any loans that suffer an early payment default, are not underwritten in accordance with investor guidelines or are determined to have pre-closing borrower misrepresentations. As of December 31, 2023, the Company had a residential mortgage loan repurchase reserve liability of \$200,000. For loans sold to GNMA, the Bank has a unilateral right but not the obligation to repurchase loans that are past due 90 days or more. As of December 31, 2023, the Bank has a recorded liability of \$1.0 million for the loans subject to this repurchase right.

Legal Proceedings and Regulatory Matters—The Company is subject to litigation in court and arbitral proceedings, as well as proceedings, investigations, examinations, and other actions brought or considered by governmental and self-regulatory agencies. The Company is party to various pending and threatened claims and legal proceedings arising in the normal course of business activities, some of which involve claims for substantial or uncertain amounts.

In August 2020, a class action complaint was filed in the United States District Court (ND Cal) alleging aiding and abetting claims against Umpqua Bank associated with the failure of two commercial real estate investment companies, Professional Financial Investors, Inc. and Professional Investors Security Fund, Inc., allegedly effected through a Ponzi scheme. Both companies maintained their primary deposit account relationship with Umpqua Bank's Novato, Marin County, California branch office, acquired by Umpqua Bank from Circle Bank. Umpqua Bank's motion to dismiss was denied in January 2021, and its motion for summary judgment was denied in December 2022, and at the same time the District Court certified the plaintiffs' proposed class. Two other related cases were filed in 2023: one case alleges similar claims by two investors and was filed in May 2023 in Marin County Superior Court; and another case was filed in June 2023 in the United States District Court (ND Cal) alleging claims by ten investors with different investments than the class members. The class plaintiffs most recently estimate that damages from the scheme may amount to between \$386.2 million and \$429.8 million, which does not consider prior bankruptcy recoveries of \$110.0 million to date. The two cases filed in 2023 do not yet have clear estimates of damages. The cases follow an SEC non-public investigation of Professional Financial Investors, Inc. and Professional Investors Security Fund, Inc. on May 28, 2020. Umpqua Bank intends to defend these matters vigorously and believes that it has meritorious defenses.

As previously disclosed, in 2023, the Company's wholly-owned subsidiary Umpqua Bank was informed by one of its technology service providers (the "Vendor") that a widely reported security incident involving MOVEit, a filesharing software used globally by government agencies, enterprise corporations, and financial institutions, resulted in the unauthorized acquisition by a third party of the names and social security numbers or tax identification numbers of certain of Umpqua Bank's consumer and small business customers (the "Vendor Incident").

Other than the information described above, no Umpqua Bank account information was compromised as a result of the Vendor Incident, and no information from Umpqua Bank's commercial customers was involved in the Vendor Incident. On June 22, 2023, Umpqua Bank sent an email to potentially affected consumer and small business customers informing them of the Vendor Incident. Between August 11, 2023, and August 15, 2023, the Vendor, on behalf of Umpqua Bank, initiated formal notice via U.S. Mail to the 429,252 Umpqua Bank customers whose information was involved in the Vendor Incident. Umpqua Bank and the Vendor also notified applicable federal and state regulators regarding the Vendor Incident.

Beginning on August 18, 2023, some of the individuals who were notified of the Vendor Incident filed lawsuits against Umpqua Bank seeking monetary recovery and other relief on behalf of themselves and one or more putative classes of other individuals similarly situated. Two such cases have been filed in federal court (the United States District Court for the Western District of Washington), one of which was later voluntarily dismissed without prejudice. Five such cases have been filed in state court in Washington (the Washington Superior Court for Pierce County) and one case in state court in California (the California Superior Court for Contra Costa County). The state court cases have been removed to federal court by Umpqua Bank. On October 4, 2023, the United States Judicial Panel on Multidistrict Litigation, in view of the large number of lawsuits arising out of the MOVEit data incident in federal courts across the United States, initiated a multidistrict litigation ("MDL") for these cases to allow such cases to be transferred to one court for pre-trial proceedings. The MDL is titled In Re: MOVEit Customer Data Security Breach Litigation, MDL No. 3083 and is pending in the United States District Court for the District of Massachusetts as MDL No. 1:23-md-03083-ADB-PGL. All seven cases against Umpqua Bank have been transferred to the MDL as of January 29, 2024. The cases collectively allege claims for negligence, negligence per se, breach of contract, breach of implied contract, breach of third-party beneficiary contract, breach of fiduciary duty, invasion of privacy, breach of the covenant of good faith and fair dealing, unjust enrichment and violation of certain statutes, namely the Washington Consumer Protection Act, the California Consumer Legal Remedies Act, the California Consumer Privacy Act, and the California Unfair Competition Law. Umpqua Bank has also received claims by or on behalf of individuals in connection with the Vendor Incident. Such claims have the potential to give rise to additional litigation. Umpqua Bank has engaged defense counsel and intends to vigorously defend against these suits and any similar or related suits or claims. Umpqua Bank has notified relevant insurance carriers and business counterparties and continues to reserve all of its relevant rights to indemnity, defense, contribution, and other relief in connection with these matters.

At least quarterly, liabilities and contingencies are assessed in connection with all outstanding or new legal matters, utilizing the most recent information available. If it is determined that a loss from a matter is probable and that the amount of the loss can be reasonably estimated, an accrual for the loss is established. Once established, each accrual is adjusted as appropriate to reflect any subsequent developments in the specific legal matter. It is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Actual losses may be in excess of any established accrual or the range of reasonably possible loss. Management's estimate will change from time to time. For matters where a loss is not probable, or the amount of the loss cannot be estimated, no accrual is established. The Company has \$5.7 million accrued related to legal matters as of December 31, 2023.

The resolution and the outcome of legal claims are unpredictable, exacerbated by factors including the following: damages sought are unsubstantiated or indeterminate; it is unclear whether a case brought as a class action will be allowed to proceed on that basis; discovery or motion practice is not complete; the proceeding is not yet in its final stages; the matters present legal uncertainties; there are significant facts in dispute; there are a large number of parties, including multiple defendants; or there is a wide range of potential results. Any estimate or determination relating to the future resolution of legal and regulatory matters is uncertain and involves significant judgment. The Company is usually unable to determine whether a favorable or unfavorable outcome is remote, reasonably likely or probable, or to estimate the amount or range of a probable or reasonably likely loss until relatively late in the process.

Although there can be no assurance as to the ultimate outcome of a specific legal matter, the Company believes it has meritorious defenses to the claims asserted against us in our currently outstanding legal matters, and the Company intends to continue to vigorously defend ourselves. The Company will consider settlement of legal matters when, in management's judgment, it is in the best interests of the Company and its shareholders.

Based on information currently available, advice of counsel, available insurance coverage, and established reserves, the Company believes that the eventual outcome of the actions against us will not have a material adverse effect on the Company's consolidated financial statements. However, it is possible that the ultimate resolution of a matter, if unfavorable, may be material to the Company's results of operations for any particular reporting period.

Concentrations of Credit Risk— The Bank grants real estate mortgage, real estate construction, commercial, agricultural and installment loans and leases to customers throughout Oregon, Washington, California, Idaho, Nevada, Arizona, Colorado, and Utah. In management's judgment, a concentration exists in real estate-related loans, which represented approximately 75% and 78% of the Bank's loan and lease portfolio for December 31, 2023 and 2022, respectively. Commercial real estate concentrations are managed to ensure geographic and business diversity, primarily in our footprint. As of December 31, 2023, the multifamily portfolio, including construction, and commercial office portfolio represented approximately 19% and 8% of the total loan portfolio, respectively. Although management believes such concentrations have no more than the normal risk of collectability, a substantial decline in the economy in general, material increases in interest rates, changes in tax policies, tightening credit or refinancing markets, or a decline in real estate values in the Bank's primary market areas in particular, could have an adverse impact on the repayment of these loans. Personal and business incomes, proceeds from the sale of real property, or proceeds from refinancing represent the primary sources of repayment for a majority of these loans.

The Bank recognizes the credit risks inherent in dealing with other depository institutions. Accordingly, to prevent excessive exposure to any single correspondent, the Bank has established general standards for selecting correspondent banks as well as internal limits for allowable exposure to any single correspondent. In addition, the Bank has an investment policy that sets forth limitations that apply to all investments with respect to credit rating and concentrations with an issuer.

Note 19 – Derivatives

The Bank may use derivatives to hedge the risk of changes in the fair values of interest rate lock commitments, residential mortgage loans held for sale, and MSRs. None of the Company's derivatives are designated as hedging instruments. Rather, they are accounted for as free-standing derivatives, or economic hedges, with changes in the fair value of the derivatives reported in income. The Company utilizes forward interest rate contracts in its derivative risk management strategy.

The Bank enters into forward delivery contracts to sell residential mortgage loans or mortgage-backed securities to broker-dealers at specific prices and dates in order to hedge the interest rate risk in its portfolio of mortgage loans held for sale and its residential mortgage interest rate lock commitments. Credit risk associated with forward contracts is limited to the replacement cost of those forward contracts in a gain position. There were no counterparty default losses on forward contracts in 2023, 2022, and 2021. Market risk with respect to forward contracts arises principally from changes in the value of contractual positions due to changes in interest rates. The Bank limits its exposure to market risk by monitoring differences between commitments to customers and forward contracts with broker-dealers. In the event the Company has forward delivery contract commitments in excess of available mortgage loans, the Company completes the transaction by either paying or receiving a fee to or from the broker-dealer equal to the increase or decrease in the market value of the forward contract. As of December 31, 2023 and 2022, the Bank had commitments to originate mortgage loans held for sale totaling \$20.6 million and \$56.1 million, respectively, and forward sales commitments of \$39.5 million and \$104.0 million, respectively, which are used to hedge both on-balance sheet and off-balance sheet exposures.

The Bank purchases interest rate futures and forward settling mortgage-backed securities to hedge the interest rate risk of MSRs. As of December 31, 2023, the Bank had \$150.0 million notional of interest rate futures contracts and \$36.0 million of mortgage-backed securities related to this program. As of December 31, 2022, the Bank had \$152.0 million notional of interest rate futures contracts and \$10.0 million of mortgage-backed securities related to this program. The Bank had cash collateral posting requirements for margins with its futures and mortgage-back securities counterparties and was required to post collateral against its obligations under these agreements of \$815,000 and \$3.8 million as of December 31, 2023 and 2022, respectively.

The Bank executes interest rate swaps with commercial banking customers to facilitate their respective risk management strategies. Those interest rate swaps are simultaneously hedged by offsetting the interest rate swaps that the Bank executes with a third party, such that the Bank minimizes its net risk exposure. As of December 31, 2023, the Bank had 1,292 interest rate swaps with an aggregate notional amount of \$9.1 billion related to this program. As of December 31, 2022, the Bank had 922 interest rate swaps with an aggregate notional amount of \$7.3 billion related to this program.

As of December 31, 2023 and 2022, the termination value of interest rate swaps in a net liability position, which includes accrued interest but excludes any adjustment for non-performance risk, related to these agreements was \$260.1 million and \$270.0 million, respectively. As of December 31, 2023 and 2022, the Bank has collateral posting requirements for initial margins with its clearing members and clearing houses and has been required to post collateral against its obligations under these agreements of \$88.3 million and \$89.5 million, respectively.

The Bank's clearable interest rate swap derivatives are cleared through the Chicago Mercantile Exchange and London Clearing House. These clearing houses characterize the variation margin payments, for certain derivative contracts that are referred to as settled-to-market, as settlements of the derivative's mark-to-market exposure and not collateral. The Company accounts for the variation margin as an adjustment to cash collateral, as well as a corresponding adjustment to the derivative asset and liability. As of December 31, 2023 and 2022, the variation margin adjustments consisted of positive adjustments of \$166.3 million and \$209.5 million, respectively.

Since the end of 2021, the Bank has solely executed swaps indexed to Term SOFR, which are not clearable. As such, at December 31, 2023 and December 31, 2022, there were 252 and 71 customer swaps, respectively, that were each offset via a swap executed on a bilateral basis with a counterparty bank. There is no initial margin posted for bilateral swaps, but cash collateral equivalent to variation margin is exchanged to cover the mark-to-market exposure on a daily basis. As of December 31, 2023 and December 31, 2022, the Bank held a total of \$61.6 million and \$51.9 million, respectively, of counterparty bank cash as collateral on these bilateral positions.

The Bank also executes foreign currency hedges as a service for customers. These foreign currency hedges are then offset with hedges with other third-party banks to limit the Bank's risk exposure.

The Bank's derivative assets are included in other assets on the Consolidated Balance Sheets, while the derivative liabilities are included in other liabilities on the Consolidated Balance Sheets. The following table summarizes the types of derivatives, separately by assets and liabilities, and the fair values of such derivatives as of December 31, 2023 and 2022:

(in thousands)	Asset De	erivati	ives		Liability I	Derivatives		
Derivatives not designated as hedging instrument	mber 31, 2023	De	cember 31, 2022	De	ecember 31, 2023	December 31, 2022		
Interest rate lock commitments	\$ _	\$	50	\$	137	\$	18	
Interest rate futures	3,745		_		_		392	
Interest rate forward sales commitments	9		512		535		601	
Interest rate swaps	33,874		14,657		260,064		270,009	
Foreign currency derivatives	457		225		355		185	
Total derivative assets and liabilities	\$ 38,085	\$	15,444	\$	261,091	\$	271,205	

The gains and losses on the Company's mortgage banking derivatives are included in residential mortgage banking revenue on the Consolidated Statements of Operations. The gains and losses on the Company's interest rate swaps and foreign currency derivatives are included in other income on the Consolidated Statements of Operations. The following table summarizes the types of derivatives and the gains (losses) recorded during the years ended December 31, 2023, 2022, and 2021:

(in thousands)			
Derivatives not designated as hedging instrument	2023	2022	2021
Interest rate lock commitments	\$ (169)	\$ (4,609)	\$ (23,503)
Interest rate futures	(4,693)	(14,476)	
Interest rate forward sales commitments	33	47,689	17,608
Interest rate swaps	(4,597)	16,249	8,395
Foreign currency derivatives	141	126	2,856
Total derivative (losses) gains	\$ (9,285)	\$ 44,979	\$ 5,356

Note 20 - Stock Compensation and Share Repurchase Plan

In connection with the Merger, all outstanding restricted equity units granted under UHC's equity plans were legally assumed by Columbia and adjusted so that its holder was entitled to receive shares of Columbia's common stock equal to the product of (a) the number of shares of UHC common stock subject to such award multiplied by (b) the Exchange Ratio and (c) rounded to the nearest whole share of Columbia common stock, as applicable, and was otherwise subject to the same terms and conditions (including, without limitation, with respect to vesting conditions (taking into account any vesting that occurred at the Merger Date) and cash dividend equivalent rights). For any outstanding UHC restricted equity units that were subject to performance-based vesting at multiple achievement levels, the number of shares of UHC common stock underlying such units was calculated and fixed as of the Merger Date assuming achievement of the applicable performance conditions at the greater of target (100%) performance level or the actual level of achievement of UHC's performance results through the latest practicable date before the Merger Date, and such units converted into service-based vesting awards with the applicable vesting date to be the last day of the original performance period.

In connection with the Merger, all outstanding and unvested performance-based restricted stock units and time-vesting restricted stock units and awards, granted under Columbia's equity plans, that were outstanding immediately before the Merger Date continued to be units or awards in respect of Columbia common stock following the Merger, subject to the same terms and conditions that were applicable to such awards before the Merger Date, except with respect to performance-based restricted stock units. Because the Merger constituted a change in control for purposes of the Columbia equity awards, the performance-based restricted stock units for which performance results had not been measured were measured as of the latest practicable date before the Merger Date and the number of performance-based restricted stock units was fixed at the greater of the target (100%) performance level or the actual level of achievement of Columbia's performance results, and such awards converted into service-based vesting awards with the applicable vesting date to be the last day of the original performance period. Columbia's outstanding time-vested RSUs and RSAs will continue to vest based on the executives' continued service through the end of the original service period. The fair value of share-based units and awards are recognized as compensation expense over the requisite service or performance period.

The total compensation cost related to restricted shares of Company stock granted to employees and included in salaries and employee benefits on the Consolidated Statements of Operations was \$13.7 million, \$9.3 million, and \$9.5 million for the years ended December 31, 2023, 2022, and 2021, respectively.

For the years ended December 31, 2023, 2022, and 2021, the Company received income tax benefits of \$3.7 million, \$3.3 million, and \$2.4 million, respectively, related to the vesting of RSUs and RSAs. The tax deficiency or benefit is recorded as income tax expense or benefit in the period the shares are vested.

Restricted Stock Units

The Company grants RSUs periodically to employees and directors. RSUs provide for an interest in Company common stock to the recipient, with such units held in escrow until certain conditions are met. RSUs provide for vesting requirements that include time-based, performance-based, or market-based conditions. RSUs generally vest over three years, subject to time or time plus performance vesting conditions. Recipients of RSUs do not pay any cash consideration to the Company for the units and the holders of the restricted units do not have voting rights; however, the holder accrues dividends, which are paid out when the shares vest. The fair value of time-based and performance-based units is equal to the fair market value of the Company's common stock on the grant date. The fair value of market-based units is estimated on the grant date using the Monte Carlo simulation model, which incorporates assumptions as to stock price volatility, the expected life of awards, a risk-free interest rate and dividend yield.

The following table summarizes information about nonvested RSU activity for the year ended December 31, 2023:

	December 31, 2023					
(shares in thousands)	RSUs Outstanding	Weighted Average Grant Date Fair Value				
Balance, beginning of period (1)	730	\$ 31.98				
Assumed	290	\$ 30.17				
Granted	640	\$ 30.14				
Vested/released	(457)	\$ 30.32				
Forfeited/expired	(26)	\$ 32.31				
Balance, end of period	1,177	\$ 31.19				

⁽¹⁾ Periods prior to February 28, 2023 have been restated based on the exchange ratio from the Merger of 0.5958.

The compensation cost related to RSUs in Company stock granted to employees and included in salaries and employee benefits on the Consolidated Statements of Operations was \$13.5 million, \$9.3 million, and \$9.5 million for the years ended December 31, 2023, 2022, and 2021, respectively.

The total fair value of RSUs vested and released was \$13.9 million, \$11.0 million, and \$9.5 million, for the years ended December 31, 2023, 2022, and 2021, respectively.

As of December 31, 2023, there was \$20.7 million of total unrecognized compensation cost related to nonvested RSUs which is expected to be recognized over a weighted-average period of 1.81 years, assuming expected performance conditions are met for certain units.

Restricted Stock Awards

Restricted stock awards provide for the immediate issuance of shares of Company common stock to the recipient, with such shares held in escrow until certain conditions are met. RSAs provide for vesting requirements that include time-based, generally vesting over three years, performance-based, or market-based conditions. Recipients of RSAs do not pay any cash consideration to the Company for the shares and the holders of the restricted shares have voting rights and the holder accrues dividends, which are paid out when the shares vest. The fair value of time-based and performance-based share awards is equal to the fair market value of the Company's common stock on the grant date.

The following table summarizes information about unvested RSA activity for the year ended December 31, 2023:

	Decembe	r 31, 2023	
(shares in thousands)	RSAs Outstanding	Weighted Avera Grant Date Fa Value	
Balance, beginning of period	_	\$	_
Assumed	508	\$ 29	9.73
Granted	114	\$ 23	3.15
Vested/released	(95)	\$ 29	9.68
Forfeited/expired	(28)	\$ 29	9.71
Balance, end of period	499	\$ 28	3.24

The compensation cost related to RSAs in Company stock granted to employees and included in salaries and employee benefits on the Consolidated Statements of Operations was \$194,000 for the year ended December 31, 2023.

The total fair value of RSAs vested and released was \$2.8 million for the year ended December 31, 2023.

As of December 31, 2023, there was \$1.6 million of total unrecognized compensation cost related to nonvested RSAs which is expected to be recognized over a weighted-average period of 2.08 years, assuming expected performance conditions are met.

Share Repurchase Plan

As of December 31, 2023, the Company does not have a current share repurchase authorization from the Board of Directors. In 2021, the Company approved a share repurchase program, which authorized the Company to repurchase up to \$400 million of common stock; the share repurchase program expired on July 31, 2022. During the years ended December 31, 2023 and 2022, there were no shares repurchased under share repurchase plans, as compared to 2.4 million shares, as adjusted for the Merger exchange ratio, repurchased under a previous share repurchase plan, in the year ended December 31, 2021.

The Company also has restricted stock plans which provide for the payment of withholding taxes by tendering previously owned or recently vested shares. Restricted shares cancelled to pay withholding taxes totaled 261,000, 120,000, and 89,000 shares during the years ended December 31, 2023, 2022, and 2021, respectively.

Note 21 - Regulatory Capital

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

Quantitative measures established by regulation to ensure capital adequacy require the Company to maintain minimum amounts and ratios (set forth in the table below) of total capital, Tier 1 capital, and Tier 1 common to risk-weighted assets (as defined in the applicable regulations), and of Tier 1 capital to average assets (as defined in the applicable regulations). Basel III also requires banking organizations to maintain a capital conservation buffer above the minimum risk-based capital requirements in order to avoid certain limitations on capital distributions, stock repurchases and discretionary bonus payments to executive officers. The capital conservation buffer is exclusively comprised of common equity Tier 1 capital, and it applies to each of the three risk-based capital ratios but not to the leverage ratio. The capital conservation buffer is fully phased-in at 2.5%, such that the common equity Tier 1, Tier 1, and total capital ratio minimums inclusive of the capital conservation buffers were 7%, 8.5%, and 10.5%. Management believes, as of December 31, 2023, that the Company meets all capital adequacy requirements to which it is subject.

The following table shows the Company's consolidated and the Bank's capital adequacy ratios compared to the regulatory minimum capital ratio and the regulatory minimum capital ratio needed to qualify as a "well-capitalized" institution, as calculated under regulatory guidelines of Basel III as of December 31, 2023 and 2022:

	Actua	nl	For Capital A Purpos		To be Well C	apitalized
(dollars in thousands)	Amount	Ratio	Amount	Ratio	Amount	Ratio
December 31, 2023						
Total Capital (to Risk Weighted Assets)						
Consolidated	\$ 4,770,335	11.86 %	\$ 3,218,301	8.00 %	\$ 4,022,876	10.00 %
Umpqua Bank	\$ 4,653,920	11.57 %	\$ 3,217,821	8.00 %	\$ 4,022,276	10.00 %
Tier 1 Capital (to Risk Weighted Assets)						
Consolidated	\$ 3,876,985	9.64 %	\$ 2,413,726	6.00 %	\$ 3,218,301	8.00 %
Umpqua Bank	\$ 4,231,569	10.52 %	\$ 2,413,366	6.00 %	\$ 3,217,821	8.00 %
Tier 1 Common (to Risk Weighted Assets)						
Consolidated	\$ 3,876,985	9.64 %	\$ 1,810,294	4.50 %	\$ 2,614,869	6.50 %
Umpqua Bank	\$ 4,231,569	10.52 %	\$ 1,810,024	4.50 %	\$ 2,614,479	6.50 %
Tier 1 Capital (to Average Assets)						
Consolidated	\$ 3,876,985	7.60 %	\$ 2,040,344	4.00 %	\$ 2,550,431	5.00 %
Umpqua Bank	\$ 4,231,569	8.30 %	\$ 2,040,489	4.00 %	\$ 2,550,611	5.00 %
December 31, 2022						
Total Capital (to Risk Weighted Assets)						
Consolidated	\$ 3,651,382	13.71 %	\$ 2,130,565	8.00 %	\$ 2,663,207	10.00 %
Umpqua Bank	\$ 3,440,574	12.92 %	\$ 2,130,240	8.00 %	\$ 2,662,799	10.00 %
Tier 1 Capital (to Risk Weighted Assets)						
Consolidated	\$ 2,934,708	11.02 %	\$ 1,597,924	6.00 %	\$ 2,130,565	8.00 %
Umpqua Bank	\$ 3,174,899	11.92 %	\$ 1,597,680	6.00 %	\$ 2,130,240	8.00 %
Tier 1 Common (to Risk Weighted Assets)						
Consolidated	\$ 2,934,708	11.02 %	\$ 1,198,443	4.50 %	\$ 1,731,084	6.50 %
Umpqua Bank	\$ 3,174,899	11.92 %	\$ 1,198,260	4.50 %	\$ 1,730,820	6.50 %
Tier 1 Capital (to Average Assets)						
Consolidated	\$ 2,934,708	9.14 %	\$ 1,283,669	4.00 %	\$ 1,604,586	5.00 %
Umpqua Bank	\$ 3,174,899	9.89 %	\$ 1,283,610	4.00 %	\$ 1,604,513	5.00 %

In 2020, the federal bank regulatory authorities finalized a rule to provide banking organizations that implemented CECL in 2020 the option to delay the estimated impact on regulatory capital by up to two years, with a three-year transition period to phase out the cumulative benefit to regulatory capital provided during the two-year delay. The Company elected this capital relief to delay the estimated regulatory capital impact of adopting CECL, relative to the incurred loss methodology's effect on regulatory capital. Currently, the Company is phasing out the cumulative adjustment as calculated at the end of 2021, by adjusting it by 75% through 2022, 50% in 2023, and 25% in 2024.

Note 22 - Fair Value Measurement

The following table presents estimated fair values of the Company's financial instruments as of December 31, 2023 and 2022, whether or not recognized or recorded at fair value on a recurring basis in the Consolidated Balance Sheets:

		December 31, 2023		Decembe	er 31, 2022	
(in thousands)	Level	Carrying Value	Fair Value	Carrying Value	Fair Value	
Financial assets:						
Cash and cash equivalents	1	\$ 2,162,534	\$ 2,162,534	\$ 1,294,643	\$ 1,294,643	
Equity and other investment securities	1,2	76,995	76,995	72,959	72,959	
Investment securities available for sale	1,2	8,829,870	8,829,870	3,196,166	3,196,166	
Investment securities held to maturity	3	2,300	3,025	2,476	3,197	
Loans held for sale	2	30,715	30,715	71,647	71,647	
Loans and leases, net	2,3	37,001,080	35,810,989	25,854,846	24,399,370	
Restricted equity securities	1	179,274	179,274	47,144	47,144	
Residential mortgage servicing rights	3	109,243	109,243	185,017	185,017	
Bank owned life insurance	1	680,948	680,948	331,759	331,759	
Derivatives	2,3	38,085	38,085	15,444	15,444	
Financial liabilities:						
Demand, money market, and savings deposits	1	\$35,379,451	\$35,379,451	\$24,355,381	\$24,355,381	
Time deposits	2	6,227,569	6,201,519	2,710,231	2,667,535	
Securities sold under agreements to repurchase	2	252,119	252,119	308,769	308,769	
Borrowings	2	3,950,000	3,950,037	906,175	905,591	
Junior subordinated debentures, at fair value	3	316,440	316,440	323,639	323,639	
Junior and other subordinated debentures, at amortized cost	3	107,895	97,695	87,813	80,922	
Derivatives	2,3	261,091	261,091	271,205	271,205	

Fair Value of Assets and Liabilities Measured on a Recurring Basis

The following tables present information about the Company's assets and liabilities measured at fair value on a recurring basis as of December 31, 2023 and 2022:

(in thousands)			December	r 31, 20	023	
Description	7	Total	Level 1	Le	evel 2	Level 3
Financial assets:						
Equity and other investment securities						
Investments in mutual funds and other securities	\$	63,298	\$ 44,839	\$	18,459	\$ _
Equity securities held in rabbi trusts		13,697	13,697		_	_
Investment securities available for sale						
U.S. Treasury and agencies	1,	478,392	373,664	1,1	04,728	
Obligations of states and political subdivisions	1,	,072,105	_	1,0	72,105	_
Mortgage-backed securities and collateralized mortgage obligations	6,	279,373	_	6,2	279,373	
Loans held for sale, at fair value		30,715	_		30,715	_
Loans and leases, at fair value		275,140		2	275,140	_
Residential mortgage servicing rights, at fair value		109,243	_		_	109,243
Derivatives						
Interest rate futures		3,745	_		3,745	_
Interest rate forward sales commitments		9			9	_
Interest rate swaps		33,874	_		33,874	_
Foreign currency derivatives		457			457	_
Total assets measured at fair value	\$ 9,	,360,048	\$ 432,200	\$ 8,8	18,605	\$ 109,243
Financial liabilities:						
Junior subordinated debentures, at fair value	\$:	316,440	\$ _	\$	_	\$ 316,440
Derivatives						
Interest rate lock commitments		137	_		_	137
Interest rate forward sales commitments		535			535	
Interest rate swaps		260,064	_	2	260,064	_
Foreign currency derivatives		355			355	
Total liabilities measured at fair value	\$	577,531	\$ _	\$ 2	260,954	\$ 316,577

(in thousands)	December 31, 2022						
Description		Total		Level 1		Level 2	Level 3
Financial assets:							
Equity and other investment securities							
Investments in mutual funds and other securities	\$	61,593	\$	44,256	\$	17,337	\$ —
Equity securities held in rabbi trusts		11,366		11,366		_	_
Investment securities available for sale							
U.S. Treasury and agencies		936,174		225,853		710,321	_
Obligations of states and political subdivisions		269,800		_		269,800	_
Mortgage-backed securities and collateralized mortgage obligations		1,990,192		_		1,990,192	_
Loans held for sale, at fair value		71,647		_		71,647	_
Loans and leases, at fair value		285,581		_		285,581	_
Residential mortgage servicing rights, at fair value		185,017		_		_	185,017
Derivatives							
Interest rate lock commitments		50		_		_	50
Interest rate forward sales commitments		512		_		512	_
Interest rate swaps		14,657		_		14,657	_
Foreign currency derivatives		225		_		225	
Total assets measured at fair value	\$	3,826,814	\$	281,475	\$	3,360,272	\$ 185,067
Financial liabilities:							
Junior subordinated debentures, at fair value	\$	323,639	\$	_	\$	_	\$ 323,639
Derivatives							
Interest rate lock commitments		18		_		_	18
Interest rate futures		392		_		392	_
Interest rate forward sales commitments		601		_		601	_
Interest rate swaps		270,009		_		270,009	_
Foreign currency derivatives		185		_		185	
Total liabilities measured at fair value	\$	594,844	\$		\$	271,187	\$ 323,657

The following methods were used to estimate the fair value of each class of financial instrument that is carried at fair value in the tables above:

Securities—Fair values for investment securities are based on quoted market prices when available or through the use of alternative approaches, such as matrix or model pricing, or broker indicative bids, when market quotes are not readily accessible or available. Management periodically reviews the pricing information received from the third-party pricing service and compares it to a secondary pricing service, evaluating significant price variances between services to determine an appropriate estimate of fair value to report.

Loans Held for Sale—Fair value for residential mortgage loans originated as held for sale is determined based on quoted secondary market prices for similar loans, including the implicit fair value of embedded servicing rights. For loans not originated as held for sale, these loans are accounted for at lower of cost or market, with the fair value estimated based on the expected sales price.

Loans and leases—Fair values are estimated for portfolios of loans with similar financial characteristics. Loans are segregated by type, including commercial, real estate and consumer loans. Each loan category is further segregated by fixed and adjustable rate loans. The fair value of loans is calculated by discounting expected cash flows at rates at which similar loans are currently being made. These amounts are discounted further by embedded probable losses expected to be realized in the portfolio. For loans originated as held for sale and transferred into loans held for investment, the fair value is determined based on quoted secondary market prices for similar loans. As of December 31, 2023, there were \$275.1 million in residential mortgage loans recorded at fair value as they were previously transferred from held for sale to loans held for investment.

Residential Mortgage Servicing Rights—The fair value of MSR is estimated using a DCF model. Assumptions used include market discount rates, anticipated prepayment speeds, delinquency and foreclosure rates, and ancillary fee income net of servicing costs. This model is periodically validated by an independent model validation group. The model assumptions and the MSR fair value estimates are also compared to observable trades of similar portfolios as well as to MSR broker valuations and industry surveys, as available. Management believes the significant inputs utilized are indicative of those that would be used by market participants.

Junior Subordinated Debentures—The fair value of junior subordinated debentures is estimated using an income approach valuation technique. The significant unobservable input utilized in the estimation of fair value of these instruments is the credit risk adjusted spread. The credit risk adjusted spread represents the non-performance risk of the liability, contemplating the inherent risk of the obligation. The Company periodically utilizes a valuation firm to determine or validate the reasonableness of inputs and factors that are used to determine the fair value. The ending carrying (fair) value of the junior subordinated debentures measured at fair value represents the estimated amount that would be paid to transfer these liabilities in an orderly transaction amongst market participants. Due to credit concerns in the capital markets and inactivity in the trust preferred markets that have limited the observability of market spreads, the Company has classified this as a Level 3 fair value measurement.

Derivative Instruments—The fair value of the interest rate lock commitments, interest rate futures, and forward sales commitments are estimated using quoted or published market prices for similar instruments, adjusted for factors such as pull-through rate assumptions based on historical information, where appropriate. The pull-through rate assumptions are considered Level 3 valuation inputs and are significant to the interest rate lock commitment valuation; as such, the interest rate lock commitment derivatives are classified as Level 3. The fair value of the interest rate swaps is determined using a DCF technique incorporating credit valuation adjustments to reflect non-performance risk in the measurement of fair value. Although the Bank has determined that the majority of the inputs used to value its interest rate swap derivatives fall within Level 2 of the fair value hierarchy, the CVA associated with its derivatives utilize Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default by itself and its counterparties. However, as of December 31, 2023, the Bank has assessed the significance of the impact of the CVA on the overall valuation of its interest rate swap positions and has determined that the CVA are not significant to the overall valuation of its interest rate swap derivatives. As a result, the Bank has classified its interest rate swap and futures derivative valuations in Level 2 of the fair value hierarchy.

Assets and Liabilities Measured at Fair Value Using Significant Unobservable Inputs (Level 3)

The following table provides a description of the valuation technique, significant unobservable inputs, and qualitative information about the unobservable inputs for the Company's assets and liabilities classified as Level 3 and measured at fair value on a recurring basis as of December 31, 2023:

Financial Instrument	Fair Value (in thousands)		Valuation Technique	Unobservable Input	Range of Inputs	Weighted Average
Assets:						
Residential mortgage servicing rights	\$	109,243	Discounted cash flow			
				Constant prepayment rate	6.07% - 28.17%	6.78%
				Discount rate	9.50% - 16.05%	10.25%
Liabilities:						
Interest rate lock commitments, net	\$	137	Internal pricing model			
				Pull-through rate	67.33% - 100.00%	85.53%
Junior subordinated debentures	\$	316,440	Discounted cash flow			
				Credit spread	2.25% - 4.66%	3.39%

Generally, increases in the constant prepayment rate or the discount rate utilized in the fair value measurement of the residential mortgage servicing rights will result in a decrease in fair value. Conversely, decreases in the constant prepayment rate or the discount rate will result in an increase in fair value.

An increase in the pull-through rate utilized in the fair value measurement of the interest rate lock commitment derivative will result in an increase in the fair value measurement. Conversely, a decrease in the pull-through rate will result in a decrease in the fair value measurement.

Management believes that the credit risk adjusted spread utilized in the fair value measurement of the junior subordinated debentures carried at fair value is indicative of the non-performance risk premium a willing market participant would require under current market conditions, which is an inactive market. Generally, an increase in the credit spread will result in a decrease in the estimated fair value. Conversely, a decrease in the credit spread will result in an increase in the estimated fair value.

The following table provides a reconciliation of assets and liabilities measured at fair value using significant unobservable inputs (Level 3) on a recurring basis during the years ended December 31, 2023 and 2022.

	2023							2022																																				
(in thousands)	I	Residential mortgage servicing rights		Interest rate lock ommitments, net	de	Junior ubordinated ebentures, at fair value	Residential mortgage servicing rights		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing		mortgage servicing			Interest rate lock ommitments, net		Junior ibordinated bentures, at fair value
Beginning balance	\$	185,017	\$	32	\$	(323,639)	\$	123,615	\$	4,641	\$	(293,081)																																
Change included in earnings		(23,816)		(234)		(29,045)		37,265		(7,342)		(15,715)																																
Change in fair values included in comprehensive income/loss		_		_		7,866		_		_		(28,842)																																
Purchases and issuances		5,347		(1,029)		_		24,137		10,103		_																																
Sales and settlements		(57,305)		1,094		28,378				(7,370)		13,999																																
Ending balance	\$	109,243	\$	(137)	\$	(316,440)	\$	185,017	\$	32	\$	(323,639)																																
Change in unrealized gains or losses for the period included in earnings for assets and liabilities held at end of period	\$	(6,122)	\$	(137)	\$	(29,045)	\$	57,537	\$	32	\$	(15,715)																																
Change in unrealized gains or losses for the period included in other comprehensive income for assets and liabilities held at end of period	\$	_	\$	_	\$	7,866	\$	_	\$	_	\$	(28,842)																																

Changes in residential mortgage servicing rights carried at fair value are recorded in residential mortgage banking revenue within non-interest income. Gains (losses) on interest rate lock commitments carried at fair value are recorded in residential mortgage banking revenue within non-interest income.

The contractual interest expense on the junior subordinated debentures is recorded on an accrual basis as interest on junior subordinated debentures within interest expense. Settlements related to the junior subordinated debentures represent the payment of accrued interest that is embedded in the fair value of these liabilities. The change in fair value of junior subordinated debentures is attributable to the change in the instrument specific credit risk; accordingly, the unrealized gain on fair value of junior subordinated debentures of \$7.9 million, for the year ended December 31, 2023, is recorded net of tax as other comprehensive gain of \$5.8 million. Comparatively, the unrealized loss of \$28.8 million was recorded net of tax as other comprehensive loss of \$21.4 million for the year ended December 31, 2022. The gain recorded for the year ended December 31, 2023 was due to a decrease in the implied forward curve and the spot curve shifting higher, partially offset by a decrease in credit spread, which resulted in a decrease in the liability.

Fair Value of Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

From time to time, certain assets are measured at fair value on a nonrecurring basis. These adjustments to fair value generally result from the application of lower-of-cost-or-market accounting or write-downs of individual assets due to impairment, typically on CDL. The following table presents information about the Company's assets and liabilities measured at fair value on a nonrecurring basis for which a nonrecurring change in fair value has been recorded during the reporting period. The amounts disclosed below represent the fair values at the time the nonrecurring fair value measurements were made, and not necessarily the fair value as of the dates reported upon.

	2023							
(in thousands)		Total		Level 1		Level 2		Level 3
Loans and leases	\$	5,036	\$	_	\$	_	\$	5,036
Total assets measured at fair value on a nonrecurring basis	\$	5,036	\$	_	\$		\$	5,036

	2022							
(in thousands)		Total		Level 1		Level 2		Level 3
Loans and leases	\$	3,216	\$	_	\$	_	\$	3,216
Total assets measured at fair value on a nonrecurring basis	\$	3,216	\$		\$		\$	3,216

The following table presents the losses resulting from nonrecurring fair value adjustments for the years ended December 31, 2023, 2022, and 2021:

(in thousands)	2023	2022	2021
Loans and leases	\$ 104,320	\$ 39,422	\$ 53,182
Total losses from nonrecurring measurements	\$ 104,320	\$ 39,422	\$ 53,182

The following provides a description of the valuation technique and inputs for the Company's assets and liabilities classified as Level 3 and measured at fair value on a nonrecurring basis. Unobservable inputs and qualitative information about the unobservable inputs are not presented as the fair value is determined by third-party information for loans and leases.

The loans and leases amounts above represent collateral-dependent loans and leases that have been adjusted to fair value. When a loan or non-homogeneous lease is identified as collateral-dependent, the Bank measures the impairment using the current fair value of the collateral, less selling costs. Depending on the characteristics of a loan or lease, the fair value of collateral is generally estimated by obtaining external appraisals, but in some cases, the value of the collateral may be estimated as having little to no value. When a homogeneous lease or equipment finance agreement becomes 181 days past due, it is determined that the collateral has little to no value. If it is determined that the value of the collateral-dependent loan or lease is less than its recorded investment, the Bank recognizes this impairment and adjusts the carrying value of the loan or lease to fair value, less costs to sell, through the ACL. The loss represents charge-offs on collateral-dependent loans and leases for fair value adjustments based on the fair value of collateral.

Refer to Note 1 - Summary of Significant Accounting Policies and Note 2 - Business Combination for further information about the methods used to determine the fair values of significant assets and liabilities pertaining to the Merger.

Fair Value Option

The following table presents the difference between the aggregate fair value and the aggregate unpaid principal balance of loans held for sale and loans held for investment accounted for under the fair value option as of December 31, 2023 and 2022:

		December 31, 2023			December 31	, 2022
(in thousands)	Fair Value	Aggregate Unpaid Principal Balance	Fair Value Less Aggregate Unpaid Principal Balance	Fair Value	Aggregate Unpaid Principal Balance	Fair Value Less Aggregate Unpaid Principal Balance
Loans held for sale	\$ 30,715	\$ 29,629	\$ 1,086	\$ 71,647	\$ 70,219	\$ 1,428
Loans	\$275,140	\$ 320,397	\$ (45,257)	\$285,581	\$ 333,469	\$ (47,888)

The Bank elected to measure certain residential mortgage loans held for sale under the fair value option, with interest income on these loans held for sale reported in interest and fees on loans and leases on the statement of operations. This reduces certain timing differences and better matches changes in the value of these assets with changes in the value of derivatives used as economic hedges for these assets. Residential mortgage loans held for sale accounted for under the fair value option are measured initially at fair value with subsequent changes in fair value recognized in earnings. Gains and losses from such changes in fair value are reported as a component of residential mortgage banking revenue. For the years ended December 31, 2023, 2022, and 2021, the Company recorded a net decrease in fair value of \$342,000, a net decrease of \$10.7 million, and a net decrease of \$13.2 million, respectively, representing the change in fair value reflected in earnings.

Management's intent to sell residential mortgage loans classified as held for sale may change over time due to such factors as changes in the overall liquidity in markets or changes in characteristics specific to certain loans held for sale. Consequently, these loans may be reclassified to loans held for investment and maintained in the Bank's loan portfolio. In such cases, the loans will continue to be measured at fair value. Gains and losses from changes in fair value for these loans are reported in earnings as a component of other income and interest income on these loans are reported in interest and fees on loans and leases on the statement of operations. For the years ended December 31, 2023 and 2022, the Company recorded a net increase in fair value of \$2.6 million and a net decrease of \$58.5 million, respectively.

The Company selected the fair value measurement option for certain junior subordinated debentures originally issued by UHC prior to the Merger (the Umpqua Statutory Trusts) and for junior subordinated debentures acquired by UHC from Sterling Financial Corporation prior to the Merger, with changes in fair value recognized as a component of other comprehensive income. The remaining junior subordinated debentures were acquired through business combinations and were measured at fair value at the time of acquisition and subsequently measured at amortized cost.

Note 23 - Earnings Per Common Share

The following is a computation of basic and diluted earnings per common share for the years ended December 31, 2023, 2022, and 2021:

(in thousands, except per share data)	2023	2022	2021
Net income	\$ 348,715	\$ 336,752	\$ 420,300
Weighted average number of common shares outstanding - basic (1)	195,304	129,277	130,499
Effect of potentially dilutive common shares (1)(2)	 567	 455	531
Weighted average number of common shares outstanding - diluted (1)	195,871	129,732	131,030
Earnings per common share (1):			
Basic	\$ 1.79	\$ 2.60	\$ 3.22
Diluted	\$ 1.78	\$ 2.60	\$ 3.21

⁽¹⁾ Periods prior to February 28, 2023 have been restated as a result of the adjustment to common shares outstanding based on the exchange ratio from the Merger of 0.5958.

⁽²⁾ Represents the effect of the assumed vesting of non-participating restricted shares based on the treasury stock method.

The following table represents the weighted average outstanding restricted shares that were not included in the computation of diluted earnings per share because their effect would be anti-dilutive for the periods indicated:

(in thousands)	2023	2022	2021
Restricted stock awards and units	727	_	_

Note 24 – Related Party Transactions

In the ordinary course of business, the Bank has made loans to its directors and executive officers (and their associated and affiliated companies). All such loans have been made in accordance with regulatory requirements.

The following table presents a summary of aggregate activity involving related party borrowers for the years ended December 31, 2023, 2022, and 2021:

(in thousands)	2023	2022	2021
Loans outstanding at beginning of year	\$ 2,410	\$ 7,564	\$ 9,393
New loans and advances	46,483	630	980
Less loan repayments	(45,810)	(5,784)	(2,809)
Reclassification (1)	(2,157)		
Loans outstanding at end of year	\$ 926	\$ 2,410	\$ 7,564

⁽¹⁾ Represents loans that were once considered related party but are no longer considered related party, or loans that were not related party that subsequently became related party loans.

As of December 31, 2023 and 2022, deposits of related parties amounted to \$8.4 million and \$19.1 million, respectively.

Note 25 – Parent Company Financial Statements

Summary financial information for Columbia Banking System, Inc. on a standalone basis is as follows:

Condensed Balance Sheets

December 31, 2023 and 2022

(in thousands)	Dece	ember 31, 2023	Dece	ember 31, 2022
ASSETS				
Non-interest-bearing deposits with subsidiary bank	\$	45,895	\$	143,130
Investments in:				
Bank subsidiary		5,367,612		2,744,195
Non-bank subsidiaries		18,951		16,932
Other assets		7,781		4,048
Total assets	\$	5,440,239	\$	2,908,305
LIABILITIES AND SHAREHOLDERS' EQUITY				
Payable to bank subsidiary	\$	444	\$	128
Other liabilities		20,426		16,899
Junior subordinated debentures, at fair value		316,440		323,639
Junior and other subordinated debentures, at amortized cost		107,895		87,813
Total liabilities		445,205		428,479
Shareholders' equity		4,995,034		2,479,826
Total liabilities and shareholders' equity	\$	5,440,239	\$	2,908,305

Condensed Statements of Operations

Years Ended December 31, 2023, 2022, and 2021

(in thousands)	2023	2022	2021
INCOME			
Dividends from bank subsidiary	\$ 353,000	\$ 192,000	\$ 398,000
Dividends from non-bank subsidiaries	10,115	2,104	9,371
Other income	453	127	5,007
Total income	363,568	194,231	412,378
EXPENSE			
Management fees paid to subsidiaries	1,877	1,434	1,590
Other expenses	44,493	22,396	17,834
Total expenses	46,370	23,830	19,424
Income before income tax benefit and equity in undistributed earnings of subsidiaries	317,198	170,401	392,954
Income tax benefit	(10,019)	(4,677)	(3,470)
Net income before equity in undistributed earnings of subsidiaries	327,217	175,078	396,424
Equity in undistributed earnings losses of subsidiaries	21,498	161,674	23,876
Net income	\$ 348,715	\$ 336,752	\$ 420,300

Condensed Statements of Cash Flows Years Ended December 31, 2023, 2022, and 2021

(in thousands)	2023	2022	2021
OPERATING ACTIVITIES:			
Net income	\$ 348,715	\$ 336,752	\$ 420,300
Adjustment to reconcile net income to net cash provided by operating activities:			
Gain on sale of Umpqua Investments, Inc.	_	_	(4,444)
Equity in undistributed earnings of subsidiaries	(21,498)	(161,674)	(23,876)
Depreciation, amortization, and accretion	(228)	(228)	(228)
Net increase in other assets	(176)	(2,334)	(1,001)
Net (decrease) increase in other liabilities	 (5,472)	2,212	2,589
Net cash provided by operating activities	321,341	174,728	393,340
INVESTING ACTIVITIES:			
Net increase in advances to subsidiaries	(143,535)	(121,409)	(313)
Net cash received from sale of Umpqua Investments, Inc.	 		10,781
Net cash (used in) provided by investing activities	(143,535)	(121,409)	10,468
FINANCING ACTIVITIES:			
Net increase (decrease) in advances from subsidiaries	317	(379)	409
Dividends paid on common stock	(270,261)	(182,273)	(183,734)
Repurchases and retirement of common stock	(6,282)	(4,163)	(80,690)
Net proceeds from issuance of common stock	1,185	54	34
Net cash used in financing activities	(275,041)	(186,761)	(263,981)
Net (decrease) increase in cash and cash equivalents	(97,235)	(133,442)	139,827
Cash and cash equivalents, beginning of year	143,130	276,572	136,745
Cash and cash equivalents, end of year	\$ 45,895	\$ 143,130	\$ 276,572

Note 26 - Revenue from Contracts with Customers

The Company records revenue when control of the promised products or services is transferred to the customer, in an amount that reflects the consideration the Company expects to be entitled to receive in exchange for those products or services. All of the Company's revenue from contracts with customers in the scope of ASC 606 is recognized in non-interest income.

The following table presents the Company's sources of non-interest income for the years ended December 31, 2023, 2022, and 2021:

(in thousands)		2023	2022	2021
Non-interest income:				
Service charges on deposits				
Account maintenance fees	\$	37,986	\$ 27,274	\$ 24,137
Transaction-based and overdraft service charges		27,539	21,091	17,949
Total service charges on deposits		65,525	48,365	42,086
Card-based fees		55,263	37,370	36,114
Financial services and trust revenue		13,471	90	5,112
Total revenue from contracts with customers		134,259	85,825	83,312
Non-interest income within the scope of other GAAP topics	_	69,668	113,703	273,006
Total non-interest income	\$	203,927	\$ 199,528	\$ 356,318

Note 27 - Shareholders' Equity

Dividends

The following summarizes the dividend activity for the year ended December 31, 2023:

Declared	Regular Cash Dividends Per Common Share	Record Date	Paid Date
January 11, 2023 (1)	\$ 0.35	January 23, 2023	February 6, 2023
May 15, 2023	\$ 0.36	May 31, 2023	June 15, 2023
August 14, 2023	\$ 0.36	August 25, 2023	September 11, 2023
November 13, 2023	\$ 0.36	November 24, 2023	December 11, 2023

⁽¹⁾ The dividend that was declared and paid prior to the Merger has been restated as a result of the adjustment to common shares outstanding based on the exchange ratio from the Merger of 0.5958.

Subsequent to year end, on February 9, 2024, the Company declared a regular quarterly cash dividend of \$0.36 per common share payable on March 11, 2024, to shareholders of record at the close of business on February 23, 2024.

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

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES.

On a quarterly basis, the Company carries out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer, Principal Financial Officer, and Principal Accounting Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934. As of December 31, 2023, our management, including our Chief Executive Officer, Principal Financial Officer, and Principal Accounting Officer, concluded that our disclosure controls and procedures were effective in timely alerting them to material information relating to us that is required to be included in our periodic SEC filings.

Although management changes and improves our internal controls over financial reporting on an ongoing basis, we do not believe that any such changes occurred in the fourth quarter 2023 that materially affected or are reasonably likely to materially affect our internal control over financial reporting.

REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Columbia Banking System, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company's internal control system is designed to provide reasonable assurance to our management and Board regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company's assets;
- 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 the authorizations of management and directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting 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.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). This assessment included controls over the preparation of the schedules equivalent to the basic financial statements in accordance with the instructions for the consolidated financial statements for Bank Holding Companies (Form FR Y-9C) to meet the reporting requirements of Section 112 of the Federal Deposit Insurance Corporation Improvement Act. Based on our assessment and those criteria, management believes that, as of December 31, 2023, the Company maintained effective internal control over financial reporting.

The Company's independent registered public accounting firm has audited the Company's consolidated financial statements that are included in this Annual Report on Form 10-K and the effectiveness of our internal control over financial reporting as of December 31, 2023 and issued their Report of Independent Registered Public Accounting Firm, appearing under Item 8. The audit report expresses an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2023.

February 27, 2024

ITEM 9B. OTHER INFORMATION

Insider Trading Arrangements and Policies

A significant portion of the compensation of our executive officers is delivered in the form of equity awards, including time-vested restricted stock unit awards, and time-vested stock awards that vest ratably over three-year periods, and performance-based restricted stock unit awards. that typically vest over a three-year performance period. This compensation design is intended to align executive compensation with the performance experienced by our shareholders. Following the delivery of shares of our common stock under those equity awards, once any applicable service-, time- or performance-based vesting standards have been satisfied, our executive officers from time to time engage in the open-market sale of some of those shares. Certain of our officers have elected to have shares withheld at the time of vesting to cover withholding taxes.

Our directors and executive officers may also engage from time to time in other transactions involving our securities. Transactions in our securities by our directors and executive officers are required to be made in accordance with our Insider Trading and Information Policy, which, among other things, requires that the transactions be in accordance with applicable U.S. federal securities laws that prohibit trading while in possession of material non-public information. Rule 10b5-1 under the Exchange Act provides an affirmative defense that enables pre-arranged transactions in securities in a manner that avoids concerns about initiating transactions at a future date while possibly in possession of material nonpublic information. Our Insider Trading and Information Policy permits our directors and executive officers to enter into trading plans designed to comply with Rule 10b5-1.

During the fourth quarter of 2023 none of our directors or officers adopted or terminated a trading plan designed to comply with Rule 10b5-1 or any non-Rule 10b5-1 trading arrangement.

Certain of our officers and directors have made elections to participate in, and are participating in, our 401(k) and profit sharing plan and have made, and may from time to time make, elections to (i) have shares withheld to cover withholding taxes or (ii) have dividends from Columbia common stock reinvested into Columbia common stock, (iii) have a portion of their 401(k) account contributions used to purchase Columbia common stock, or (iv) participate in the employee stock purchase plan, which may be designed to satisfy the affirmative defense conditions of Rule 10b5-1 under the Exchange Act or may constitute non-Rule 10b5-1 trading arrangements (as defined in Item 408(c) of Regulation S-K).

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding "Directors, Executive Officers and Corporate Governance" will be set forth in the Company's 2024 Annual Proxy Statement (the "Proxy Statement"), which will be filed with the SEC within 120 days of the end of our 2023 fiscal year and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

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

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

Information regarding "Security Ownership of Certain Beneficial Owners and Management and Related Stockholders" will be set forth in the Proxy Statement and is incorporated herein by reference.

Equity Compensation Plan Information

The following table sets forth information about equity compensation plans that provide for the award of securities or the grant of options to purchase securities to employees and directors of Columbia and its subsidiaries and predecessors by merger that were in effect as of December 31, 2023.

	Equity Compensation Plan Information			
	$(A) \qquad (B)$		(C)	
(shares in thousands) Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans excluding securities reflected in column (A)	
Equity compensation plans approved by	security holders			
2018 Incentive Plan (1)	267	\$ —	1,084	
Other (2), (3)	336	_	2,069	
Equity compensation plans not approved by security holders				
Total	603	\$	3,153	

- The 2018 Incentive Plan, which was approved by Columbia shareholders on May 23, 2018 and amended on May 22, 2019. The 2018 Plan authorizes the issuance of equity awards to directors and employees and reserves 3.1 million shares of the Company's common stock for issuance under the plan. As of December 31, 2023, 267,000 performance share awards were outstanding and subject to satisfaction of performance based on the Company's total shareholder return or return on average tangible shareholders equity relative to a peer group. As of December 31, 2023, 687,000 shares issued as restricted stock were outstanding, but subject to forfeiture in the event that time-based conditions are not met.
- (2) Includes outstanding restricted share awards issued under stock plans assumed through mergers. As of December 31, 2023, 336,000 performance share awards were outstanding and subject to satisfaction of performance based on the Company's total shareholder return or return on average tangible shareholders equity relative to a peer group and 520,000 full value shares issued as restricted stock were outstanding, but subject to forfeiture in the event that time-based conditions are not met.
- (3) Includes 27,000 shares available for purchase under the shareholder-approved ESPP as of December 31, 2023.

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

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

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Information regarding "Principal Accounting Fees and Services" billed to us by our principal accountant, Deloitte & Touche LLP, will be set forth in the Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(1) Financial Statements:

The consolidated financial statements are included as Item 8 of this Annual Report on Form 10-K.

(2) Financial Statement Schedules:

All schedules have been omitted because the information is not required, not applicable, not present in amounts sufficient to require submission of the schedule, or is included in the financial statements or notes thereto.

(3) Exhibits:

The exhibits filed as part of this Annual Report on Form 10-K and incorporated herein by reference to other documents are listed on the Exhibit Index to this Annual Report on Form 10-K, immediately before the signatures.

ITEM 16. FORM 10-K SUMMARY.

None.

EXHIBIT INDEX

	EXHIBIT INDEX	
Exhibit #	Description	Location
2.1*	Agreement and Plan of Merger, dated as of October 11, 2021, by and among Umpqua Holdings Corporation, Columbia Banking System, Inc., and Cascade Merger Sub, Inc.	Incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed October 15, 2021
2.2	Amendment No. 1 to the Merger Agreement, dated as of January 9, 2023, by and among Umpqua Holdings Corporation, Columbia Banking System, Inc., and Cascade Merger Sub. Inc.	Incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed January 10, 2023
3.1	Restated Articles of Incorporation	Incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
3.2	Amended and Restated Bylaws	Incorporated by reference to Exhibit 3.4 of the Company's Current Report on Form 8-K filed March 1, 2023
4.1	Specimen Common Stock Certificate	Incorporated by reference to Exhibit 4.3 of the Company's Registration Statement on Form S-3 filed on December 19, 2008
4.2	Pursuant to Item 601(b) (4) (iii) (A) of Regulation S-K, copies of instruments defining the rights of holders of long-term debt and preferred securities are not filed. The Company agrees to furnish a copy thereof to the Securities and Exchange Commission upon request.	
4.3	Description of Capital Stock (securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934)	Incorporated by reference to Exhibit 4.3 of the Company's Annual Report on Form 10-K for the year ended December 31, 2019
10.1**	2018 Equity Incentive Plan (as amended through May 22, 2019)	Incorporated by reference to Exhibit 10.1 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.2**	Form of Restricted Stock Agreement	Incorporated by reference to Exhibit 10.2 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.3**	Form of Restricted Stock Unit Agreement	Incorporated by reference to Exhibit 10.3 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.4**	Form of Performance Stock Unit Agreement	Incorporated by reference to Exhibit 10.4 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.5**	Change in Control Agreement between the Bank and Clint E. Stein dated as of October 24, 2017	Incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019
10.6**	Change in Control Agreement between the Bank and Andrew L. McDonald dated as of May 23, 2019	Incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019
10.7**	Change in Control Agreement between the Bank and Kumi Yamamoto Baruffi dated as of December 2, 2019	Incorporated by reference to Exhibit 10.72 of the Company's Annual Report on Form 10-K for the year ended December 31, 2019

Exhibit #	Description	Location
10.8**	Change in Control Agreement between the Bank and Christopher Merrywell dated as of January 1, 2020	Incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020
10.9**	Change in Control Agreement between the Bank and David Moore Devine dated as of March 2, 2020	Incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020
10.10**	Change in Control Agreement between the Bank and Eric Eid dated as of March 2, 2020	Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020
10.11**	Change in Control Agreement between the Bank and Aaron Deer dated as of May 7, 2020	Incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020
10.12**	Change in Control Agreement between the Bank and David Lawson dated as of November 25, 2020	Incorporated by reference to Exhibit 10.21 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.13**	Change in Control Agreement between the Bank and Lisa Dow dated as of November 25, 2020	Incorporated by reference to Exhibit 10.22 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.14**	Form of Long-Term Care Agreement between the Bank, the Company, and each of the following directors: Mr. Folsom, Mr. Hulbert, Mr. Matson, Mr. Rodman, Mr. Weyerhaeuser, and Mr. Will	Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001
10.15**	Form of Supplemental Compensation Agreement between the Bank and Messrs. Andrew L. McDonald and Clint E. Stein, respectively	Incorporated by reference to Exhibit 10.16 of the Company's Annual Report on Form 10-K for the year ended December 31, 2007
10.16**	Form of Indemnification Agreement between the Company and its directors	Incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009
10.17**	Amended and Restated Columbia Banking System, Inc. 2005 401 Plus Plan (Deferred Compensation Plan), dated October 26, 2016 for directors and key employees	Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed October 28, 2016
10.18**	Amendment to Amended and Restated Columbia Banking System, Inc. 2005 401 Plus Plan (Deferred Compensation plan), dated November 14, 2022	Incorporated by reference to Exhibit 10.18 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.19**	Columbia Banking System, Inc. 2016 401 Plus Plan (Deferred Compensation Plan), dated October 26, 2016 for directors and key employees	Incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed October 28, 2016
10.20**	Amendment to Columbia Banking System, Inc. 2016 401 Plus Plan (deferred Compensation Plan), dated November 14, 2022	Incorporated by reference to Exhibit 10.20 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.21**	Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Kumi Baruffi, effective February 27, 2015	Incorporated by reference to Exhibit 10.8 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015

Exhibit #	Description	Location
10.22**	First Amendment to the Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Kumi Baruffi, effective November 15, 2017	Incorporated by reference to Exhibit 10.47 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017
10.23**	First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and David C. Lawson, effective February 27, 2015	Incorporated by reference to Exhibit 10.5 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015
10.24**	First Amendment to the First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and David Lawson, effective November 15, 2017	Incorporated by reference to Exhibit 10.48 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017
10.25**	First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Andrew L. McDonald, effective February 27, 2015	Incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015
10.26**	First Amendment to the First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Andrew L. McDonald, effective November 15, 2017	Incorporated by reference to Exhibit 10.49 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017
10.27**	First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Clint E. Stein, effective February 27, 2015	Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015
10.28**	First Amendment to the First Amended and Restated Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Clinton E. Stein, effective November 15, 2017	Incorporated by reference to Exhibit 10.51 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017
10.29**	Employment Offer (Lisa Dow), dated January 3, 2018	Incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018
10.30**	Offer Letter, dated April 6, 2020 by and between Columbia State Bank and Aaron Deer	Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed April 13, 2020
10.31**	Employment Agreement, dated as of September 30, 2019, by and between Columbia Banking System, Inc. and Clint E. Stein	Incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed October 3, 2019
10.32**	Amended and Restated Employment Agreement, dated as of October 11, 2021, by and between Columbia Banking System, Inc. and Clint E. Stein	Incorporated by reference to Exhibit 10.32 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.33**	First Amendment to the Employment Agreement and the A&R Employment Agreement, dated as of December 31, 2022, by and between Columbia Banking System, Inc. and Clint E. Stein	Incorporated by reference to Exhibit 10.33 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022
10.34**	Amended and Restated Employee Stock Purchase Plan	Incorporated by reference to Exhibit 10.7 of the Company's Annual Report on Form 10-K for the year ended December 31, 2010
10.35**	First Amendment to Amended and Restated Employee Stock Purchase Plan	Incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018

Exhibit #	Description	Location
10.36**	Amended and Restated Executive Supplemental Income Agreement, by and between the Company and Lisa Dow, dated December 26, 2018	Incorporated by reference to Exhibit 10.62 of the Company's Annual Report on Form 10-K for the year ended December 31, 2018
10.37**	Columbia State Bank Supplemental Executive Retirement Plan Agreement, by and between the Bank and Lisa Dow, effective March 11, 2018	Incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019
10.38**	Columbia State Bank Endorsement Method Split Dollar Agreement (SERP Benefit), by and between the Bank and Lisa Dow, effective February 25, 2019	Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019
10.39**	First Amendment to the Columbia State Bank Endorsement Split Dollar Agreement (SERP Benefit), by and between the Bank and Lisa Dow, effective February 25, 2019	Incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019
10.40**	Second Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, by and between the Bank and David C. Lawson, effective May 31, 2019	Incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019
10.41**	Second Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, by and between the Bank and Kumi Baruffi, effective May 31, 2019	Incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019
10.42**	Third Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, by and between the Bank and Clinton E. Stein, effective May 31, 2019	Incorporated by reference to Exhibit 10.4 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2019
10.43**	Columbia State Bank Endorsement Method Split Dollar Agreement, effective January 15, 2013, by and between Columbia State Bank and Christopher Merrywell	Incorporated by reference to Exhibit 10.58 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.44**	First Amendment to the Columbia State Bank Endorsement Method Split Dollar Agreement, dated November 23, 2020, by and between Columbia State Bank and Christopher Merrywell	Incorporated by reference to Exhibit 10.59 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.45**	Columbia State Bank Endorsement Method Split Dollar Agreement, dated November 25, 2020 by and between Columbia State Bank and Aaron Deer	Incorporated by reference to Exhibit 10.60 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.46**	Executive Supplemental Compensation Agreement dated as of February 23, 2011 between Columbia State Bank and Eric J. Eid	Incorporated by reference to Exhibit 10.61 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.47**	Columbia State Bank Joint Beneficiary Agreement, by and between Columbia State Bank and David Devine, effective November 1, 2011	Incorporated by reference to Exhibit 10.62 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.48**	Columbia State Bank Joint Beneficiary Agreement, by and between Columbia State Bank and Eric Eid, effective November 1, 2011	Incorporated by reference to Exhibit 10.63 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020

Exhibit #	Description	Location
10.49**	Executive Supplemental Compensation Agreement dated as of February 27, 2014 between Columbia State Bank and Eric J. Eid	Incorporated by reference to Exhibit 10.64 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.50**	Executive Supplemental Compensation Agreement dated as of March 25, 2015 between Columbia State Bank and Christopher M. Merrywell	Incorporated by reference to Exhibit 10.65 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.51**	Executive Supplemental Compensation Agreement dated as of February 1, 2018 between Columbia State Bank and Christopher Merrywell	Incorporated by reference to Exhibit 10.66 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.52**	Executive Supplemental Compensation Agreement dated as of March 11, 2019 between Columbia State Bank and David Moore Devine	Incorporated by reference to Exhibit 10.67 of the Company's Annual Report on Form 10-K for the year ended December 31, 2020
10.53**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Ronald Farnsworth	Incorporated by reference to Exhibit 10.2 of the Company's Current Report on Form 8-K filed March 1, 2023
10.54**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Lisa White	Incorporated by reference to Exhibit 10.3 of the Company's Current Report on Form 8-K filed March 1, 2023
10.55**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Aaron Deer	Incorporated by reference to Exhibit 10.4 of the Company's Current Report on Form 8-K filed March 1, 2023
10.56**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Eric Eid	Incorporated by reference to Exhibit 10.5 of the Company's Current Report on Form 8-K filed March 1, 2023
10.57**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Christopher Merrywell	Incorporated by reference to Exhibit 10.6 of the Company's Current Report on Form 8-K filed March 1, 2023
10.58**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Drew Anderson	Incorporated by reference to Exhibit 10.6 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.59**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Sheri Burns	Incorporated by reference to Exhibit 10.7 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.60**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Frank Namdar	Incorporated by reference to Exhibit 10.8 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.61**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Tory Nixon	Incorporated by reference to Exhibit 10.9 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.62**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Andrew Ognall	Incorporated by reference to Exhibit 10.10 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023

Exhibit #	Description	Location
10.63**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Kumi Baruffi	Incorporated by reference to Exhibit 10.11 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.64**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and Lisa Dow	Incorporated by reference to Exhibit 10.12 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.65**	Letter Agreement, dated as of March 1, 2023, by and between Columbia Banking System, Inc. and David Moore Devine	Incorporated by reference to Exhibit 10.13 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.66**	Second Amendment to the Columbia State Bank Supplemental Executive Retirement Plan Agreement, dated as of February 28, 2023, by and between Columbia State Bank and Kumi Baruffi	Incorporated by reference to Exhibit 10.14 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.67**	Columbia Banking System, Inc. 2023 Deferred Compensation Plan	Incorporated by reference to Exhibit 10.7 of the Company's Current Report on Form 8-K filed March 1, 2023
10.68**	First Amendment to Columbia Banking System, Inc. 2023 Deferred Compensation Plan, dated as of April 18, 2023	Incorporated by reference to Exhibit 10.16 of the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023
10.69**	Umpqua Holdings Corporation 2013 Incentive Plan	Incorporated by reference to Exhibit 4.5 of the Company's Registration Statement on Form S-8 filed March 1, 2023
10.70**	Sterling Financial Corporation 2010 Long-Term Incentive Plan	Incorporated by reference to Exhibit 4.6 of the Company's Registration Statement on Form S-8 filed March 1, 2023
10.71**	Umpqua Bank Nonqualified Deferred Compensation Plan, Revised and Restated January 1, 2024	Filed herewith
19.1	Columbia Banking System, Inc. Insider Trading Policy and Procedures, dated March 1, 2023	Filed herewith
21.1	Subsidiaries of the Company	Filed herewith
23.1	Consent of Deloitte & Touche LLP	Filed herewith
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
31.3	Certification of Principal Accounting Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32	Certification of Chief Executive Officer, Principal Financial Officer and Principal Accounting Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
97.1	Columbia Banking System, Inc. Policy for the Recovery of Erroneously Awarded Incentive-based Compensation, dated October 2, 2023	Filed herewith

Exhibit #	Description	Location
101	The following financial information from Columbia Banking System, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023 is formatted in XBRL: (i) Audited Consolidated Balance Sheets, (ii) Audited Consolidated Statements of Income, (iii) Audited Consolidated Statements of Comprehensive Income, (iv) Audited Consolidated Statements of Changes in Shareholders' Equity, (v) Audited Consolidated	Filed herewith
104	Cover Page Interactive Data File (the cover page XBRL tags are embedded within the Inline XBRL)	Filed herewith

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

** Management contract or compensatory plan or arrangement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, Columbia Banking System, Inc. has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on February 27, 2024.

COLUMBIA BANKING SYSTEM, INC. (Registrant)

/s/ Clint E. Stein	February 27, 2024	
Clint E. Stein, President and Chief Ex	xecutive Officer	
Signature	Title	Date
/s/ Clint E. Stein Clint E. Stein	President, Chief Executive Officer and Director (Principal Executive Officer)	February 27, 2024
/s/ Ronald L. Farnsworth Ronald L. Farnsworth	Chief Financial Officer (Principal Financial Officer)	February 27, 2024
/s/ Lisa M. White Lisa M. White	Corporate Controller (Principal Accounting Officer)	February 27, 2024
/s/ Cort L. O'Haver Cort L. O'Haver	Executive Chair	February 27, 2024
/s/ Craig D. Eerkes Craig D. Eerkes	Lead Independent Director	February 27, 2024
/s/ Mark A. Finkelstein Mark A. Finkelstein	Director	February 27, 2024
/s/ Eric S. Forrest Eric S. Forrest	Director	February 27, 2024
/s/ Peggy Y. Fowler Peggy Y. Fowler	Director	February 27, 2024
/s/ Randal L. Lund Randal L. Lund	Director	February 27, 2024
/s/ Luis F. Machuca Luis F. Machuca	Director	February 27, 2024
/s/ S. Mae Fujita Numata S. Mae Fujita Numata	Director	February 27, 2024

/s/ Maria M. Pope	Director	February 27, 2024
Maria M. Pope	_	
/s/ John F. Schultz	Director	February 27, 2024
John F. Schultz		
/s/ Elizabeth W. Seaton	Director	February 27, 2024
Elizabeth W. Seaton		
/s/ Hilliard C. Terry III	Director	February 27, 2024
Hilliard C. Terry III		
/s/ Anddria Varnado	Director	February 27, 2024
Anddria Varnado	_	

Board of Directors

Cort L. O'Haver. Executive Chair

Craig D. Eerkes, Lead Independent Director

Clint E. Stein, President and Chief Executive Officer

Mark A. Finkelstein

Eric S. Forrest

Peggy Y. Fowler

Randal L. Lund

Luis F. Machuca

S. Mae Fujita Numata

Maria M. Pope

John F. Schultz

Elizabeth W. Seaton

Hilliard C. Terry, III

Anddria Varnado

Umpqua Bank Executive Officers

Clint E. Stein, Chief Executive Officer

Chris Merrywell, President of Consumer Banking

Tory Nixon, President of Commercial Banking

Drew Anderson, Executive Vice President, Chief Administrative Officer

Kumi Yamamoto Baruffi, Executive Vice President, General Counsel and Corporate Secretary

Sheri Burns, Executive Vice President, Chief Human Resources Officer

Aaron James Deer, Executive Vice President, Chief Strategy and Innovation Officer

David Moore Devine, Executive Vice President, Chief Marketing Officer

Lisa Dow, Executive Vice President, Chief Risk Officer

Ron Farnsworth, Executive Vice President, Chief Financial Officer

Frank Namdar, Executive Vice President, Chief Credit Officer

Andrew Ognall, Executive Vice President, IMO General Counsel

INDEPENDENT AUDITORS

Deloitte & Touche, LLP

TRANSFER AGENT AND REGISTRAR

Broadridge Corporate Issuer Solutions

FINANCIAL INFORMATION

Columbia news and financial results are available through the Internet and mail.

REGULATORY & SECURITIES COUNSEL

Sullivan & Cromwell, LLP

STOCK LISTING

The Company's common stock trades on the Nasdaq Stock Market LLC under the symbol: COLB

INTERNET

For information about Columbia Banking System, Inc., access our home page at www.columbiabankingsystem.com. You can also view or retrieve copies of Columbia's financial reports on the Internet by connecting to www.sec.gov. Immediate access to the Company's quarterly earnings news releases via the Internet is provided by PR Newswire at www.prnewswire.com



1301 A Street, Tacoma, WA 98402 503-727-4100 ColumbiaBankingSystem.com