# Commerce Bancshares, Inc.

Annual Report
& Form 10-K

2023 | **Built for This:**
Resilient in Challenging Times

*Newsweek*
America's Greatest
Workplaces 2023

Forbes 2023
AMERICA'S
BEST MID-SIZE
EMPLOYERS
POWERED BY STATISTA

Outstanding Community Reinvestment Act rating for 28 years

4.7

Rating on iOS Platform

This past year has been a testament to the strength and resilience of Commerce Bank. As the banking industry navigated a complex economic landscape, our bank continued to deliver exceptional and consistent service to our customers. Commerce's strong foundation, conservative risk management and diversified operating model positioned us well. We executed against our strategic priorities and continued to make long-term investments in key growth areas like digital, payments, wealth management and our expansion markets.

Looking ahead, Commerce will continue to adapt to market changes and be there for our customers, in both good and challenging times. Fundamental to our enduring strength as an institution is an engaged team and a strong culture — nearly 160 years in the making — that is always focused on what matters most to our customers.

## About the Cover

In a year of deposit pressures across the banking industry, Commerce Bank maintained strong levels of liquidity and a steady deposit base. Our consistent and diverse deposit franchise is cemented by long-term, loyal customer relationships. Foundational to our success is the talented branch team who serves these relationships — supporting our customers and helping them focus on what matters most. Pictured on the cover are a few of our team members who deliver a best-in-class customer experience and represent the 141 branches across our footprint.

*Pictured – left to right*

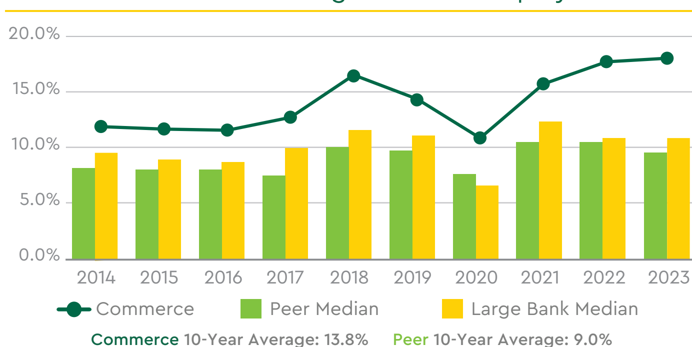
- **Hugo Figueira** – Private Banking Relationship Manager
- **Kyla Pollard** – Retail Banking Group Manager
- **Tina Stiverson** – Retail Banking Senior Branch Manager

# Financial Highlights

| (In thousands, except per share data) | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| **OPERATING RESULTS** | | | | | |
| Net interest income | $ 821,293 | $ 829,847 | $ 835,424 | $ 942,185 | $ 998,129 |
| Provision for credit losses | 50,438 | 137,190 | (66,326) | 28,071 | 35,451 |
| Non-interest income | 524,703 | 505,867 | 560,393 | 546,535 | 573,045 |
| Investment securities gains (losses), net | 3,626 | 11,032 | 30,059 | 20,506 | 14,985 |
| Non-interest expense | 767,398 | 768,378 | 805,901 | 848,777 | 930,982 |
| Net income attributable to Commerce Bancshares, Inc. | 421, 231 | 354,057 | 530,765 | 488,399 | 477,060 |
| Net income available to common shareholders | 412, 231 | 342,091 | 530,765 | 488,399 | 477,060 |
| Cash dividends on common stock | 113,466 | 120,818 | 122,693 | 127,466 | 134,734 |
| **AT YEAR END** | | | | | |
| Total assets | $ 26,065,789 | $ 32,922,974 | $ 36,689,088 | $ 31,875,931 | $ 31,701,061 |
| Loans, including held for sale | 14,751,626 | 16,374,730 | 15,184,974 | 16,308,095 | 17,209,656 |
| Investment securities | 8,741,888 | 12,645,693 | 14,699, 511 | 12,519,177 | 9,948,764 |
| Deposits | 20,520,415 | 26,946,745 | 29,813,073 | 26,187,440 | 25,363,898 |
| Equity | 3,138,472 | 3,399,972 | 3,448,324 | 2,481,577 | 2,964,230 |
| Non-accrual loans | 10,220 | 26,540 | 9,157 | 8,306 | 7,312 |
| Common shares outstanding[1] | 136,297 | 135,602 | 133,884 | 131,249 | 130,176 |
| Tier I common risk-based capital ratio | 13.93% | 13.71% | 14.34% | 14.13% | 15.25% |
| Tier I risk-based capital ratio | 14.66 | 13.71 | 14.34 | 14.13 | 15.25 |
| Total risk-based capital ratio | 15.48 | 14.82 | 15.12 | 14.89 | 16.03 |
| Tier I leverage ratio | 11.38 | 9.45 | 9.13 | 10.34 | 11.25 |
| Tangible common equity to tangible assets ratio | 10.99 | 9.92 | 9.01 | 7.32 | 8.85 |
| Efficiency ratio | 56.87 | 57.19 | 57.64 | 56.90 | 59.17 |
| **OTHER FINANCIAL DATA** (based on average balances) | | | | | |
| Return on total assets | 1.67% | 1.20% | 1.55% | 1.45% | 1.49% |
| Return on common equity | 14.06 | 10.64 | 15.37 | 17.31 | 17.94 |
| Loans to deposits | 71.54 | 67.73 | 56.46 | 55.41 | 66.31 |
| Equity to total assets | 12.20 | 11.18 | 10. 11 | 8.39 | 8.33 |
| Net yield on interest earning assets (FTE) | 3.48 | 2.99 | 2.58 | 2.85 | 3.16 |
| **PER COMMON SHARE DATA** | | | | | |
| Net income – basic[1] | $ 2.95 | $ 2.52 | $ 3.92 | $ 3.68 | $ 3.64 |
| Net income – diluted[1] | 2.94 | 2.51 | 3.91 | 3.67 | 3.64 |
| Market price[1] | 55.89 | 56.75 | 62.35 | 64.83 | 53.41 |
| Book value[1] | 21.97 | 25.08 | 25.76 | 18.90 | 22.77 |
| Cash dividends[1] | 0.815 | 0.889 | 0.907 | 0.961 | 1.029 |
| Cash dividend payout ratio | 27.52% | 35.32% | 23.12% | 26.10% | 28.24% |

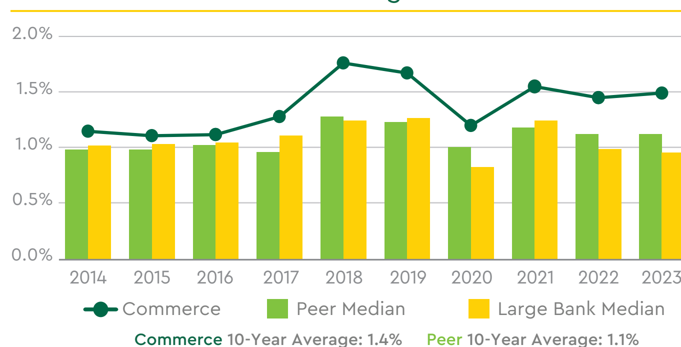
1 Restated for the 5% stock dividend distributed in December 2023

## Return on Average Common Equity




**Commerce** 10-Year Average: 13.8% **Peer** 10-Year Average: 9.0%

## Return on Average Assets




**Commerce** 10-Year Average: 1.4% **Peer** 10-Year Average: 1.1%

Sources: S&P Global Market Intelligence, and company reports and filings as of December 31, 2023

# Letter to Our Shareholders

**David W. Kemper**
Executive Chairman
COMMERCE BANCSHARES, INC.
FEBRUARY 21, 2024

The global macroeconomic landscape of 2023 was marked by a series of complex challenges, notably high inflation, interest rate hikes and slowing economic growth. Financial markets showed significant volatility, influenced by the Federal Reserve's restrictive monetary policy, global economic uncertainties and geopolitical tensions. These factors raised concerns about a potential recession in the U.S. The economy, however, proved to be resilient in 2023 with a surprisingly strong fourth quarter economic report, a robust labor market, and the emergence of a late-year rally in the stock market.

The banking industry faced its own set of challenges — navigating an elevated rate environment and the aftermath of bank failures. Despite these challenges, Commerce Bancshares delivered solid financial performance in 2023. Strong revenue diversification and a healthy balance sheet positioned us well this past year, even as overall earnings were impacted by inflationary pressures on expenses and by a one-time FDIC insurance special charge related to bank failures. At the same time, our results benefited from low credit and funding costs. Capital levels remain strong, and liquidity has proven to be durable.

Consistent with our steady core earnings, we returned capital to shareholders through increased dividends. In February 2024, we increased our quarterly common dividend 5% to $.27 per share, making this the 56th consecutive year of dividend increases. Over the past 20 years, our annualized total return to shareholders has been 8%, significantly outperforming the KBW Regional Bank Index annualized return of 4%.

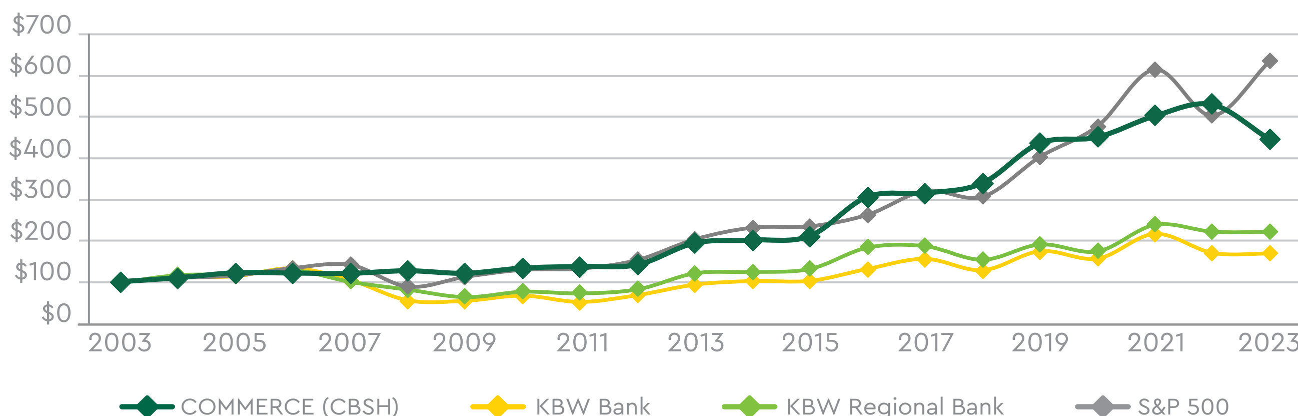
As we have for nearly 160 years, we take the long view, building a franchise that will perform through the economic cycle. We are very proud of our long track record and the shareholder value we have created over decades. With this strong momentum driving us forward, the Commerce team is solidly positioned to build upon the long-term growth and fundamental strength of your company. We will continue to focus on delivering innovative solutions to our customers and generating risk-adjusted returns for our shareholders.

I would like to thank our team members, our customers and you, our shareholders, for the trust and confidence you place in this institution. We look forward to growing the value of the Commerce franchise in 2024.

David Kemper

## Long-Term Shareholder Return

Cumulative Total Return Indexed, 12/31/2003 = $100




Source: Bloomberg as of December 31, 2023

# Built for This:

## Resilient in Challenging Times

**John W. Kemper**
President and Chief Executive Officer
COMMERCE BANCSHARES, INC.
FEBRUARY 21, 2024

The year 2023 presented a new and evolving set of economic challenges and opportunities. Global markets watched anxiously as geopolitical tensions flared and growth slowed. High inflation and rising interest rates slowed business investment and threatened to tip the economy into recession. Despite these headwinds and widespread predictions of an economic downturn, the global economy marched forward with remarkably steady strength, and in the U.S., employment remained robust and growth positive.

Against this backdrop, banks faced their own set of industry-specific challenges. Most notably, the rising interest rate environment laid bare the underpinnings of asset/liability matching strategies. Rising rates created both competition for deposits and unrealized losses in fixed rate asset portfolios. The resulting intertwining questions of bank liquidity and solvency precipitated the failure of a handful of institutions, with costs borne by the industry as a whole.

In the wake of these failures, however, the industry demonstrated remarkable resilience. The rapid response and collaboration among financial institutions, regulators and central banks effectively stabilized funding markets and shored up confidence among investors and customers.

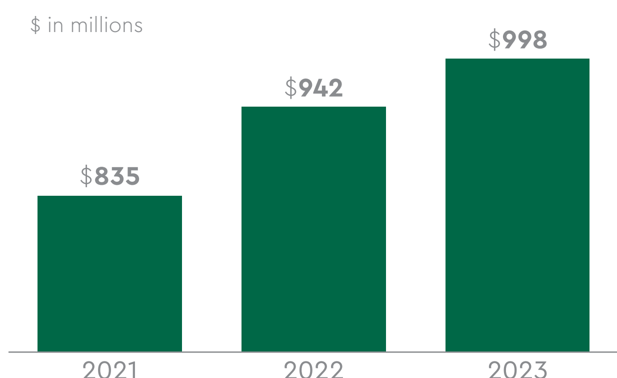
The industry continues to face headwinds in the form of higher funding costs, suppressed lending capacity, tougher regulation, and by some measures, weakening credit quality. The steady repricing of asset portfolios could give some hope for interest margin expansion and revenue growth. But banks, like all companies, face expense pressure associated with still-too-high inflation and ongoing investment in technology.

As we saw in 2023, Commerce is built to navigate challenging times and to serve our customers with consistency and excellence. The theme of this report — "Built for This" — is a reflection of your company's resilience and adaptability. Because of our balanced, diversified and agile business model, prudent risk management, and customer-centric approach to building and sustaining relationships, this bank is positioned to endure and to grow alongside our communities and customers.

### Our Results

In the past year, our operating model stood tall in an environment of high scrutiny and uncertainty. Commerce's financial results were strong in 2023, and our balance sheet

remains healthy. Liquidity was ample and core deposits were stable, though understandably more expensive than in recent years. The rapid repricing of deposits in the second quarter took a toll on net interest margins, but the steady repricing of loans throughout the year stabilized this margin erosion — a promising trend as we enter 2024.




Commerce's diverse revenue streams make the bank less reliant on spread income, and therefore somewhat less susceptible to the kind of market volatility that more rate-sensitive institutions faced in 2023. During the year, non-interest income from our fee-based businesses was steady and comprised 36% of total revenue. Elevated expenses driven by inflationary pressures were offset to some extent by low credit costs. Overall profit was down from the previous year, but earnings of 1.49% on assets were strong by historical standards.

As in years past, Commerce's capital levels surpass regulatory requirements and consistently outstrip those of our peers. Financial performance, as measured by returns on average assets and returns on average equity, positions Commerce in the top quartile relative to peer institutions. Our long-term shareholder returns remain positive compared to the industry, and our regular dividend payments over time reflect our commitment to delivering steady value to our shareholders.

Taken together, our results are a reflection of financial strength and a diversified business model, and evidence of our ability to perform well through different economic cycles.

## Built for This: A Strong Foundation

Commerce's strong culture and super-community bank model served the bank well in 2023. This operating model combines the best of small with the best of big — marrying sophisticated solutions, capabilities, and advice with high-touch delivery in the context of deep relationships, excellent customer service, and local bankers empowered to take care of their customers and communities.

Foundational to our success, and the source of our long-term competitive advantage, is our culture — one we are very proud of and work diligently to shape. We take an intentional approach to introducing and reinforcing culture at every level of the organization. Amidst the industry disruption that unfolded in March, this strong foundation allowed our team to navigate successfully, communicate effectively with stakeholders, and take care of our customers. Our team's response showcased the effectiveness of the risk management policies in place at Commerce and the ability to adapt to sudden market shifts. In a time when some were constrained and quiet, Commerce was communicative and open for business.

The diversity of our loan portfolio and fee-based businesses serves as a ballast for our model in uncertain times. Our capabilities and scale in payments and wealth management positions

Commerce well among our peer bank and non-bank competitors. We maintain high-quality depository relationships with our customers — relationships that have been built over decades. We have a long history of steady asset quality, prudent expense management, and strong levels of capital and liquidity, all of which positioned us well in 2023. Reaffirming the bank's financial strength and stability, Moody's assigned Commerce an a2 baseline credit assessment in 2023, two ratings above the U.S. banking industry median, and in line with some of the biggest and strongest financial institutions in the country.

The heart of our success lies with our talented team members and their unwavering commitment to our purpose and culture. Our results are a reflection of the way this team works collaboratively, communicates, and strives toward the shared goal of helping our customers focus on what matters most.

## Beyond the Numbers

At Commerce, we believe our success is defined by contributing more than financial results. We actively engage in initiatives that serve our customers, strengthen our communities, and cultivate a positive and inclusive workplace for our team members. This approach has been integral to our ethos for nearly 160 years, guided by strong governance practices that ensure our actions and decisions align with our hard-earned reputation as a trusted company.

Our commitment to inclusion is evident in our actions inside and outside of Commerce. We've made significant progress over time, focusing our efforts around four key pillars: our customers, our communities, our suppliers and our internal workplace. Our initiatives include a community outreach and banking program that provides financial access to the unbanked and underbanked as we strive to make banking more accessible in all communities where we do business.

Internally, we continue to cultivate an inclusive and engaging culture where all team members can grow and succeed. To foster personal connections and a sense of belonging, we support various employee-led resource groups (ERGs), including RISE (empowering women), EMERGE (connecting young professionals), VIBE (valuing multicultural perspectives), PRIDE (engaging the LGBTQIA+ community), SALUTE (supporting our veterans and their careers at Commerce), and our newest group, ENABLE (supporting team members with disabilities and caregivers). Participation in these ERGs is entirely voluntary, yet over 40% of our team members are involved in at least one group, with 22% active in multiple groups.

Commerce's culture emphasizes the need to build strong relationships with our communities. We strive to ensure our lending products and solutions are tailored to community needs by offering accessible and affordable homeownership options. We take pride in our consistent "outstanding" rating under the Community Reinvestment Act for the past 28 years, recognizing our efforts to support low- and moderate-income communities.

Our commitment extends beyond traditional banking services to philanthropy through the Commerce Bancshares Foundation and volunteer-ism that we encourage through paid time off. Our team members actively contribute their time, talent and financial resources to hundreds of nonprofits, helping to shape a brighter, more sustainable future for our communities.

We have made great strides together and recognize this important work is ongoing. We will continue to build upon our progress to make our communities and our company a better place to live and work. To learn more about our efforts in these areas, please visit the About Us page on commercebank.com.

## Built for This: Our Business Segments

### Consumer Banking

In a year of rising interest rates, continued inflation and lending pressures, Commerce embraced the role of trusted financial partner to our consumer customers, providing advice and solutions for both short-term needs and long-term financial well-being.

We introduced new products and enhancements to optimize the customer experience. We provided customers with easier and more efficient ways to grow their savings through automated tools. At the same time, we offered options to help customers manage their short-term liquidity. We also grew our Commerce**Premier** customer base, delivering an elevated experience that rewards customers for their relationship with Commerce.

Over the course of the year, we continued to invest in our digital platforms, releasing 23 updates across online banking and mobile channels. We delivered new real-time payment capabilities, including transitioning to the Zelle® platform. We invested in our real estate lending systems for origination and servicing that will bring added flexibility, features and scale in 2024. Additionally, we expanded the Commerce Bank CONNECT® app experience to provide customers a way to make personal connections with our bankers anytime and anywhere through their smartphone.

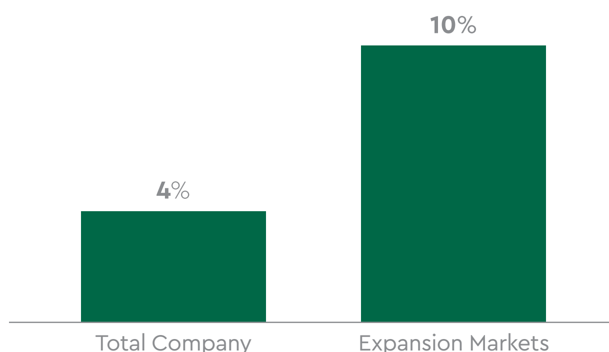
Our relationships with customers continue to be strong. In 2023, we maintained a primary banking relationship with more than 76% of our retail banking customers, marking the fifth consecutive year we have held primacy at this level. For four years in a row, we exceeded our overall customer experience goal, reflecting our commitment to understanding customer needs and connecting them with relevant solutions. Customer feedback across all channels enables us to drive actions to improve.

As we move into 2024, we are committed to sustaining a best-in-class experience for our customers and prospects.

### Commercial Banking and Commercial Payments

Our commercial banking and payments teams support 12,500 clients nationally, helping their businesses thrive. We provide access to funding which allows our customers to capitalize upon new opportunities, innovate, and maximize cash flow while managing risk.

Expansion Market Loan Growth
5-year CAGR



Commercial loan balances grew to $11 billion in 2023. The St. Louis and Kansas City markets both achieved double-digit average loan growth, while our expansion markets continued to make sizeable contributions with average loan balances exceeding $3 billion in aggregate. Our loan growth was diversified across three major loan categories: business, construction and commercial real estate. The strength of our commercial borrowers' credit quality remains noteworthy as we saw net loan charge-offs of only $3 million in 2023, or .03% of average commercial loans.

The strong relationships with our treasury services clients continued to serve us well throughout 2023. While we anticipated some decline in deposit balances, we ended the year over budget and in a strong position at $10 billion. Payments solutions drove an increase of 9% in commercial fee income for the year, with treasury management, accounts payable and card-based services experiencing the highest levels of growth. Healthcare remains a standout vertical for the bank with RemitConnect®, our payments processing automation solution, and HSF®, our patient financing solution, both continuing to be well-received by healthcare providers across the U.S.

In 2023, Commerce launched a new integrated receivables product capable of connecting with many of the most popular enterprise resource planning systems on the market. This suite of tools automates manual accounts receivable tasks into streamlined processes. The solution offers a unified business process encompassing credit, electronic billing, payments processing, collections and beyond.

Our teams made significant enhancements to our PreferPay® solution, extending its functionality to new verticals. Originally developed to support the insurance industry, PreferPay® is a highly capable solution that allows customers to send business-to-consumer (or employee) payments quickly and more efficiently. With its recent enhancements, PreferPay® is now used by a growing number of customers in industries such as healthcare, government, property management and retail, among others.

Instant payments also remained a strong focus throughout the year as we participated in the RTP® network from The Clearing House. This payment rail allows customers to receive instant payments from the RTP network at any time, with approximately 480 financial institutions connected to the system.

In 2023, Commerce Bank formalized its acquisition of L.J. Hart & Company, a leading municipal bond underwriter and advisory firm. This addition enhances offerings for our capital markets customers by adding proprietary municipal products and has become a key part of our growing institutional fixed-income business.

At the core of our strong commercial banking franchise is our talented team — equipped with very compelling tools and products, and focused on developing long-term, well-rounded banking relationships with our customers.

## Wealth Management

Commerce's wealth management business, operating under the umbrella of Commerce Trust, is a core piece of the bank's overall operating model, a business line that is highly complementary to the other parts of the bank and one that offers excellent — and relatively steady — risk-adjusted returns.

The recovery in financial asset prices over the course of 2023 was a positive tailwind for Commerce Trust, as asset management revenues grew alongside the market. Asset attrition in 2023 was negligible, and new asset management sales remained strong. The net effect of these trends pushed total assets under management over $41 billion. Total assets under administration ended the year at $69 billion.

Building trusted relationships with our clients — individuals, families and institutions — continues to be our primary focus at Commerce Trust. Our steady commitment to engaging and deepening existing client relationships is reflected in our overall client satisfaction rating (9.4 out of 10) and client asset retention rate of 95%.

Entering the new year, we are poised for strategic growth, having launched a new wealth office in Naples, Florida, while continuing to build out our teams in Houston and Dallas, Texas. In these new markets, we are able to follow — and better serve — a number of our existing clients, and we are working collaboratively with our commercial teams to bring new clients into the fold.

With the accelerating trend of a significant wave of generational wealth transfer in view, we believe our holistic approach to wealth management effectively positions us to offer customized advice along with lending and portfolio solutions to the next generation of high-net-worth clientele, and we are optimistic about the long-term growth prospects for Commerce Trust.

## Continuous Improvement and Innovation

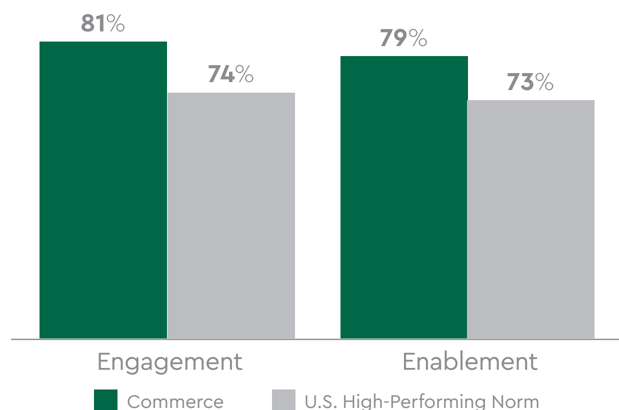
Commerce's success over time relies on a careful balance of continuous improvement and innovation. Even slight improvements, when achieved consistently over time, can yield tremendous results and can help ensure profitability levels that allow for investment in innovation and growth.

Commerce delivered improvements, large and small, over the course of 2023. Our team invested heavily to enhance our customers' digital banking experience, encompassing everything from routine transactions to advanced financial planning. We updated functionality to provide increased convenience and efficiency. We improved internal processes, adopting tools to streamline and distribute work among our team. Our ongoing investment in customer relationship management allowed our teams to stay close to customers, communicating regularly and in targeted, meaningful ways. Our teams continue to embrace hybrid ways of working as we enhance technology and optimize workspaces to boost flexibility and foster collaboration.

These improvements would not be possible without a talented and highly engaged team. Some of our most important initiatives are focused on enhancing the experience of our team members and growing their careers at Commerce. Our 2023 team member engagement survey results showed that the percentage of effective employees, or those that identify as both engaged and enabled to do their job, is significantly above the U.S. high-performing company norm, a high bar for excellence. According to our survey administrator Korn Ferry, 95% of our survey results were on par or above the norm for high-performing organizations across the country.

### Effective Teams Are Engaged and Enabled

Based on 2023 Team Member Survey by Korn Ferry



Our high scores and outperformance relative to external benchmarks is a testament to our strong teamwork and culture. Affirming these results, in 2023 *Forbes* named Commerce to its list of America's Best Midsize Employers for the sixth consecutive year, and Commerce was also included on *Newsweek*'s inaugural list of America's Greatest Workplaces.

## Built for This: Resilient in Challenging Times

It has been an eventful year, but Commerce has proven to be a resilient company — navigating challenges, delivering strong results, and thriving despite the challenges at hand. While the absence of a recession in 2023 was a welcome relief and a positive for credit quality, the economy continues to face the challenges of higher interest rates, lingering inflation and tightening credit availability.

Regardless of economic fluctuations, Commerce remains well-positioned for sustained growth and long-term success. We have a balance sheet and a risk profile that are built for challenging times. Our liquidity and capital levels are robust, credit performance of our loan portfolio continues to be strong, and our funding costs remain among the best in the industry. We have a highly engaged team and a strong culture that will allow us to adjust course as we navigate the road ahead. We are poised to leverage these strengths to capitalize on new opportunities for growth and innovation.

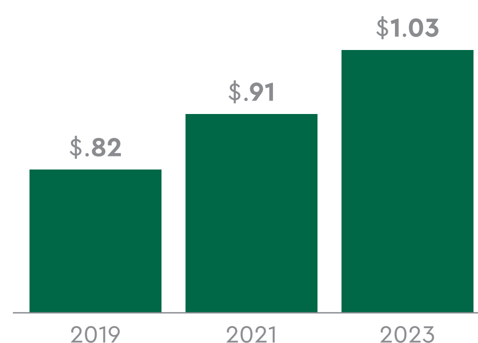
While 2023 posed its share of challenges, it was also a year of achievement and progress. The Commerce team has shown that it is "Built for This," demonstrating resilience and agility in challenging times. Thank you for the continued trust and support you place in our team. I look forward to a promising and successful 2024.

# Performance Highlights

- Commerce reported earnings per share of $3.64, compared to $3.67 in 2022. Return on average assets totaled 1.49% in 2023 and return on average equity was 17.9%. This compares favorably to the top 50 bank median of 1.04% for return on average assets and 10.3% for return on average equity.
- Net income attributable to Commerce Bancshares, Inc. totaled $477 million in 2023, compared to $488 million in 2022.
- In 2023, Commerce paid a regular cash dividend of $1.03 per share (restated) on common shares, representing a 7% increase over 2022. In February 2024, Commerce increased its regular cash dividend 5%, marking the 56th consecutive year of cash dividend increases. Also in 2023, for the 30th year in row, a 5% stock dividend was distributed.
- Total stockholders' equity grew $479 million in 2023 to $2.9 billion, and our Tier I common risk-based capital ratio remained strong, ending 2023 at 15.3%.
- Period-end total loans grew $902 million, or 6%, in 2023, including growth of $357 million, or 6%, in business loans and $312 million, or 9%, in business real estate loans.
- Total revenue, comprised of net interest income and non-interest income, increased $82 million in 2023 to a record level of $1.6 billion.
- Net interest income grew $56 million, or 6%, compared to 2022, mostly driven by higher average rates earned on loans. The Federal Reserve increased rates four times in 2023, leading to higher average rates earned on loans.
- Non-interest income grew $27 million, or 5%, in 2023 to a record $573 million. This increase was driven mostly by bank card transaction fees, which grew $15 million, or 9%, compared to 2022.
- The net yield on interest-earning assets on a fully taxable equivalent basis increased 31 basis points in 2023 to 3.16%.
- The efficiency ratio was 59.2% in 2023.
- Credit quality remained strong. Net loan charge-offs totaled $31 million, or .19% of average loans in 2023, and the non-accrual loans to total loans ratio was .04% at December 31, 2023.
- In 2023, Commerce Bank was recognized on *Forbes*' World's Best Banks list for the fifth consecutive year.

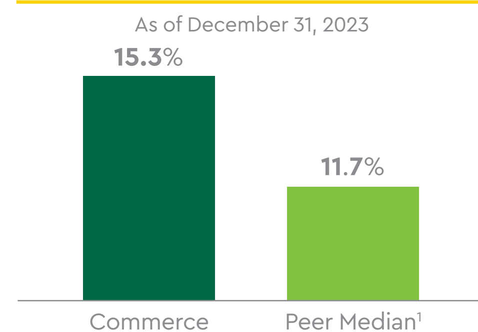
1 Peer median information based on availability. As of February 7, 2024, information for 7 of 19 peers had been reported.
2 Peer and Large Bank median information based on availability. As of February 7, 2024, information for 17 of 19 peers and 9 of 10 large banks had been reported.

## Cash Dividends per Common Share

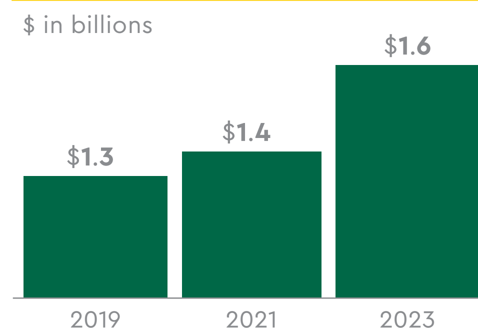



## Tier I Common Risk-Based Capital Ratio

As of December 31, 2023

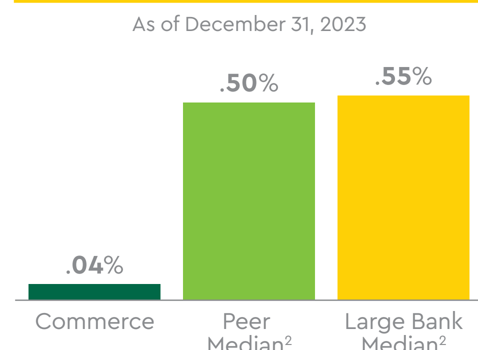


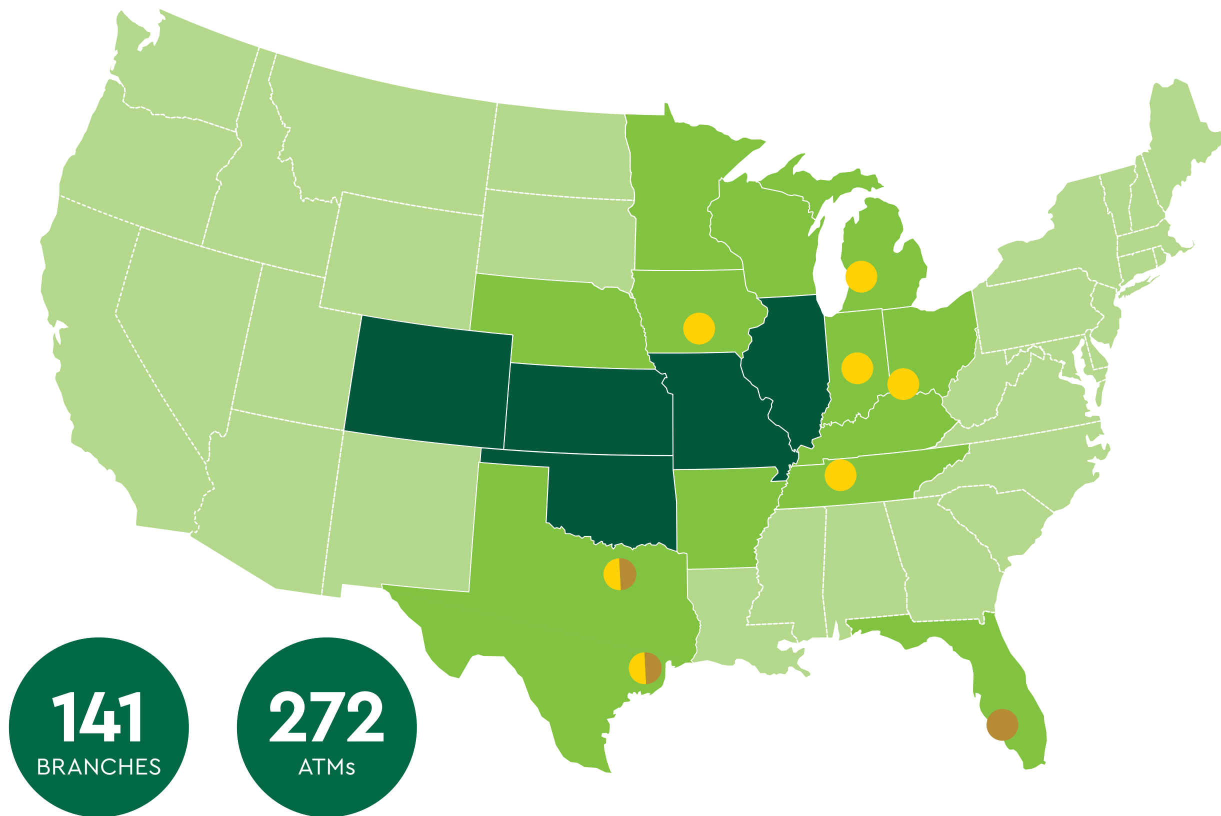

## Total Revenue




## Non-Accrual Loans to Total Loans

As of December 31, 2023






## Core Banking Footprint

COMMERCIAL, CONSUMER, WEALTH MANAGEMENT

St. Louis • Kansas City • Springfield
Central Missouri • Central Illinois • Wichita
Tulsa • Oklahoma City • Denver

COMMERCIAL OFFICES

Cincinnati • Nashville • Dallas • Des Moines
Indianapolis • Grand Rapids • Houston[1]

WEALTH MANAGEMENT OFFICES

Dallas • Houston[1] • Naples[1]

U.S. PRESENCE

Extended Market Area

Commercial Payments Services
Offered in 48 states across the U.S.

1 Locations outside the core banking footprint that accept deposits

# Officers

**David W. Kemper**
Executive Chairman

**John W. Kemper**
President
and Chief Executive Officer

**Charles G. Kim**
Executive Vice President
and Chief Financial Officer

**Kevin G. Barth**
Executive Vice President

**John K. Handy**
Executive Vice President

**Robert S. Holmes**
Executive Vice President

**David L. Orf**
Executive Vice President
and Chief Credit Officer

**Paula S. Petersen**
Executive Vice President

**Derrick R. Brooks**
Senior Vice President

**Richard W. Heise**
Senior Vice President

**Kim L. Jakovich**
Senior Vice President

**Patricia R. Kellerhals**
Senior Vice President

**Douglas D. Neff**
Senior Vice President

**Thomas J. Noack**
Senior Vice President

**David L. Roller**
Senior Vice President

**Margaret M. Rowe**
Vice President,
Secretary and General Counsel

**Jana L. Webb**
Vice President
and Chief Risk Officer

**Paul A. Steiner**
Controller
and Chief Accounting Officer

**Aaron C. Meinert**
Auditor

Sources: S&P Global Market Intelligence, and company reports and filings as of December 31, 2023
1 Regulated U.S. depositories, which includes commercial banks, bank holding companies and credit unions, as of September 30, 2023
2 Commerce is two ratings above the U.S. banking industry median rating of baa1, "Moody's Sector Profile: Banks," November 30, 2023
3 Based on the top 50 publicly traded U.S. banks by total assets, as of September 30, 2023

# Directors

**Terry D. Bassham**
Retired
Chief Executive Officer
and President
Evergy, Inc.

**Blackford F. Brauer***
President
Hunter Engineering Company

**W. Kyle Chapman**
President and Board Member
Barry-Wehmiller Group, Inc.

**Karen L. Daniel***
Retired
Chief Financial Officer
and Executive Director
Black & Veatch

**Earl H. Devanny, III**
Retired
Chief Executive Officer
TractManager

**June McAllister Fowler**
Retired
Senior Vice President
Communications, Marketing and
Public Affairs of BJC HealthCare

**David W. Kemper**
Executive Chairman
Commerce Bancshares, Inc.

**John W. Kemper**
President
and Chief Executive Officer
Commerce Bancshares, Inc.

**Jonathan M. Kemper**
Chairman Emeritus
Commerce Bank
Kansas City Region

**Benjamin F. Rassieur, III***
President
Paulo Products Company

**Todd R. Schnuck***
Chairman of the Board
and Chief Executive Officer
Schnuck Markets, Inc.

**Christine B. Taylor**
President and
Chief Executive Officer
Enterprise Mobility

**Kimberly G. Walker***
Retired
Chief Investment Officer
Washington University
in St. Louis

*Audit and Risk Committee Member

# Community Advisors

Our Community Advisors help us understand the unique needs and challenges of our customers and communities. They are business owners, educators, professionals and civic leaders who take on the challenges of their organizations and communities every day. We're continually impressed by their hard work and grateful to them for sharing their valuable insights. It is because of our Community Advisors in each of our markets that we're able to say, "Challenge Accepted.®"

## Missouri

### CAPE GIRARDEAU

**Nick Burger**
Commerce Bank

**Tim Coad**
Coad Chevrolet and Coad Toyota

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Mike Kasten**
Beef Alliance

**Adam Kidd**
Kidd's Gas & Convenience Store

**Frank Kinder**
Retired, Red Letter Communications

**Steve Sowers**
Commerce Bank

**Susan Layton Tomlin**
Layton & Southard, LLC

**Allen Toole**
Schaefer's Electrical Enclosures

**Ben Traxel**
Tenmile Companies

### COLUMBIA

**Dan Atwill**
Boone County Commission

**Botswana T. Blackburn**
University of Missouri

**Dr. Holly Bondurant**
Tiger Pediatrics

**Sarah Dubbert**
Commerce Bank

**Mark Fenner**
Murray's Restaurant

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Robert S. Holmes**
Commerce Bancshares, Inc.
Commerce Bank

**Douglas D. Neff**
Commerce Bancshares, Inc.
Commerce Bank

**Steve Sowers**
Commerce Bank

**David Townsend**
Fidelity National Financial

**Andy Waters**
AW Holdings, LLC

**Robin Wenneker**
CPW Partnership

**Dave Whelan**
Commerce Bank

**Dr. John S. Williams**
Retired, Horton Animal Hospital

### MEXICO

**Chad Bruns**
Chad Bruns Farms

**George M. Huffman**
Pearl Motor Company

**Robby Miller**
Mexico Heating Company

**Gina Raines**
Commerce Bank

**Steve Sowers**
Commerce Bank

**Larry Webber**
Webber Pharmacy

### MOBERLY

**Robert Gaines**
STLF Trucking/STLF Diesel Repair

**Dr. Clifford J. Miller**
Green Hills Veterinary Clinic

**Todd Norton**
Commerce Bank

**Susan J. Spencer**
Moberly Area Community College

**Steve Sowers**
Commerce Bank

### MONITEAU COUNTY

**Philip Burger**
Burgers' Smokehouse

**Brad Clay**
Commerce Bank

**Shayne W. Healea**
Cornell Farrow Healea, LLC

**Bart Jurgensmeyer**
Jurgensmeyer Farms, Inc.

**Dr. Mike Lutz**
Mike Lutz, DDS

**Steve Sowers**
Commerce Bank

**Casey Wasser**
Missouri Soybean Association

### HANNIBAL / QUINCY

**C. Todd Ahrens**
Hannibal Regional Healthcare System

**David M. Bleigh**
Bleigh Construction Company
Bleigh Ready Mix Company

**Darin D. Redd**
Commerce Bank

**Michael C. Riesenbeck**
Golden Eagle Distributing

**Steve Sowers**
Commerce Bank

**Joshua J. Williams**
HRW Companies, LLC

### KANSAS CITY

**Ali H. Armistead**
Alaris Capital, LLC

**Kevin G. Barth**
Commerce Bancshares, Inc.
Commerce Bank

**Rosana Privitera Biondo**
Mark One Electric Co., Inc.

**Clay C. Blair, III**
Clay Blair Services Corp.

**Rob Bratcher**
Commerce Bank

**Timothy S. Dunn**
J.E. Dunn Construction Co., Inc.

**Jon D. Ellis**
LSEG, LLC

**Jonathan M. Kemper**
Commerce Bancshares, Inc.
Commerce Bank

**Michael P. McCoy**
Intercontinental Engineering-Manufacturing Corporation

**Stephen G. Mos**
Central States Beverage Company

**Laura M. Perin**
Labconco Corp.

**Jeanette Prenger**
ECCO Select

**Jay Reardon**
Commerce Bank

**Ora H. Reynolds**
Hunt Midwest Enterprises, Inc.

**Dr. Nelson R. Sabates**
Sabates Eye Centers

**Meyer J. Sosland**
Sosland Publishing Company

**Nick Warren**
Commerce Bank

**Debbie Wilkerson**
Greater Kansas City Community Foundation

**Thomas R. Willard**
Commerce Trust
Tower Properties Company

### POPLAR BLUFF

**Edward L. Baker**
Edward L. Baker Enterprises

**Larry Greenwall**
Greenwall Vending Co.

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Nicole Neidenberg**
Poplar Bluff Regional Medical Center

**Kenny Rowland**
Commerce Bank

**Steve Sowers**
Commerce Bank

**Blake Thomas**
Baker Implement Company

### ST. JOSEPH

**Mark Barkman**
Commerce Trust

**Brett Carolus**
Hillyard, Inc.

**Brendon Clark**
Commerce Bank

**James H. Counts**
Morton, Reed, Counts, Briggs & Robb, LLC

**Pat Dillon**
Mosaic Life Care

**Todd Meierhoffer**
Meierhoffer Funeral Home & Crematory

**Patrick Modlin**
Bottlecage Investments, LLC

**Dr. Scott Murphy**
Murphy-Watson-Burr Eye Center

**Jay Reardon**
Commerce Bank

**Matt Robertson**
CPA

**Amy Ryan**
Commerce Bank

**Judy Sabbert**
Retired, Mosaic Life Care Foundation

**Rick Schultz**
RS Electric

**Bill Severn**
NPG, Inc.

**Heidi Walker**
CBIZ Insurance Services

**Julie Walker**
Commerce Trust

### ST. LOUIS METRO

**Kwofe A. Coleman**
The Muny

**Charles L. Drury, Jr.**
Drury Hotels Company, LLC

**Frederick D. Forshaw, Sr.**
Forshaw of St. Louis

**James G. Forsyth, III**
Moto, Inc.

**David S. Grossman**
Private Investor

**Tom Harmon**
Commerce Bank

**Robert S. Holmes**
Commerce Bancshares, Inc.
Commerce Bank

**Kristin Humes**
Tacony Corporation

**Donald A. Jubel**
Spartan Light Metal Products

**David W. Kemper**
Commerce Bancshares, Inc.

**John W. Kemper**
Commerce Bancshares, Inc.
Commerce Bank

**Alois J. Koller, III**
Koller Enterprises, Inc.

**Kristopher G. Kosup**
Buckeye International, Inc.

**Alaina Maciá**
MTM

**Arteveld J. McCoy II**
SAGES LLC

**James B. Morgan**
Subsurface Constructors, Inc.

**Chrissy Nardini**
American Metals Supply Co., Inc.

**Victor L. Richey, Jr.**
ESCO Technologies, Inc.

**James E. Schiele**
Consultant

**Paul J. Shaughnessy**
BSI Constructors, Inc.

**Thomas H. Stillman**
Summit Distributing

**Andrew Thome**
Marsh McLennan Agency

**Gregory Twardowski**
Private Investor

**Kelvin R. Westbrook**
KRW Advisors, LLC

### ST. LOUIS METRO EAST

**Hamilton Callison**
Breakthru Beverage Group

**Darren L. Clay**
Clay Piping

**Harlan Ferry, Jr.**
Retired, Commerce Bank

**Matthew Gomric**
Commerce Bank

**Jared Katt**
Chelar Tool & Die, Inc.

**Mike Marchal**
Holland Construction Service, Inc.

**Robert McClellan**
Retired, Hortica

**James Rauckman**
National Safety Apparel

**Dr. James T. Rosborg**
McKendree University

**Richard Sauget Jr.**
Mayor of Sauget

**Jack Schmitt**
Jack Schmitt Family of Dealerships

**Kurt Schroeder**
Greensfelder, Hemker & Gale, P.C.

**Joe Wiley**
Quest Management Consultants

### ST. LOUIS BUSINESS BANKING

**Paul J. Berra III**
Missouri Terrazzo

**Kevin Bray**
St. Charles Community College

**Emily B. Bremer**
The Bremer Group, LLC

**Richard K. Brunk**
Attorney at Law

**James N. Foster**
McMahon Berger

**Lou Helmsing**
Craftsmen Trailer, LLC

**J.L. (Juggie) Hinduja**
Sinclair Industries, Inc.

**Susan Kalist**
Commerce Bank

**Dr. Barbara Kavalier**
St. Charles Community College

**Greg Kendall**
Commerce Bank

**Stuart Krawll**
Beam of St. Louis, Inc.

**Patrick N. Lawlor**
Lawlor Corporation

**Scott Lively**
CliftonLarsonAllen LLP

**Stephen Mattis**
Retired, Allied Industrial Equipment Corporation

**Lisa D. McLaughlin**
MGD Law, LLC

**McGraw Milhaven**
KTRS

**Duane A. Mueller**
Cissell Mueller Construction Company

**Elizabeth Powers**
Powers Insurance

### SPRINGFIELD

**Christina Angle**
The Erlen Group

**Dr. Tyrone Bledsoe, Sr.**
Student African American Brotherhood

**Kimberly Chaffin**
Hogan Land Title Company

**Brian Esther**
Retired, Commerce Bank

**James P. Ferguson**
Heart of America Beverage Co.

**Jared Gottman**
Commerce Bank

**Charles R. Greene**
American Sportsman Holdings Co.

**Dr. Molly Greenwade**
CoxHealth Systems

**Robert A. Hammerschmidt, Jr.**
Retired, Commerce Bank

**Dr. Hal L. Higdon**
Ozarks Technical Community College

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Robert S. Holmes**
Commerce Bancshares, Inc.
Commerce Bank

**Craig Lehman**
Shelter Insurance Agency

**Sherry Lynch**
Commerce Bank

**James F. Moore**
Retired, American Products

**Robert Moreland**
More-Land Realty, LLC

**David Murray**
R.B. Murray Company

**Douglas D. Neff**
Commerce Bancshares, Inc.
Commerce Bank

**Keith Noble**
Commerce Bank

**Richard Ollis**
Ollis/Akers/Arney Insurance & Business Advisors

**Doug Russell**
The Durham Company

**Rusty Shadel**
Shadel's Colonial Chapel

**Steve Sowers**
Commerce Bank

**David Waugh**
Independent Stave Company

### JOPLIN/PITTSBURG

**Donald Cupps**
Ellis, Cupps & Cole

**Adam Endicott**
Unique Metal Fabrication, Inc.

**Kathleen M. Flannery**
Pittsburg State University

**Jay Hatfield**
Jay Hatfield Chevrolet

**Jerrod Hogan**
Own Inc.

**Wesley C. Houser**
Retired, Commerce Bank

**David C. Humphreys**
TAMKO Building Products, Inc.

**Phil Hutchens**
Hutchens Construction

**Don Kirk**
H & K Camper Sales, Inc.

**Barbara J. Majzoub**
Yorktown Properties

**Eric Schnelle**
S & H Farm Supply, Inc.

**Lane R. Shumaker**
Battery Outfitters, Inc.

**Steve W. Sloan**
Midwest Minerals, Inc.

**Steve Sowers**
Commerce Bank

**Brian Sutton**
Commerce Bank

**Clive Veri**
Commerce Bank

**Wendell L. Wilkinson**
Retired, Commerce Bank

## Kansas

### BUTLER COUNTY (EL DORADO)

**Monte A. Cook**
Commerce Bank

**Vince Haines**
Gravity :: Works Architecture

**Ryan T. Murry**
ICI

**Jeremy Sundgren**
Sundgren Realty, Inc.

**Mark Utech**
Commerce Bank

### GARDEN CITY

**Monte A. Cook**
Commerce Bank

**Richard Harp**
Commerce Bank

**John Koons**
Commerce Bank

**Andy Linscott**
Hi Plains Feed, LLC

**Patrick Rooney**
Rooney Farms

**Tamara Roth**
Allred & Company, CPA's, Inc.

**Liz Sosa**
The Corner on Main

**Pat Sullivan**
Retired, Sullivan Analytical Service, Inc.

### HAYS

**D.G. Bickle, Jr.**
Warehouse, Inc.

**Monte A. Cook**
Commerce Bank

**Brian Dewitt**
Adams Brown CPA's

**Marty Patterson**
Rome Corporation

**Kevin Royer**
Midland Marketing Cooperative

**Shane Smith**
Commerce Bank

### LAWRENCE

**Rob Gillespie**
Commerce Bank

**Michele Hammann**
SSC CPAs + Advisors

**Russ Johnson**
LMH Health

**Eugene W. Meyer**
Executive in Residence
Masters HealthCare Administration, KUMC

**Allison Vance Moore**
Colliers International

**Martin W. Moore**
Advanco, Inc.

**Kevin J. O'Malley**
O'Malley Beverage of Kansas, Inc.

**Jay Reardon**
Commerce Bank

**Dan C. Simons**
The World Company

**Michael Treanor**
CT Design + Development

LEAVENWORTH

**Arlen Briggs**
Armed Forces Insurance Exchange

**Jeffrey Chalabi**
Central Bag Company

**Mark Denney**
J.F. Denney Plumbing & Heating

**Jeremy Greenamyre**
Greenamyre Rentals

**Eric Hoins**
Young Sign Company, Inc.

**Matt Kaaz**
Leavenworth Excavating & Equipment Company, Inc.

**Lawrence W. O'Donnell, Jr.**
Lawrence W. O'Donnell, Jr., CPA Chartered

**Trenton Peter**
Trenton Peter Agency LLC
American Family Insurance

**Bill Petrie**
Commerce Bank

**Jay Reardon**
Commerce Bank

MANHATTAN

**Mark Bachamp**
Olsson Associates

**Monte A. Cook**
Commerce Bank

**Shawn Drew**
Commerce Bank

**Neal Helmick**
Griffith Lumber Co.

**Dr. David Pauls**
Surgical Associates

**Tammi Stewart**
Charlson & Wilson Real Estate Title & Escrow

WICHITA

**Ray L. Connell**
Connell & Connell

**Monte A. Cook**
Commerce Bank

**Thomas E. Dondlinger**
Dondlinger Construction

**Craig Duerksen**
Commerce Bank

**Robert S. Holmes**
Commerce Bancshares, Inc.
Commerce Bank

**Ronald W. Holt**
Retired, Sedgwick County

**Eric Ireland**
Commerce Bank

**Paul D. Jackson**
Vantage Point Properties, Inc.

**Kristi Krok**
Commerce Bank

**Brett Mattison**
Decker & Mattison Co., Inc.

**Douglas D. Neff**
Commerce Bancshares, Inc.
Commerce Bank

**Marilyn B. Pauly**
Retired, Commerce Bank

**John Rolfe**
President/CEO
Wichita Chamber of Commerce

**Barry L. Schwan**
House of Schwan, Inc.

**David White**
Retired, Alloy Architecture

## Illinois

BLOOMINGTON-NORMAL

**Mary Bennett Henrichs**
Integrity Technology Solutions

**Larry H. Dietz**
Retired, Illinois State University

**Brent A. Eichelberger**
Commerce Bank

**Neil Finlen**
Farnsworth Group, Inc.

**Ron Greene**
Afni, Inc.

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Robert S. Holmes**
Commerce Bancshares, Inc.
Commerce Bank

**Colleen Kannaday**
Carle BroMenn Medical Center

**Nick Kemp**
Vogo Cabinets

**Douglas D. Neff**
Commerce Bancshares, Inc.
Commerce Bank

**William J. Phillips IV**
Commerce Bank

**Jay Reece**
Jay D. Reece, P.C. Attorney at Law

**Alan Sender**
Retired, Chestnut Health Systems

CHAMPAIGN-URBANA

**Mark Arends**
Arends Hogan Walker, LLC

**Matt Deering**
Meyer Capel

**Brent A. Eichelberger**
Commerce Bank

**Donna Greene**
University of Illinois Foundation

**Tim Harrington**
Coldwell Banker Commercial
Devonshire Realty

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Kim Martin**
Kim Martin Consulting

**William J. Phillips IV**
Commerce Bank

**Jeff Troxell**
Commerce Bank

PEORIA

**Bruce L. Alkire**
Coldwell Banker Commercial
Devonshire Realty

**David W. Altorfer**
United Facilities, Inc.

**Royal J. Coulter**
Retired, GFL Environmental Inc.

**Brent A. Eichelberger**
Commerce Bank

**Gregg E. Hollabaugh**
Commerce Bancshares, Inc.

**Robert S. Holmes**
Commerce Bancshares, Inc.
Commerce Bank

**John P. Kaiser**
RSM US, LLP

**Dr. James W. Maxey**
OSF Orthopedics

**Douglas D. Neff**
Commerce Bancshares, Inc.
Commerce Bank

**Becky Rossman**
Veteran CEO Consulting

**Leanne Skuse**
River City Construction, LLC

## Oklahoma

TULSA

**Jack Allen**
HUB International Limited

**R. Scott Case**
Case & Associates, Inc.

**Wade Edmundson**
Retired, Commerce Bank

**Dr. John R. Frame**
Breast Health Specialists of Oklahoma

**Gip Gibson**
Commerce Bank

**Kent J. Harrell**
Harrell Energy

**Ed Keller**
Titan Properties

**Teresa L. Knox**
Hickory House Properties, LLC

**Ken Lackey**
The NORDAM Group, Inc.

**Tom E. Maxwell**
Retired, Flintco, LLC

**John Neas**
Neas Investments

**Shannon O'Doherty**
Commerce Bank

**Carol E. Owens**
Retired, Commerce Bank

**John Peters**
Adwon Properties

**Tracy A. Poole**
FortySix Venture Capital LLC

**Stephanie Regan**
AAON, Inc.

**Dr. Andy Revelis**
Tulsa Pain Consultants

**Daryl Woodard**
SageNet

OKLAHOMA CITY

**Gary K. Bridwell**
Orange Power Group

**Steven M. Brown**
Red Rock Distributing Co.

**James R. Cleaver**
Midsouth Financial Company

**Clay Cockrill**
SiteAware

**Kevin Cooper**
Commerce Bank

**Mark A. Fischer**
Fischer Investments

**Zane L. Fleming**
Eagle Drilling Fluids

**William M. McDonald**
Triad Energy

**Shannon O'Doherty**
Commerce Bank

**Vincent Orza**
Retired, Family Broadcasting Corporation

**Kathy Potts**
Rees Associates, Inc.

**Ethan Slavin**
Creek Commercial Real Estate

**Jay Soulek**
Northwest Companies

**Joseph C. Warren**
Cimarron Production

## Colorado

DENVER

**Robert L. Cohen**
The IMA Financial Group, Inc.

**Joseph Freund, Jr.**
Running Creek Ranch

**R. Allan Fries**
i2 Construction, LLP

**Darren Lemkau**
Commerce Bank

**James C. Lewien**
Retired, Commerce Bank

**Alek Orloff**
Frontier Waste Solutions

**David Schunk**
Volunteers of America, Colorado Branch

**Olivia Thompson**
Retired, AlloSource

**Jason Zickerman**
The Alternative Board

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# FORM 10-K

(Mark One)

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

For the Fiscal Year Ended December 31, 2023

OR

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

For the transition period from to

Commission File No. 001-36502

**COMMERCE BANCSHARES, INC.**

(Exact name of registrant as specified in its charter)

| Missouri | 43-0889454 |
|---|---|
| (State of Incorporation) | (IRS Employer Identification No.) |

| 1000 Walnut<br>Kansas City, MO | 64106 |
|---|---|
| (Address of principal executive offices) | (Zip Code) |

Registrant's telephone number, including area code: **(816) 234-2000**

**Securities registered pursuant to Section 12(b) of the Act:**

| Title of class | Trading symbol(s) | Name of exchange on which registered |
|---|---|---|
| $5 Par Value Common Stock | CBSH | NASDAQ Global Select Market |

**Securities registered pursuant to Section 12(g) of the Act:** NONE

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☑ No ☐

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

Large accelerated filer ☑ Accelerated Filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☑

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

As of June 30, 2023, the aggregate market value of the voting stock held by non-affiliates of the Registrant was approximately $5,672,000,000.

As of February 21, 2024, there were 129,877,146 shares of Registrant’s $5 Par Value Common Stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Registrant’s definitive proxy statement for its 2024 annual meeting of shareholders, which will be filed within 120 days of December 31, 2023, are incorporated by reference into Part III of this Report.

**Commerce Bancshares, Inc.**

**Form 10-K**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# PART I

## Item 1. BUSINESS

### General

Commerce Bancshares, Inc., a bank holding company as defined in the Bank Holding Company Act of 1956, as amended, was incorporated under the laws of Missouri on August 4, 1966. Through a second tier wholly-owned bank holding company, it owns all the outstanding capital stock of Commerce Bank (the “Bank”), which is headquartered in Missouri. The Bank engages in general banking business, providing a broad range of retail, mortgage banking, corporate, investment, trust, and asset management products and services to individuals and businesses. Commerce Bancshares, Inc. also owns, directly or through the Bank, various non-banking subsidiaries. Their activities include private equity investment, securities brokerage, insurance agency, specialty lending, and leasing activities. A list of Commerce Bancshares, Inc.'s subsidiaries is included as Exhibit 21.

Commerce Bancshares, Inc. and its subsidiaries (collectively, the "Company") is one of the nation’s top 50 bank holding companies, based on asset size. At December 31, 2023, the Company had consolidated assets of $31.7 billion, loans of $17.2 billion, deposits of $25.4 billion, and equity of $3.0 billion. The Company's principal markets, which are served by 141 branch facilities, are located throughout Missouri, Kansas, and central Illinois, as well as Tulsa and Oklahoma City, Oklahoma and Denver, Colorado. Its two largest markets are St. Louis and Kansas City, which serve as central hubs for the Company. The Company also has offices in Dallas, Houston, Cincinnati, Nashville, Des Moines, Indianapolis, Grand Rapids, and Naples that support customers in its commercial and/or wealth segments and operates a commercial payments business with sales representatives covering the continental United States of America (“U.S.”).

The Company’s goal is to be the preferred provider of financial services in its communities, based on strong customer relationships built through providing top quality service with a strong risk management culture, and employing a strong balance sheet with strong capital levels. The Company operates under a super-community banking format which incorporates large bank product offerings coupled with deep local market knowledge, augmented by experienced, centralized support in select, critical areas. The Company’s focus on local markets is supported by an experienced team of bankers assigned to each market coupled with industry specialists. The Company also uses regional advisory boards, comprised of local business leaders, professionals and other community representatives, who assist the Company in responding to local banking needs. In addition to this local market, community-based focus, the Company offers sophisticated financial products usually only available at larger financial institutions.

The markets the Bank serves are mainly located in the lower Midwest, which provides natural sites for production and distribution facilities and serve as transportation hubs. The economy has been well-diversified in these markets with many major industries represented, including telecommunications, automobile, technology, financial services, aircraft and general manufacturing, health care, numerous service industries, and food and agricultural production. The personal real estate lending operations of the Bank are predominantly centered in its principal markets.

From time to time, the Company evaluates the potential acquisition of various financial institutions. In addition, the Company regularly considers the purchase and disposition of real estate assets and branch locations. The Company seeks merger or acquisition partners that are culturally similar, have experienced management and either possess significant market presence or have potential for improved profitability through financial management, economies of scale and expanded services. In the second quarter of 2023, the Company acquired L.J. Hart & Company, a municipal bond underwriter and advisor.

### Employees and Human Capital

The Company employed 4,592 persons on a full-time basis and 136 persons on a part-time basis at December 31, 2023. None of the Company's employees are represented by collective bargaining agreements.

Attracting and retaining talented team members is key to the Company’s ability to execute its strategy and compete effectively. The Company values the unique combination of talents and experiences each team member contributes toward the Company’s success and strives to offer rewards that meet team members’ individual, evolving needs. Well-being is much more than a paycheck and that’s why the Company takes a comprehensive approach to Total Rewards, supporting team members’ physical well-being, financial well-being, and emotional well-being and career development. The Company’s financial well-being program includes a company-matching 401(k) plan and health savings accounts, educational and adoption assistance programs. Emotional well-being programs include paid time off, an employee assistance program (EAP) and company-paid membership to Care.com. Physical well-being is supported by the Company’s health, dental, vision, life and various other insurances, and a wellness program that incentivizes team members to live a healthy and balanced lifestyle. Career development is also a key component of the Company’s Total Rewards, and the Company has a variety of programs to support team members as they continue to grow within their current role or develop for their next role. Job shadowing, leadership

development programs, Aspiring Managers program, Managing at Commerce, competency assessments and education assistance are just a few of the ways the Company helps team members excel.

The Company believes inclusion builds stronger companies with better results and focuses its efforts around four key pillars: its workforce, its suppliers, its community and its customers. Internal teams continue to iterate to build plans for growth in all four areas. The Company continues to build a sense of belonging by engaging team members in a variety of Employee Resource Groups (ERGs) to support its diverse workforce. RISE (empowering women), EMERGE (connecting young professionals), VIBE (valuing multicultural perspectives), PRIDE (engaging the LGBTQIA+ community), SALUTE (supporting veterans), and ENABLE (supporting team members with disabilities and their caregivers) are important forums that provide team members opportunities to connect, learn, and encourage diverse perspectives. Participation in these ERGs is voluntary, and more than 40% of team members belong to one of these groups. The Company's longstanding approach of "doing what's right" continues to guide its focus on its team members and communities.

The Company's robust listening strategy allows it to stay connected to the team member experience to understand the evolving needs of its team members and to focus on what matters most to them. This strategy includes a balance of surveys, focus groups, and one on one conversations to allow for two-way conversation and provides trends over time by key demographics. The Company's goal is to create a sense of belonging which it believes is connected to high levels of engagement, enablement, retention, and results. The Company's intentional strategy has allowed it to maintain levels of engagement that have been recognized by its annual survey partner, Korn Ferry, for being "best-in-class" and to be recognized by Forbes as one of the best mid-sized employers.

**Competition**

The Company operates in the highly competitive environment of financial services. The Company regularly faces competition from banks, savings and loan associations, credit unions, brokerage companies, mortgage companies, insurance companies, trust companies, credit card companies, private equity firms, leasing companies, securities brokers and dealers, financial technology companies, e-commerce companies, investment management companies, and other companies providing financial services. Some of these competitors are not subject to the same regulatory restrictions as domestic banks and bank holding companies. Some other competitors are significantly larger than the Company, and therefore have greater economies of scale, greater financial resources, higher lending limits, and may offer products and services that the Company does not provide. The Company competes by providing a broad offering of products and services to support the needs of customers, matched with a strong commitment to customer service. The Company also competes based on quality, innovation, convenience, reputation, industry knowledge, and price. In its two largest markets, the Company has approximately 12% of the deposit market share in Kansas City and approximately 7% of the deposit market share in St. Louis.

**Operating Segments**

The Company is managed in three operating segments: Commercial, Consumer, and Wealth. The Commercial segment provides a full array of corporate lending, merchant and commercial bank card products, payment solutions, leasing, and international services, as well as business and government deposit, investment, institutional brokerage, and cash management services. The Consumer segment includes the retail branch network, consumer installment lending, personal mortgage banking, and consumer debit and credit bank card activities. The Wealth segment provides traditional trust and estate planning services, consumer brokerage services, and advisory and discretionary investment portfolio management services to both personal and institutional corporate customers. In 2023, the Commercial, Consumer and Wealth segments contributed 53%, 25% and 21% of total segment pre-tax income, respectively. See the section captioned "Operating Segments" in Item 7, Management's Discussion and Analysis, of this report and Note 13 to the consolidated financial statements for additional discussion on operating segments.

**Government Policies**

The Company's operations are affected by federal and state legislative changes, by the U.S. government, and by policies of various regulatory authorities, including those of the numerous states in which they operate. These include, for example, the statutory minimum legal lending rates, domestic monetary policies of the Board of Governors of the Federal Reserve System, U.S. fiscal policy, international currency regulations and monetary policies, the U.S. Patriot Act, and capital adequacy and liquidity constraints imposed by federal and state bank regulatory agencies.

**Supervision and Regulation**

The following information summarizes existing laws and regulations that materially affect the Company's operations. It does not discuss all provisions of these laws and regulations, and it does not include all laws and regulations that affect the Company presently or may affect the Company in the future.

*General*

The Company, as a bank holding company, is primarily regulated by the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956, as amended (BHC Act). Under the BHC Act, the Federal Reserve Board's prior approval is required in any case in which the Company proposes to acquire all or substantially all the assets of any bank, acquire direct or indirect ownership or control of more than 5% of the voting shares of any bank, or merge or consolidate with any other bank holding company. With certain exceptions, the BHC Act also prohibits the Company from acquiring direct or indirect ownership or control of more than 5% of any class of voting shares of any non-banking company. Under the BHC Act, the Company may not engage in any business other than managing and controlling banks or furnishing certain specified services to subsidiaries, and may not acquire voting control of non-banking companies unless the Federal Reserve Board determines such businesses and services to be closely related to banking. When reviewing bank acquisition applications for approval, the Federal Reserve Board considers, among other things, the Bank's record in meeting the credit needs of the communities it serves in accordance with the Community Reinvestment Act of 1977, as amended (CRA). Under the terms of the CRA, banks have a continuing obligation, consistent with safe and sound operation, to help meet the credit needs of their communities, including providing credit to individuals residing in low- and moderate-income areas. The Bank has a current CRA rating of "outstanding."

The Company is required to file various reports and additional information with the Federal Reserve Board. The Federal Reserve Board regularly performs examinations of the Company. The Bank is a state-chartered Federal Reserve member bank and is subject to regulation, supervision and examination by the Federal Reserve Bank of Kansas City and the Missouri Division of Finance. The Bank is also subject to regulation by the Federal Deposit Insurance Corporation (FDIC). In addition, there are numerous other federal and state laws and regulations which control the activities of the Company, including requirements and limitations relating to capital and reserve requirements, permissible investments and lines of business, transactions with affiliates, loan limits, mergers and acquisitions, issuance of securities, dividend payments, and extensions of credit. The Bank is subject to federal and state consumer protection laws, including laws designed to protect customers and promote fair lending. These laws include the Equal Credit Opportunity Act, the Fair Credit Reporting Act, the Truth in Lending Act, the Home Mortgage Disclosure Act, the Real Estate Settlement Procedures Act, and their respective state law counterparts. If the Company fails to comply with these or other applicable laws and regulations, it may be subject to civil monetary penalties, imposition of cease and desist orders or other written directives, removal of management and, in certain circumstances, criminal penalties. This regulatory framework is intended primarily for the protection of depositors and the preservation of the federal deposit insurance funds. Statutory and regulatory controls increase a bank holding company's cost of doing business and limit the options of its management to employ assets and maximize income.

In addition to its regulatory powers, the Federal Reserve Bank affects the conditions under which the Company operates by its influence over the national supply of bank credit. The Federal Reserve Board employs open market operations in U.S. government securities and oversees changes in the discount rate on bank borrowings, changes in the federal funds rate on overnight inter-bank borrowings, and changes in reserve requirements on bank deposits in implementing its monetary policy objectives. These methods are used in varying combinations to influence the overall level of the interest rates charged on loans and paid for deposits, the price of the dollar in foreign exchange markets, and the level of inflation. The monetary policies of the Federal Reserve have a significant effect on the operating results of financial institutions, most notably on the interest rate environment. In view of changing conditions in the national economy and in the money markets, as well as the effect of credit policies of monetary and fiscal authorities, the Company makes no prediction as to possible future changes in interest rates, deposit levels or loan demand, or their effect on the financial statements of the Company.

The financial industry operates under laws and regulations that are under regular review by various agencies and legislatures and are subject to change. The Company currently operates as a bank holding company, as defined by the Gramm-Leach-Bliley Financial Modernization Act of 1999 (GLB Act), and the Bank qualifies as a financial subsidiary under the GLB Act, which allows it to engage in investment banking, insurance agency, brokerage, and underwriting activities that were not available to banks prior to the GLB Act. The GLB Act also included privacy provisions that limit banks' abilities to disclose non-public information about customers to non-affiliated entities.

The Company must also comply with the requirements of the Bank Secrecy Act (BSA). The BSA is designed to help fight drug trafficking, money laundering, and other crimes. Compliance is monitored by the Federal Reserve. The BSA was enacted to prevent banks and other financial service providers from being used as intermediaries for, or to hide the transfer or deposit of money derived from, criminal activity. Since its passage, the BSA has been amended several times. These amendments include the Money Laundering Control Act of 1986 which made money laundering a criminal act, as well as the Money Laundering Suppression Act of 1994 which required regulators to develop enhanced examination procedures and increased examiner training to improve the identification of money laundering schemes in financial institutions.

The USA PATRIOT Act, established in 2001, substantially broadened the scope of U.S. anti-money laundering laws and regulations by imposing significant new compliance and due diligence obligations, creating new crimes and penalties and expanding the extra-territorial jurisdiction of the U.S. The regulations impose obligations on financial institutions to maintain appropriate policies, procedures and controls to detect, prevent, and report money laundering and terrorist financing. The regulations include significant penalties for non-compliance.

The Company is subject to regulation under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2011 (Dodd-Frank Act). Among its many provisions, the Dodd-Frank Act required stress-testing for certain financial services companies and established a new council of "systemic risk" regulators. The Dodd-Frank Act also established the Consumer Financial Protection Bureau (CFPB) which is authorized to supervise certain financial services companies and has responsibility to implement, examine for compliance with, and enforce "Federal consumer financial law." The Company is subject to examinations by the CFPB. The Dodd-Frank Act, through Title VI, commonly known as the Volcker Rule, placed trading restrictions on financial institutions and separated investment banking, private equity and proprietary trading (hedge fund) sections of financial institutions from their consumer lending arms. The Volcker Rule also restricts financial institutions from investing in and sponsoring certain types of investments.

In May 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act was signed into law which provides a number of limited amendments to the Dodd-Frank Act. Notable provisions of the legislation include: an increase in the asset threshold from $50 billion to $250 billion, above which the Federal Reserve is required to apply enhanced prudential standards; an exemption from the Volcker Rule for insured depository institutions with less than $10 billion in consolidated assets; modifications to the Liquidity Coverage and Supplementary Leverage ratios; and the elimination of Dodd-Frank company-run stress tests for banks and bank holding companies with less than $250 billion in assets. Most of these provisions affect institutions larger than the Company, and the Company is not required to prepare stress testing as specified by the Dodd-Frank Act.

*Subsidiary Bank*

Under Federal Reserve policy, the bank holding company, Commerce Bancshares, Inc. (the "Parent"), is expected to act as a source of financial strength to its bank subsidiary and to commit resources to support it in circumstances when it might not otherwise do so. In addition, loans by a bank holding company to any of its subsidiary banks are subordinate in right of payment to deposits and to certain other indebtedness of such subsidiary banks. In the event of a bank holding company's bankruptcy, any commitment by the bank holding company to a federal bank regulatory agency to maintain the capital of a subsidiary bank will be assumed by the bankruptcy trustee and entitled to a priority of payment.

*Deposit Insurance*

Substantially all of the deposits held by the Bank are insured up to applicable limits (generally $250,000 per depositor for each account ownership category) by the FDIC's Deposit Insurance Fund (DIF) and are subject to deposit insurance assessments to maintain the DIF. In 2011, the FDIC released a final rule to implement provisions of the Dodd-Frank Act that affected deposit insurance assessments. Among other things, the Dodd-Frank Act raised the minimum designated reserve ratio from 1.15% to 1.35% of estimated insured deposits, removed the upper limit of the designated reserve ratio, and required the FDIC to offset the effect of increasing the minimum designated reserve ratio on depository institutions with total assets of less than $10 billion. Due to growth in insured deposits during the first half of 2020, the DIF reserve ratio fell below statutory minimum of 1.35% on June 30, 2022. The FDIC Board of Directors adopted an Amended Restoration Plan in an effort to restore the reserve ratio to at least 1.35% by September 30, 2028. The FDIC Board also increased base deposit insurance assessment rates by 2 basis points, which took effect on January 1, 2023.

In November 2023, the FDIC Board of Directors approved a final rule implementing a special assessment to recover the loss to the DIF associated with protecting uninsured depositors following the closures of Silicon Valley Bank and Signature Bank earlier in 2023. As a result of the FDIC's approval of its final rule, the Company accrued $16.0 million in the fourth quarter of 2023 for the one-time special assessment. For the year ended December 31, 2023, the Company's deposit insurance expense was $33.2 million.

*Payment of Dividends*

The Federal Reserve Board may prohibit the payment of cash dividends to shareholders by bank holding companies if their actions constitute unsafe or unsound practices. The principal source of the Parent's cash revenues is cash dividends paid by the Bank. The amount of dividends paid by the Bank in any calendar year is limited to the net profit of the current year combined with the retained net profits of the preceding two years, and permission must be obtained from the Federal Reserve Board for

dividends exceeding these amounts. The payment of dividends by the Bank may also be affected by factors such as the maintenance of adequate capital.

*Capital Adequacy*

The Company is required to comply with the capital adequacy standards established by the Federal Reserve, which are based on the risk levels of assets and off-balance sheet financial instruments. Capital adequacy guidelines and prompt corrective action regulations involve quantitative measures of assets, liabilities, and certain off-balance sheet items calculated under regulatory accounting practices. Capital amounts and classifications are also subject to judgments by regulators regarding qualitative components, risk weightings, and other factors.

A comprehensive capital framework was established by the Basel Committee on Banking Supervision, which was effective for large and internationally active U.S. banks and bank holding companies on January 1, 2015. A key goal of the Basel III framework was to strengthen the capital resources of banking organizations during normal and challenging business environments. Basel III increased minimum requirements for both the quantity and quality of capital held by banking organizations. The rule includes a minimum ratio of common equity Tier 1 capital to risk-weighted assets of 4.5% and a common equity Tier 1 capital conservation buffer of 2.5% of risk-weighted assets. The capital conservation buffer is intended to absorb losses during periods of economic stress. Failure to maintain the buffer will result in constraints on dividends, stock repurchases and executive compensation. The rule also adjusted the methodology for calculating risk-weighted assets to enhance risk sensitivity. At December 31, 2023, the Company's capital ratios are well in excess of those minimum ratios required by Basel III.

The Federal Deposit Insurance Corporation Improvement Act (FDICIA) requires each federal banking agency to take prompt corrective action to resolve the problems of insured depository institutions, including but not limited to those that fall below one or more prescribed minimum capital ratios. Pursuant to FDICIA, the FDIC promulgated regulations defining the following five categories in which an insured depository institution will be placed, based on the level of its capital ratios: well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized, and critically undercapitalized. Under the prompt corrective action provisions of FDICIA, an insured depository institution generally will be classified as well-capitalized (under the Basel III rules mentioned above) if it has a Tier 1 capital ratio of at least 8%, a common equity Tier 1 capital ratio of at least 6.5%, a total capital ratio of at least 10%, and a Tier 1 leverage ratio of at least 5%. An institution that, based upon its capital levels, is classified as “well-capitalized,” “adequately capitalized,” or “undercapitalized,” may be treated as though it were in the next lower capital category if the appropriate federal banking agency, after notice and opportunity for hearing, determines that an unsafe or unsound condition, or an unsafe or unsound practice warrants such treatment. At each successive lower capital category, an insured depository institution is subject to more restrictions and prohibitions, including restrictions on growth, restrictions on interest rates paid on deposits, restrictions or prohibitions on payment of dividends, and restrictions on the acceptance of brokered deposits. Furthermore, if a bank is classified in one of the undercapitalized categories, it is required to submit a capital restoration plan to the federal bank regulator, and the holding company must guarantee the performance of that plan. The Bank has consistently maintained regulatory capital ratios above the “well-capitalized” standards.

*Stress Testing*

As required by the Dodd-Frank Act, the Company performed stress tests as specified by the Federal Reserve requirement and published results beginning in 2014 through 2017. On May 24, 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act was enacted, which eliminated the required stress testing under the Dodd-Frank Act for banks with consolidated assets of less than $250 billion. While not required to perform stress testing, the Company continues to perform periodic stress-testing based on its own internal criteria.

*Executive and Incentive Compensation*

Guidelines adopted by federal banking agencies prohibit excessive compensation as an unsafe and unsound practice, and describe compensation as "excessive" when the amounts paid are unreasonable or disproportionate to the services performed by an executive officer, employee, director or principal shareholder. The Federal Reserve Board has issued comprehensive guidance on incentive compensation intended to ensure that the incentive compensation policies do not undermine safety and soundness by encouraging excessive risk taking. This guidance covers all employees that have the ability to materially affect the risk profile of an organization, either individually or as part of a group, based on key principles that (i) incentives do not encourage risk-taking beyond the organization's ability to identify and manage risk, (ii) compensation arrangements are compatible with effective internal controls and risk management, and (iii) compensation arrangements are supported by strong corporate governance, including active and effective board oversight. Deficiencies in compensation practices may affect supervisory ratings and enforcement actions may be taken if incentive compensation arrangements pose a risk to safety and soundness.

*Transactions with Affiliates*

The Federal Reserve Board regulates transactions between the Bank and its subsidiaries. Generally, the Federal Reserve Act and Regulation W, as amended by the Dodd-Frank Act, limit the Company's banking subsidiary and its subsidiaries to lending and other "covered transactions" with affiliates. The aggregate amount of covered transactions a banking subsidiary or its subsidiaries may enter into with an affiliate may not exceed 10% of the capital stock and surplus of the banking subsidiary. The aggregate amount of covered transactions with all affiliates may not exceed 20% of the capital stock and surplus of the banking subsidiary.

Covered transactions with affiliates are also subject to collateralization requirements and must be conducted on arm's length terms. Covered transactions include (a) a loan or extension of credit by the banking subsidiary, including derivative contracts, (b) a purchase of securities issued to a banking subsidiary, (c) a purchase of assets by the banking subsidiary unless otherwise exempted by the Federal Reserve, (d) acceptance of securities issued by an affiliate to the banking subsidiary as collateral for a loan, and (e) the issuance of a guarantee, acceptance or letter of credit by the banking subsidiary on behalf of an affiliate.

Certain transactions with the Company's directors, officers or controlling persons are also subject to conflicts of interest regulations. Among other things, these regulations require that loans to such persons and their related interests be made on terms substantially the same as for loans to unaffiliated individuals, and must not create an abnormal risk of repayment or other unfavorable features for the financial institution. See Note 2 to the consolidated financial statements for additional information on loans to related parties.

**Available Information**

The Company's principal offices are located at 1000 Walnut Street, Kansas City, Missouri (telephone number 816-234-2000). The Company makes available free of charge, through its website at www.commercebank.com, reports filed with the Securities and Exchange Commission as soon as reasonably practicable after the electronic filing. Additionally, a copy of our electronically filed materials can be found at www.sec.gov. These filings include the annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports.

## Item 1a. RISK FACTORS

Making or continuing an investment in securities issued by the Company, including its common stock, involves certain risks that you should carefully consider. If any of the following risks actually occur, the Company's business, financial condition or results of operations could be negatively affected, the market price for your securities could decline, and you could lose all or a part of your investment. Further, to the extent that any of the information contained in this Annual Report on Form 10-K constitutes forward-looking statements, the risk factors set forth below also are cautionary statements identifying important factors that could cause the Company's actual results to differ materially from those expressed in any forward-looking statements made by or on behalf of Commerce Bancshares, Inc.

### Market Risks

*Difficult market conditions may affect the Company's industry.*

The concentration of the Company's banking business in the United States particularly exposes it to downturns in the U.S. economy. In particular, the Company may face the following risks in connection with market conditions:

- In 2023, the United States ("U.S.") economy faced a series of challenges, including high inflation, rising interest rates, and slowing economic growth. Uncertainties about global geopolitical tensions and volatile financial markets raised concerns about the potential for a recession in the U.S. Despite these challenges, the U.S. economy was resilient in 2023 with stronger-than-expected results in the fourth quarter, including a robust labor market and a rallying stock market.
- The U.S. economy is affected by global events and conditions, including U.S. trade disputes and renewed trade agreements with various countries. Although the Company does not directly hold foreign debt or have significant activities with foreign customers, the global economy, the strength of the U.S. dollar, international trade conditions, and oil prices may ultimately affect interest rates, business import/export activity, capital expenditures by businesses, and investor confidence. Unfavorable changes in these factors may result in declines in consumer credit usage, adverse changes in payment patterns, reduced loan demand, and higher loan delinquencies and default rates. These could impact the Company's future provision for credit losses, as a significant part of the Company's business includes consumer and credit card lending.
- In addition to the results above, a slowdown in economic activity may cause declines in financial services activity, including declines in bank card, corporate cash management and other fee businesses, as well as the fees earned by the Company on such transactions.
- While the COVID-19 pandemic appears to be over, the impact on businesses is still uncertain. During the pandemic, there was a shift from in-office work to remote work. This shift appears to be permanent for some businesses and partial for others. As a result, businesses are reevaluating their office space needs and, in some cases, reducing their leased office space, selling commercial office buildings, or leasing space no longer needed. The impact of this shift is not fully known and could result in reduced demand for office space, lower lease rates for office space, and lower values of office buildings. These factors may contribute to higher delinquencies and net charge-offs for commercial office real estate loans. Additionally, businesses that cater to or are located near dense areas of office buildings may be adversely impacted, which could result in higher delinquencies and net charge-offs for certain commercial borrowers.
- The process used to estimate credit losses in the Company's loan portfolio requires difficult, subjective, and complex judgments, including consideration of economic conditions and how these economic predictions might impair the ability of its borrowers to repay their loans. If an instance occurs that renders these predictions no longer capable of accurate estimation, this may in turn impact the reliability of the process.
- Competition in the industry could intensify as a result of the increasing consolidation of financial services companies in connection with current market conditions, thereby reducing market prices for various products and services which could in turn reduce the Company's revenues.

*The performance of the Company is dependent on the economic conditions of the markets in which the Company operates.*

The Company's success is heavily influenced by the general economic conditions of the specific markets in which it operates. Unlike larger national or other regional banks that are more geographically diversified, the Company provides financial services primarily throughout the states of Missouri, Kansas, central Illinois, Oklahoma, and Colorado. It also has a growing presence in additional states through its offices in: Texas, Iowa, Indiana, Michigan, Ohio, Florida, and Tennessee that serve commercial or trust customers. As the Company does not have a significant banking presence in other parts of the country, a prolonged economic downturn in these markets could have a material adverse effect on the Company's financial condition and results of operations.

*The Company operates in a highly competitive industry and market area.*

The Company operates in the financial services industry and has numerous competitors including other banks and insurance companies, securities dealers, brokers, trust and investment companies, mortgage bankers, and financial technology companies. Consolidation among financial service providers and new changes in technology, product offerings and regulation continue to challenge the Company's marketplace position. As consolidation occurs, larger regional and national banks may enter the Company's markets and add to existing competition. Large, national financial institutions have substantial capital, technology and marketing resources. These new competitors may lower fees to grow market share, which could result in a loss of customers and lower fee revenue for the Company. They may have greater access to capital at a lower cost than the Company, and may have higher loan limits, both of which may adversely affect the Company's ability to compete effectively. The Company must continue to make investments in its products and delivery systems to stay competitive with the industry, or its financial performance may suffer.

**Regulatory and Compliance Risks**

*The Company is subject to extensive government regulation and supervision.*

As part of the financial services industry, the Company is subject to extensive federal and state regulation and supervision. Banking regulations are primarily intended to protect depositors' funds, federal deposit insurance funds, and the banking system, not shareholders. These regulations affect the Company's lending practices, capital structure, investment practices, dividend policy, and growth, among other things. Congress and federal regulatory agencies continually review banking laws, regulations, and policies for possible changes. Changes to statutes, regulations, or regulatory policies, including changes in interpretation or implementation of statutes, regulations, or policies, could affect the Company in substantial and unpredictable ways. Such changes could subject the Company to additional costs, limit the types of financial services and products it may offer, restrict the Company's ability to pay dividends, subject the Company to higher capital requirements, and/or increase the ability of non-banks to offer competing financial services and products, among other things. During November 2023, the FDIC approved a final rule implementing a one-time special assessment to recover the loss to the DIF associated with protecting uninsured depositors following the closures of Silicon Valley Bank and Signature Bank earlier in 2023. The Company accrued $16.0 million in the fourth quarter of 2023 for the special assessment. Assessments driven by regulation, such as these, increased the Company's expenses in 2023 and additional assessments could further increase the Company's expenses.

Beyond the expense of additional regulation, failure to comply with laws, regulations, or policies could result in sanctions by regulatory agencies, civil money penalties, and/or reputation damage, which could have a material adverse effect on the Company's business, financial condition, and results of operations. While the Company has policies and procedures designed to prevent any such violations, there can be no assurance that such violations will not occur.

*Significant changes in federal monetary policy could materially affect the Company's business.*

The Federal Reserve System regulates the supply of money and credit in the United States. Its policies determine in large part the cost of funds for lending and interest rates earned on loans and paid on borrowings and interest-bearing deposits. Credit conditions are influenced by its open market operations in U.S. government securities, changes in the member bank discount rate, and bank reserve requirements. Changes in Federal Reserve Board policies are beyond the Company's control and difficult to predict, and such changes may result in lower interest margins and a lack of demand for credit products.

*Climate-related and other Environmental, Social, and Governance ("ESG") developments could result in additional regulation and reporting for the Company.*

In recent years, federal, state and international lawmakers and regulators have increased their focus on financial institutions' and other companies' risk oversight, disclosures and practices in connection with climate change and other ESG matters. For example, in March 2022, the SEC issued a proposed rule on the enhancement and standardization of climate-related disclosures for investors. The proposed rule would require public issuers, including the Company, to significantly expand the scope of climate-related disclosures in their SEC filings. The SEC has also announced plans to propose rules to require enhanced disclosure regarding human capital management and board diversity for public issuers.

**Liquidity and Capital Risks**

*The Company is subject to both interest rate and liquidity risk.*

With oversight from its Asset-Liability Management Committee, the Company devotes substantial resources to monitoring its liquidity and interest rate risk on a monthly basis. The Company's net interest income is the largest source of overall revenue to the Company, representing 64% of total revenue for the year ended December 31, 2023. The interest rate environment in which the Company operates fluctuates in response to general economic conditions and policies of various governmental and

regulatory agencies, particularly the Federal Reserve Board, which regulates the supply of money and credit in the U.S. Changes in monetary policy, including changes in interest rates, will influence loan originations, deposit generation, demand for investments and revenues and costs for earning assets and liabilities, and could significantly impact the Company's net interest income.

As the economy rebounded from the COVID-19 pandemic-induced recession, high inflation experienced in 2022 continued into 2023. In response, the Federal Reserve Board significantly increased the benchmark interest rate from nearly zero at the start of 2022 to between 4.25% and 4.50% at the end of 2022. The Federal Reserve Board continued to raise interest rates at a more modest pace to between 5.25% and 5.50% by the end of July 2023. Elevated rates have created competition for deposits and unrealized losses in fixed rate asset portfolios. Future economic conditions or other factors could shift monetary policy resulting in additional increases or decreases in the benchmark rate. Furthermore, changes in interest rates could result in unanticipated changes to customer deposit balances and adversely affect the Company's liquidity position.

*The soundness of other financial institutions could adversely affect the Company.*

As demonstrated within the industry during 2023, the Company's ability to engage in routine funding transactions could be adversely affected by the actions and commercial soundness of other financial institution counterparties. Financial services institutions are interrelated because of trading, clearing, counterparty or other relationships. The Company has exposure to many different industries and counterparties and routinely executes transactions with counterparties in the financial industry, including brokers and dealers, commercial banks, investment banks, mutual funds, and other institutional clients. Transactions with these institutions include overnight and term borrowings, interest rate swap agreements, securities purchased and sold, short-term investments, and other such transactions. Because of this exposure, defaults by, or rumors or questions about, one or more financial services institutions or the financial services industry in general, could lead to market-wide liquidity problems and defaults by other institutions. Many of these transactions expose the Company to credit risk in the event of default of its counterparty or client, while other transactions expose the Company to liquidity risks should funding sources quickly disappear. In addition, the Company's credit risk may be exacerbated when the collateral held cannot be realized or is liquidated at prices not sufficient to recover the full amount of the exposure due to the Company. Any such losses could materially and adversely affect results of operations.

Events impacting the banking industry during the first few months of 2023, including the failure of Silicon Valley Bank in March, resulted in decreased confidence in regional banks among deposit customers, investors, and other counterparties. Additionally, these events caused significant disruption, volatility and reduced valuations of equity and other securities of banks in the capital markets. These events occurred during a period of rapidly rising interest rates, which, among other things, resulted in unrealized losses in the Company's available for sale debt securities portfolio and increased competition for bank deposits. These events had, and could again have, adverse impacts on the market price and volatility of the Company's stock. These events could also lead to increases in the Company's interest expense, as it has raised and may continue to raise interest rates paid to depositors in order to compete with other banks, and in an effort to replace deposits, seek borrowings which carry higher interest rates.

Bank failures during 2023 caused concern and uncertainty regarding the liquidity adequacy of the banking sector as a whole and resulted in some regional bank customers choosing to maintain deposits with larger financial institutions. A significant reduction in the Company's deposits could materially and adversely impact the Company's liquidity, ability to fund loans, and results of operations. In addition to customer deposits, the Company borrows on an overnight and short-term basis from third parties in the form of federal funds purchased and repurchase agreements and through lines of credit and borrowings from the FHLB and FRB. If the Company were not able to access borrowings through those facilities due to an increase in demand from other banks or due to insufficient levels of pledgeable assets, its ability to borrow funds may be materially adversely impacted.

*Commerce Bancshares, Inc. relies on dividends from its subsidiary bank for most of its revenue.*

Commerce Bancshares, Inc. is a separate and distinct legal entity from its banking and other subsidiaries. It receives substantially all of its revenue from dividends from its subsidiary bank. These dividends, which are limited by various federal and state regulations, are the principal source of funds to pay dividends on its common stock and to meet its other cash needs. In the event the subsidiary bank is unable to pay dividends, the Company may not be able to pay dividends or other obligations, which would have a material adverse effect on the Company's financial condition and results of operations.

**Operational Risks**

*The Company's asset valuation may include methodologies, models, estimations and assumptions which are subject to differing interpretations and could result in changes to asset valuations that may materially adversely affect its results of operations or financial condition.*

The Company uses estimates, assumptions, and judgments when certain financial assets and liabilities are measured and reported at fair value. Assets and liabilities carried at fair value inherently result in greater financial statement volatility. Fair values and the information used to record valuation adjustments for certain assets and liabilities are based on quoted market prices and/or other observable inputs provided by independent third-party sources, when available. When such third-party information is not available, fair value is estimated primarily by using cash flow and other financial modeling techniques utilizing assumptions such as credit quality, liquidity, interest rates and other relevant inputs. Changes in underlying factors, assumptions, or estimates in any of these areas could materially impact the Company's future financial condition and results of operations. Furthermore, if models used to calculate fair value of financial instruments are inadequate or inaccurate due to flaws in their design or execution, upon sale, the Company may not realize the cash flows of a financial instrument as modeled and could incur material, unexpected losses.

During periods of market disruption, including periods of significantly rising or high interest rates, rapidly widening credit spreads or illiquidity, it may be difficult to value certain assets if trading becomes less frequent and/or market data becomes less observable. There may be certain asset classes in active markets with significant observable data that become illiquid due to the current financial environment. In such cases, certain asset valuations may require more subjectivity and management judgment. As such, valuations may include inputs and assumptions that are less observable or require greater estimation. Further, rapidly changing and unprecedented credit and equity market conditions could materially impact the valuation of assets as reported within the Company's consolidated financial statements, and the period-to-period changes in value could vary significantly. Decreases in value may have a material adverse effect on results of operations or financial condition.

*The Company's operations rely on certain external vendors.*

The Company relies on third-party vendors to provide products and services necessary to maintain day-to-day operations. For example, the Company outsources a portion of its information systems, communication, data management, and transaction processing to third parties. Accordingly, the Company is exposed to the risk that these vendors might not perform in accordance with the contracted arrangements or service level agreements because of changes in the vendor's organizational structure, financial condition, support for existing products and services, or strategic focus. Such failure to perform could be disruptive to the Company's operations, which could have a materially adverse impact on its business, financial condition and results of operations. These third parties are also sources of risk associated with operational errors, system interruptions or breaches and unauthorized disclosure of confidential information. If the vendors encounter any of these issues, the Company could be exposed to disruption of service, damage to reputation and litigation. Because the Company is an issuer of both debit and credit cards, it is periodically exposed to losses related to security breaches which occur at retailers that are unaffiliated with the Company (e.g., customer card data being compromised at retail stores). These losses include, but are not limited to, costs and expenses for card reissuance as well as losses resulting from fraudulent card transactions.

**Credit Risks**

*The allowance for credit losses may be insufficient or future credit losses could increase.*

The allowance for credit losses on loans and the liability for unfunded lending commitments at December 31, 2023 reflect management's estimate of credit losses expected in the loan portfolio, including unfunded lending commitments, as of the balance sheet date. See Note 2 to the consolidated financial statements and the section captioned "Allowance for Credit Losses on Loans and Liability for Unfunded Lending Commitments" in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, of this report for further discussion related to the Company's process for determining the appropriate level of the allowance for credit losses on loans and the liability for unfunded lending commitments at December 31, 2023.

The Company's estimate of credit losses utilizes a life of loan loss concept, and the level of the allowance is based on management's methodology that utilizes historical net charge-off rates and adjusts for the impacts in the reasonable and supportable forecast and other qualitative factors. Key assumptions include the application of historical loss rates, prepayment speeds, forecast results of a reasonable and supportable period, the period to revert to historical loss rates, and qualitative factors. The Company's allowance level is subject to review by regulatory agencies, and that review could also result in adjustments to the allowance for credit losses. Additionally, the volatility of the Company's provision for credit losses may change from year to year due to macroeconomic variables that influence the Company's loss estimates, and the volatility in credit losses may be material to the Company's earnings.

*The Company's investment portfolio values may be adversely impacted by deterioration in the credit quality of underlying collateral within the various categories of investment securities it owns.*

The Company maintains a portfolio of investments, which includes available for sale debt securities, trading securities, equity securities, and other investments. Throughout 2023 and at December 31, 2023, the Company did not hold any investments classified as held-to-maturity. The Company generally invests in liquid, investment grade securities, however, these securities are subject to changes in market value due to changing interest rates and implied credit spreads. While the Company maintains prudent risk management practices over bonds issued by municipalities and other issuers, credit deterioration in these bonds could occur and result in losses. Certain mortgage and asset-backed securities (which are collateralized by residential mortgages, credit cards, automobiles, mobile homes or other assets) may decline in value due to actual or expected deterioration in the underlying collateral. Under accounting rules, when an available for sale debt security is in an unrealized loss position, the entire loss in fair value is required to be recognized in current earnings if the Company intends to sell the security or believes it is more likely than not that the Company will be required to sell the security before the value recovers. Additionally, the current expected credit loss model (CECL) implemented by the Company on January 1, 2020, requires that lifetime expected credit losses on securities be recorded in current earnings. This could result in significant losses.

*The Company could recognize losses on securities held in its securities portfolio, particularly if it were to sell a significant portion of its investments prior to maturity.*

The Company's available for sale debt securities portfolio is carried at fair value, with unrealized gains and losses carried in accumulated other comprehensive income (loss) within shareholder's equity. The fair value of investments, including available for sale debt investments, may change with changes in interest rates, credit concerns, or other economic factors. Due to the rapid rise of interest rates during 2022 and 2023, the fair value of the Company's available of sale debt securities included a net unrealized loss of $1.2 billion at December 31, 2023. As of December 31, 2023, the Company has the intent and ability to maintain its available for sale debt investments until recovery of their amortized cost basis. However, if in the future the Company were to elect to sell or needed to sell the investments before the recovery of their amortized cost basis, the Company could realize significant losses in its income statement.

**Strategic Risk**

*New lines of business or new products and services may subject the Company to additional risk.*

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

**Technology Risks**

*A successful cyber attack or other computer system breach could significantly harm the Company, its reputation and its customers.*

The Company relies heavily on communications and information systems to conduct its business, and as part of its business, the Company maintains significant amounts of data about its customers and the products they use. The Company's data is maintained on its own systems and on the systems of its vendors, business partners and third-party service providers. The Company relies on a layered system of security controls to secure collection, transmission, storage, and retrieval of data, including confidential data, in its computer systems and the systems of third parties. Information security risks continue to increase due to new technologies, the increasing use of the Internet and telecommunication technologies (including mobile devices) to conduct financial and other business transactions, and the increased sophistication and activities of organized crime, perpetrators of fraud, hackers, and others. The Company has faced security incidents, which have been minor in scope and impact, and it expects unauthorized parties to continue to attempt to gain access to its systems or information, as well as those of its business partners and service providers. The Company makes significant investments in various technology to identify and prevent intrusions into its information systems. The Company has policies, procedures and controls designed to identify, protect, detect, respond, and recover from security incidents. The Company also requires ongoing security awareness training for employees, hosts tabletop exercises to test response readiness, and performs regular audits using both internal and outside resources. However, there can be no assurance that any such failures, interruptions or security breaches will not occur, or if

they do occur, that they will be adequately addressed. In addition to unauthorized access, denial-of-service attacks or other operational disruptions could prevent the Company from adequately serving customers. Should any of the Company's systems become compromised or customer information be obtained by unauthorized parties, the reputation of the Company could be damaged, relationships with existing customers may be impaired, and the Company could be subject to lawsuits, all of which could result in lost business and have a material adverse effect on the Company’s business, financial condition and results of operations.

*The Company continually encounters technological change.*

The financial services industry is continually undergoing rapid technological change with frequent introductions of new technology-driven products and services, including the entrance of financial technology companies offering new financial service products. The Company regularly upgrades or replaces technological systems to increase efficiency, enhance product and service capabilities, eliminate risks of end-of-lifecycle products, reduce costs, and better serve our customers. As the Company completes system upgrades, it may face operational risks after system conversions, including disruptions to its technology systems, which may adversely impact customers. The Company’s future success depends, in part, upon its ability to address the needs of its customers by using technology to provide products and services that will satisfy customer demands, as well as to create additional efficiencies in the Company’s operations. Many of the Company’s competitors have substantially greater resources to invest in technological improvements. The Company may encounter significant problems in effectively implementing new technology-driven products and services and may not be successful in marketing the new products and services to its customers. These problems might include significant time delays, cost overruns, loss of key people, and technological system failures. Failure to successfully keep pace with technological change affecting the financial services industry or failure to successfully complete the replacement of technological systems could have a material adverse effect on the Company’s business, financial condition and results of operations.

**General Risks**

*The Company must attract and retain skilled employees.*

The Company’s success depends, in large part, on its ability to attract and retain key people. Competition for the best people can be intense, and the Company spends considerable time and resources attracting, hiring, and retaining qualified people for its various business lines and support units. The unexpected loss of the services of one or more of the Company’s key personnel could have a material adverse impact on the Company’s business because of their skills, knowledge of the Company’s market, and years of industry experience, as well as the difficulty of promptly finding qualified replacement personnel.

*Public health threats or outbreaks of communicable diseases could have an adverse effect on the Company's operations and financial results.*

The Company may face risks related to public health threats or outbreaks of communicable diseases. A widespread healthcare crisis, such as an outbreak of a communicable disease could adversely affect the global economy and the Company’s financial performance. For example, the global COVID-19 pandemic caused significant disruption and harm to the economy and the financial markets in which the Company operates.

The situation surrounding the COVID-19 pandemic remains uncertain. While the U.S. economy has rebounded significantly since the peak of the pandemic-induced recession, fallout from economic and societal changes resulting from the pandemic may cause prolonged global or national recessionary economic conditions, which could have a material adverse effect on the Company's business, results of operations and financial condition. Beyond the impact of the COVID-19 pandemic, the potential impacts of future epidemics, pandemics, or other outbreaks of an illness, disease, or virus could therefore materially and adversely affect the Company's business, revenue, operations, financial condition, liquidity and cash flows.

*Our business and financial results may be affected by societal and governmental responses to climate change and related environmental issues.*

The current and anticipated effects of climate change have raised concerns for the condition of the global environment. These concerns have changed and will continue to change the behavior of consumers and businesses. Further, governments have increased their attention on the issue of climate change. As a result, international agreements have been signed to attempt to reduce global temperatures and federal and state legislative and regulatory initiatives have been proposed to seek to mitigate the effects of climate change. The Company and its customers may need to respond to new laws and regulations as well as new consumer and business preferences resulting from climate change concerns. These changes may result in cost increases, asset value reductions, and operating process changes to the Company and its customers. The impact on our customers will likely vary depending on their specific attributes, including reliance on or role in carbon intensive activities. Among the impacts to the Company could be a drop in demand for our products and services, particularly in certain industries. In addition, the

Company could experience reductions in creditworthiness on the part of some customers or in the value of assets securing loans. The Company's efforts to take these risks into account in making lending and other decisions, including by increasing the Company's business with climate-friendly companies, may not be effective in protecting the Company from the adverse impact of new laws and regulations or changes in consumer or business behavior.

## Item 1b. UNRESOLVED STAFF COMMENTS

None

## Item 1c. CYBERSECURITY

### Cybersecurity Program and Management Oversight

The Company has established an Information and Cybersecurity program. The program is directed by the Company's Information Security Strategy Board ("ISSB"). The purpose of the ISSB is to (i) provide management direction and support for information security risk oversight for the Company's information security program and (ii) to engage Company leaders to promote information security risk awareness and sound information security risk management practices across the organization. The ISSB has been delegated authority from the Company's Enterprise Risk Management Committee ("ERM Committee") to advance and monitor the overall effectiveness of the Company's information security program and risk management activities. The ISSB also has the authority to direct effective and timely implementation of actions to address emerging information security risks and information security risk management deficiencies. The ISSB meets at least quarterly.

The ISSB is responsible for identifying, evaluating and monitoring information security risk across the Company. In order to fulfill this role, the ISSB engages in a variety of activities, including, but not limited to, the following:

a. Review current status of the Company's overall information security program.
b. Review and monitor impacts, outcomes and remediation plans or mitigation activities related to internal and external security incidents, vulnerability scans or assessments.
c. Review and monitor significant information security related projects and regulatory initiatives.
d. Monitor metrics related to the Company's information security program.
e. Review and approve new, and modifications to existing, information security policies for which the ISSB has been designated approval authority by the ERM Committee. Existing information security policies are reviewed at least annually.
f. Review information security examination reports and other significant communications from regulatory agencies and the status of any outstanding information security related regulatory findings. -
g. Monitor and discuss emerging industry information security risk issues including applicable frameworks, rules and regulations.
h. Identify and analyze significant changes affecting information security risk management such as changes in the external environment, business model and leadership.
i. Review new, expanded or modified software and applications that process, transmit, or store sensitive information to ensure appropriate information security risk management is embedded in the development and implementation processes.

The ISSB is comprised of the following:

a. Chief Information Security Officer – Chair
b. Chief Information Officer
c. Executive Director, Consumer Segment & Strategic Services
d. Managing Counsel
e. Director, Bank Operations
f. Executive Director, Retail
g. Chief Risk Officer
h. Commerce Trust Chief Operating Officer
i. IT General Manager
j. Director, Commercial LOB Products & Operations
k. Director, Audit

The Chief Information Security Officer ("CISO") is responsible for the Company's enterprise-wide Information and Cybersecurity Program. Responsibilities include the Information and Cybersecurity program, Security Architecture, Application Security, IT Risk Management, Operational Security, Security Consulting, Awareness and Training, Policies and Standards development, Incident Response and Information Security defense / mitigation strategy, strategic planning, and Vendor and Service Provider monitoring. The CISO has 25 years of experience with Information Security Program development, Application Security program development, IT Risk Management program development, Incident Response preparation, planning, and testing, Operational and Technical Security Architecture, and Creating Zero-Day defense strategies. The CISO is a Certified Information Systems Security Professional, is a member of the Information Systems Security Association and Infragard, and participates in local and national Security consortiums. CISO demonstrates expertise in Graham-Leach-Bliley Act, Health Insurance Portability and Accountability Act, Payment Card Industry, International Organization for Standardization27001, National Institute of Standards and Technology, Open Worldwide Application Security Project, and other programs to provide strategic consulting across a variety of industry sectors.

***Governance***

The Company's Board of Directors (the "Board") is responsible for the oversight of all risk management activities, including cybersecurity risk. The Board has delegated that oversight responsibility to the Audit and Risk Committee. The Audit and Risk Committee has delegated the responsibility to advance and monitor the overall effectiveness of the Company's risk management activities, including cybersecurity risk, to the ERM Committee. The ERM Committee also has the authority to direct effective and timely implementation of actions to address emerging cybersecurity risks. The ISSB provides quarterly reports to the Operational Risk Management Committee and ERM Committee. Through reports received from the ERM Committee, the Audit and Risk Committee notifies the Board of Directors about new policies and policy changes, changes in standards applied, and key risk metrics to evaluate ongoing cybersecurity threats and security risk exposure (the "Governance Model"). In addition, the ISSB provides a full report on the Company's cybersecurity framework, risks, initiatives, and significant incidents to the Audit and Risk Committee or the Company's Board of Directors not less than annually.

**Cybersecurity Risk Assessment Strategy, Policies and Standards**

The Company's cybersecurity program is primarily structured based upon national and international security protocols and frameworks. The Company has implemented a strategy to address threats to Company assets. The Company's Information Security program balances security risks with business goals and provides appropriate protections for the confidentiality, integrity and availability of Company and customer information. The Company conducts benchmark reports of its Information Security program to assess its strength as measured against recommended industry security best practice entities.

The Company has a process to prioritize and manage security related projects. The ISSB provides oversight of program changes, security awareness updates, exposures from new exploits, and risks to information, data and systems. Policies and standards are regularly reviewed within the Governance Model and presented to the Board.

The Company utilizes a risk assessment approach to oversee and identify material risks from cyber threats, which includes information gathering, analysis, and prioritization of mitigation strategies. This approach was designed following security industry standard processes, models and guidelines. Risk assessments are a key component of the overall risk management process. The objectives of the risk assessment process are as follows:

a. Provide assurance that management has implemented appropriate controls to mitigate risk.
b. Identify applications, vendors, service providers, and/or business units that process, transmit, or store sensitive information.
c. Comply with the various regulations addressing data security.
d. Comply with the Company's information security policies and standards.

The scope of the risk assessment process includes but is not limited to the following asset types:

a. Applications
b. Business units
c. Service providers
d. Servers
e. Databases
f. Data centers
g. Network infrastructure

h. Security infrastructure
i. Storage/recovery
j. Mobile devices
k. Workstations
l. Authentication directory services
m. Cloud.

The Company conducts detailed due diligence (as described below), contract reviews and ongoing monitoring of high-risk third-party service providers. Third-party service providers hosting an application or providing a service that processes, analyzes, transmits, stores, or reports the Company's sensitive information must complete a control questionnaire. Vendors are subject to rigorous review of the vendor's internal control policies, procedures, data security and contingency capabilities. Ongoing monitoring is also performed annually on selected service providers. The program requires service providers on the ongoing monitoring list to provide the Company with a third-party security penetration assessment, and other artifacts based on the type of information processed, transmitted, or stored, annually.

The Company has also developed a comprehensive set of key risk metrics to evaluate ongoing cybersecurity threats and the security risk exposure. These metrics are used for threat trending, identifying attack vectors, and determining the effectiveness of controls. Key risk metrics are provided to management monthly and reported through the Governance Model to the Board.

***Security event monitoring and detection***

The Company formally tracks and reports on major identified risks and vulnerabilities and the results of their analysis and evaluation. These details can then be used to track and monitor their successful management as part of the activity to deliver the required, anticipated results. Security risks are categorized by Practice or Vulnerability (exploitable). The information is reported in the monthly security metrics report along with quarterly reporting to the ISSB.

The Company actively monitors alerts and shared intelligence from a variety of industry-standard sources and takes appropriate actions when warranted. As new threats and vulnerabilities emerge that threaten its systems and data, the Company continues to evaluate and address these threats through a layered security approach.

The Company performs network and application penetration testing on external high-risk applications as well as network penetration testing across its production, test, and disaster recovery networks. The Company also performs tests on its operational defense and response to assess the ability to detect and respond to a threat actor. This allows the Company to test lateral movement, exploitation, data exfiltration, and evaluate its security posture around three primary security functions: detection, prevention, and response. The Company regularly participates in desktop exercises to help demonstrate incident preparedness and regulatory compliance. All testing results are reported to the Board quarterly through the Governance Model.

***Incident materiality***

The Commerce Bank Cybersecurity Incident Investigation and Response Plan is a component of the Information Security policy and sets forth the severity categories and processes required to assess the impact of a cyber-related incident to the Company. The impact is categorized in one of five severity levels and is expressed in terms of financial loss, strategic objectives, customer, legal and regulatory, reputation, and service interruption. The incident response plan includes timely notification of a material cybersecurity incident to the Board of Directors and other members of senior management.

Like other financial institutions, the Company experiences malicious cyber activity on an ongoing basis directed at its websites, computer systems, software, networks and users. This malicious activity includes attempts at unauthorized access, implantation of computer viruses or malware, and denial of service attacks. The Company also experiences large volumes of phishing and other forms of social engineering attempted for the purpose of perpetuating fraud. While, to date, malicious cyber activity, cyberattacks and other information security breaches have not had a material adverse impact on the Company, risk to its systems remains significant. See Technology Risk "*A successful cyber attack or other computer system breach could significantly harm the Company, its reputation and its customers*" within Risk Factors Item 1a.

## Item 2. PROPERTIES

The main offices of the Company are located in Kansas City and St. Louis, Missouri. The Company owns its main offices and leases unoccupied premises to the public. The larger office buildings include:

| Building | Net rentable square footage | % occupied in total | % occupied by Bank |
|---|---|---|---|
| 1000 Walnut<br>Kansas City, MO | 391,000 | 95% | 53% |
| 922 Walnut<br>Kansas City, MO | 256,000 | 95 | 91 |
| 811 Main<br>Kansas City, MO | 237,000 | 100 | 100 |
| 8001 Forsyth<br>Clayton, MO | 274,000 | 70 | 19 |
| 8000 Forsyth<br>Clayton, MO | 178,000 | 100 | 100 |

The Company has an additional 141 branch locations in Missouri, Illinois, Kansas, Oklahoma and Colorado which are owned or leased.

## Item 3. LEGAL PROCEEDINGS

The information required by this item is set forth in Item 8 under Note 21, Commitments, Contingencies and Guarantees on page 137.

## Item 4. MINE SAFETY DISCLOSURES

Not applicable

### Information about the Company's Executive Officers

The following are the executive officers of the Company as of February 22, 2024, each of whom is designated annually. There are no arrangements or understandings between any of the persons so named and any other person pursuant to which such person was designated an executive officer.

| Name and Age | Positions with Registrant |
|---|---|
| Kevin G. Barth, 63 | Executive Vice President of the Company since April 2005, and Community President and Chief Executive Officer of Commerce Bank since October 1998. Senior Vice President of the Company and Officer of Commerce Bank prior thereto. |
| Derrick R. Brooks, 47 | Senior Vice President of the Company and Executive Vice President of Commerce Bank since January 2021. Senior Vice President of Commerce Bank prior thereto. |
| John K. Handy, 60 | Executive Vice President of the Company since January 2018 and Senior Vice President of the Company prior thereto. Community President and Chief Executive Officer of Commerce Bank since January 2018 and Senior Vice President of Commerce Bank prior thereto. |
| Richard W. Heise, 55 | Senior Vice President of the Company since April 2022 and Executive Vice President of Commerce Bank since July 2021. Prior to his employment with Commerce Bank in February 2017, he was employed at a healthcare tech services company where he served as a senior vice president of revenue cycle and financial services. |
| Robert S. Holmes, 60 | Executive Vice President of the Company since April 2015, and Community President and Chief Executive Officer of Commerce Bank since January 2016. Prior to his employment with Commerce Bank in March 2015, he was employed at a Midwest regional bank where he served as managing director and head of Regional Banking. |
| Kim L. Jakovich, 54 | Senior Vice President of the Company since April 2022, and Officer of the Company prior thereto. Senior Vice President of Commerce Bank since July 2015. |

| Name and Age | Positions with Registrant |
|---|---|
| Patricia R. Kellerhals, 66 | Senior Vice President of the Company since February 2016 and Vice President of the Company prior thereto. Executive Vice President of Commerce Bank since 2005. |
| David W. Kemper, 73 | Executive Chairman of the Company and of the Board of Directors of the Company since August 2018. Prior thereto, he was Chief Executive Officer of the Company and Chairman of the Board of Directors of the Company. He was President of the Company from April 1982 until February 2013. He is the brother of Jonathan M. Kemper (a former Vice Chairman of the Company), and father of John W. Kemper, President and Chief Executive Officer of the Company. |
| John W. Kemper, 46 | Chief Executive Officer of the Company and Chairman and Chief Executive Officer of Commerce Bank since August 2018. Prior thereto, he was Chief Operating Officer of the Company. President of the Company since February 2013 and President of Commerce Bank since March 2013. Member of Board of Directors since September 2015. He is the son of David W. Kemper (Executive Chairman of the Company) and nephew of Jonathan M. Kemper (a former Vice Chairman of the Company). |
| Charles G. Kim, 63 | Chief Financial Officer of the Company since July 2009. Executive Vice President of the Company since April 1995 and Executive Vice President of Commerce Bank since January 2004. Prior thereto, he was Senior Vice President of Commerce Bank. |
| Douglas D. Neff, 55 | Senior Vice President of the Company since January 2019 and Chairman and Chief Executive Officer of Commerce Bank Southwest Region since 2013. |
| Thomas J. Noack, 68 | Senior Vice President of the Company since October 2018 and was also Secretary and General Counsel of the Company from October 2018 to March 2022. He was Secretary, General Counsel and Vice President of the Company prior to October 2018. Executive Vice President of Commerce Bank since September 2021. Prior thereto, he was Secretary, General Counsel and Vice President of Commerce Bank. |
| David L. Orf, 57 | Executive Vice President of the Company since October 2020 and Chief Credit Officer of the Company since January 2021. Executive Vice President of Commerce Bank since January 2014 and Senior Vice President of Commerce Bank prior thereto. |
| Paula S. Petersen, 57 | Executive Vice President of the Company since January 2022 and Senior Vice President of the Company prior thereto. Executive Vice President of Commerce Bank since March 2012. |
| David L. Roller, 53 | Senior Vice President of the Company since July 2016 and Senior Vice President of Commerce Bank since September 2010. |
| Paul A. Steiner, 52 | Controller and Chief Accounting Officer of the Company since April 2019. He is also Controller of the Company's subsidiary bank, Commerce Bank. Assistant Controller and Director of Tax of the Company prior thereto. |

## PART II

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

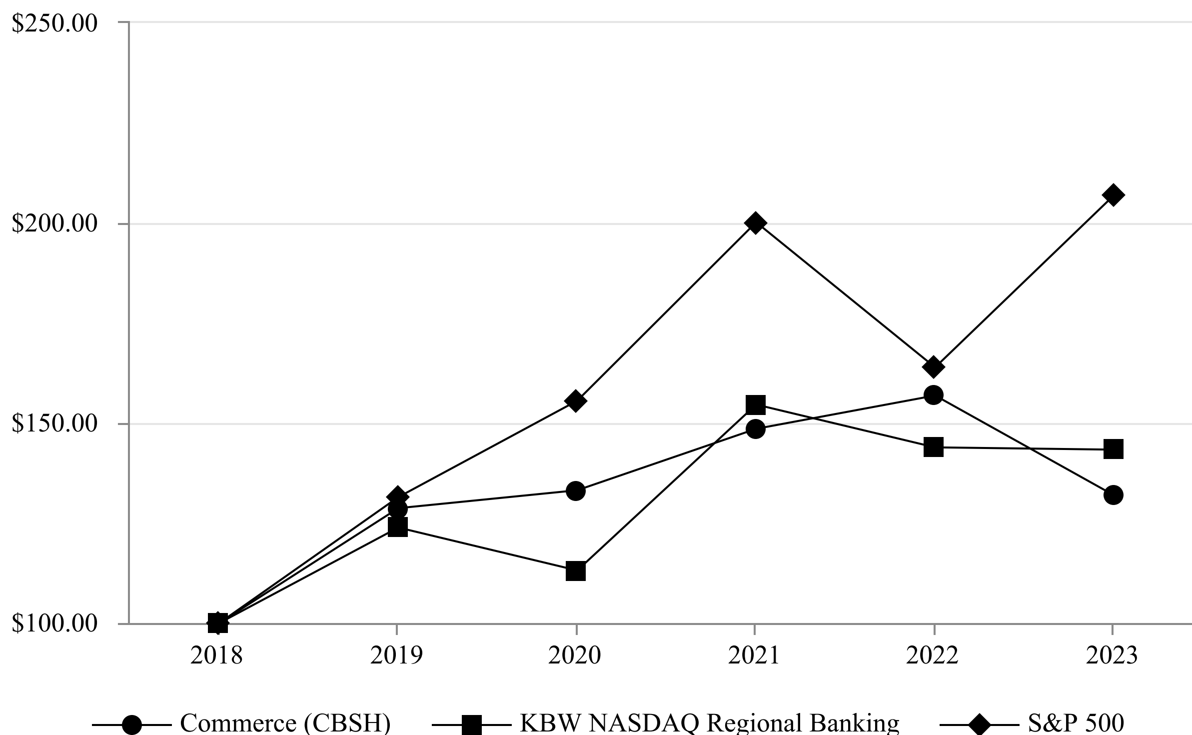
### Commerce Bancshares, Inc.

#### Common Stock Data

Commerce Bancshares, Inc. common shares are listed on the Nasdaq Global Select Market (NASDAQ) under the symbol CBSH. The Company had 3,373 common shareholders of record as of December 31, 2023. Certain of the Company's shares are held in "nominee" or "street" name and the number of beneficial owners of such shares is approximately 150,000.

#### Performance Graph

The following graph presents a comparison of Company (CBSH) performance to the indices named below. It assumes $100 invested on December 31, 2018 with dividends reinvested on a cumulative total shareholder return basis.




| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Commerce (CBSH) | $ 100.00 | $ 128.71 | $ 133.19 | $ 148.55 | $ 156.88 | $ 131.93 |
| KBW NASDAQ Regional Banking | 100.00 | 123.87 | 113.14 | 154.61 | 143.91 | 143.34 |
| S&P 500 | 100.00 | 131.47 | 155.58 | 200.19 | 163.91 | 206.95 |

The Company has a long history of paying dividends. 2023 marked the 55th consecutive year of growth in our regular common dividend, and the Company has also issued an annual 5% common stock dividend for the past 30 years. However, payment of future dividends is within the discretion of the Board of Directors and will depend, among other factors, on earnings, capital requirements, and the operating and financial condition of the Company. The Board of Directors makes the dividend determination quarterly.

The following table sets forth information about the Company's purchases of its $5 par value common stock, its only class of common stock registered pursuant to Section 12 of the Exchange Act, during the fourth quarter of 2023.

| Period | Total Number of Shares Purchased | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Program | Maximum Number that May Yet Be Purchased Under the Program |
|---|---|---|---|---|
| October 1 - 31 2023 | 58,835 | $44.18 | 58,835 | 2,111,333 |
| November 1 - 30 2023 | 224,014 | $48.05 | 224,014 | 1,887,319 |
| December 1 - 31 2023 | 130,072 | $52.32 | 130,072 | 1,757,247 |
| **Total** | **412,921** | **$48.84** | **412,921** | **1,757,247** |

The Company's stock purchases shown above were made under authorizations by the Board of Directors. Under the most recent authorization in April 2022 of 5,000,000 shares, 1,757,247 shares remained available for purchase at December 31, 2023.

## Item 6. RESERVED

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

### Forward-Looking Statements

This report may contain "forward-looking statements" that are subject to risks and uncertainties and include information about possible or assumed future results of operations. Many possible events or factors could affect the future financial results and performance of Commerce Bancshares, Inc. and its subsidiaries (the "Company"). This could cause results or performance to differ materially from those expressed in the forward-looking statements. Words such as "expects", "anticipates", "believes", "estimates", variations of such words and other similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in, or implied by, such forward-looking statements. Readers should not rely solely on the forward-looking statements and should consider all uncertainties and risks discussed throughout this report. Forward-looking statements speak only as of the date they are made. The Company does not undertake to update forward-looking statements to reflect circumstances or events that occur after the date the forward-looking statements are made or to reflect the occurrence of unanticipated events. Such possible events or factors include the risk factors identified in Item 1a Risk Factors and the following: changes in economic conditions in the Company's market area; changes in policies by regulatory agencies, governmental legislation and regulation; fluctuations in interest rates; changes in liquidity requirements; demand for loans in the Company's market area; changes in accounting and tax principles; estimates made on income taxes; failure of litigation settlement agreements to become final in accordance with their terms; and competition with other entities that offer financial services.

### Overview

The Company operates as a super-community bank and offers a broad range of financial products to consumer and commercial customers, delivered with a focus on high-quality, personalized service. The Company is headquartered in Missouri, with its principal offices in Kansas City and St. Louis, Missouri. Customers are served from 257 locations in Missouri, Kansas, Illinois, Oklahoma and Colorado and commercial offices throughout the nation's midsection. A variety of delivery platforms are utilized, including an extensive network of branches and ATM machines, full-featured online banking, a mobile application, and a centralized contact center.

The core of the Company's competitive advantage is its focus on the local markets in which it operates, its offering of competitive, sophisticated financial products, and its concentration on relationship banking and high-touch service. In order to enhance shareholder value, the Company targets core revenue growth. To achieve this growth, the Company focuses on strategies that will expand new and existing customer relationships, offer opportunities for controlled expansion in additional markets, utilize improved technology, and enhance customer satisfaction.

Various indicators are used by management in evaluating the Company's financial condition and operating performance. Among these indicators are the following:

- Net income and earnings per share — Net income attributable to Commerce Bancshares, Inc. was $477.1 million, a decrease of 2.3% compared to the previous year. The return on average assets was 1.49% in 2023, and the return on average common equity was 17.94%. Diluted earnings per share decreased .8% in 2023 compared to 2022.
- Total revenue — Total revenue is comprised of net interest income and non-interest income. Total revenue in 2023 increased $82.5 million, or 5.5%, from 2022, as net interest income grew $55.9 million, and non-interest income increased $26.5 million. Growth in net interest income resulted principally from increases in interest income from loans, partly offset by an increase in interest expense on deposits and borrowings. The increase in non-interest income in 2023 was mainly due to higher bankcard transaction fees and trust fees.
- Non-interest expense — Total non-interest expense increased 9.7% this year compared to 2022, mainly due to higher salaries and employee benefits expense and higher deposit insurance expense due to a special FDIC assessment accrued in 2023.
- Asset quality — Net loan charge-offs totaled $31.1 million in 2023, an increase of $12.0 million from those recorded in 2022, and averaged .19% of loans in 2023, as compared to .12% of loans in 2022. Total non-performing assets, which include non-accrual loans and foreclosed real estate, amounted to $7.6 million at December 31, 2023, compared to $8.4 million at December 31, 2022, and represented .04% of loans outstanding at December 31, 2023.
- Shareholder return — During 2023, the Company paid cash dividends of $1.03 per share on its common stock, representing an increase of 7.1% over the previous year. In 2023, the Company issued its 30th consecutive annual 5% common stock dividend, and in February 2024, the Company's Board of Directors authorized an increase of 5.1% in

the common cash dividend. The Company purchased 1,354,811 shares in 2023. Total shareholder return, including the change in stock price and dividend reinvestment, was 5.7%, 8.7%, and 8.7% over the past 5, 10, and 15 years, respectively.

The following discussion and analysis should be read in conjunction with the consolidated financial statements and related notes. The historical trends reflected in the financial information presented below are not necessarily reflective of anticipated future results.

## Key Ratios

| | **2023** | 2022 | 2021 | 2020 | 2019 |
|---|---|---|---|---|---|
| *(Based on average balances)* | | | | | |
| Return on total assets | **1.49%** | 1.45% | 1.55% | 1.20% | 1.67% |
| Return on common equity | **17.94** | 17.31 | 15.37 | 10.64 | 14.06 |
| Equity to total assets | **8.33** | 8.39 | 10.11 | 11.18 | 12.20 |
| Loans to deposits [(1)] | **66.31** | 55.41 | 56.46 | 67.73 | 71.54 |
| Non-interest bearing deposits to total deposits | **32.61** | 39.02 | 40.46 | 37.83 | 32.03 |
| Net yield on interest earning assets (tax equivalent basis) | **3.16** | 2.85 | 2.58 | 2.99 | 3.48 |
| *(Based on end of period data)* | | | | | |
| Non-interest income to revenue [(2)] | **36.47** | 36.71 | 40.15 | 37.87 | 38.98 |
| Efficiency ratio [(3)] | **59.17** | 56.90 | 57.64 | 57.19 | 56.87 |
| Tier I common risk-based capital ratio | **15.25** | 14.13 | 14.34 | 13.71 | 13.93 |
| Tier I risk-based capital ratio | **15.25** | 14.13 | 14.34 | 13.71 | 14.66 |
| Total risk-based capital ratio | **16.03** | 14.89 | 15.12 | 14.82 | 15.48 |
| Tier I leverage ratio | **11.25** | 10.34 | 9.13 | 9.45 | 11.38 |
| Tangible common equity to tangible assets ratio [(4)] | **8.85** | 7.32 | 9.01 | 9.92 | 10.99 |
| Common cash dividend payout ratio | **28.24** | 26.10 | 23.12 | 35.32 | 27.52 |

*(1) Includes loans held for sale.*
*(2) Revenue includes net interest income and non-interest income.*
*(3) The efficiency ratio is calculated as non-interest expense (excluding intangibles amortization) as a percent of total revenue.*
*(4) The tangible common equity to tangible assets ratio is a measurement which management believes is a useful indicator of capital adequacy and utilization. It provides a meaningful basis for period to period and company to company comparisons, and also assist regulators, investors and analysts in analyzing the financial position of the Company. Tangible common equity and tangible assets are non-GAAP measures and should not be viewed as substitutes for, or superior to, data prepared in accordance with GAAP.*

The following table is a reconciliation of the GAAP financial measures of total equity and total assets to the non-GAAP measures of total tangible common equity and total tangible assets.

| *(Dollars in thousands)* | **2023** | 2022 | 2021 | 2020 | 2019 |
|---|---|---|---|---|---|
| Total equity | **$ 2,964,230** | $ 2,481,577 | $ 3,448,324 | $ 3,399,972 | $ 3,138,472 |
| Less non-controlling interest | **20,114** | 16,286 | 11,026 | 2,925 | 3,788 |
| Less preferred stock | **—** | — | — | — | 144,784 |
| Less goodwill | **146,539** | 138,921 | 138,921 | 138,921 | 138,921 |
| Less intangible assets* | **4,058** | 4,305 | 4,604 | 4,958 | 1,785 |
| **Total tangible common equity (a)** | **$ 2,793,519** | $ 2,322,065 | $ 3,293,773 | $ 3,253,168 | $ 2,849,194 |
| Total assets | **$31,701,061** | $31,875,931 | $36,689,088 | $32,922,974 | $26,065,789 |
| Less goodwill | **146,539** | 138,921 | 138,921 | 138,921 | 138,921 |
| Less intangible assets* | **4,058** | 4,305 | 4,604 | 4,958 | 1,785 |
| **Total tangible assets (b)** | **$31,550,464** | $31,732,705 | $36,545,563 | $32,779,095 | $25,925,083 |
| **Tangible common equity to tangible assets ratio (a)/(b)** | **8.85%** | 7.32% | 9.01% | 9.92% | 10.99% |

** Intangible assets other than mortgage servicing rights.*

## Results of Operations

| (Dollars in thousands) | 2023 | 2022 | 2021 | $ Change '23-'22 | $ Change '22-'21 | % Change '23-'22 | % Change '22-'21 |
|---|---|---|---|---|---|---|---|
| Net interest income | **$ 998,129** | $ 942,185 | $ 835,424 | **$ 55,944** | $ 106,761 | 5.9% | 12.8% |
| Provision for credit losses | **(35,451)** | (28,071) | 66,326 | **7,380** | 94,397 | 26.3 | (142.3) |
| Non-interest income | **573,045** | 546,535 | 560,393 | **26,510** | (13,858) | 4.9 | (2.5) |
| Investment securities gains (losses), net | **14,985** | 20,506 | 30,059 | **(5,521)** | (9,553) | (26.9) | (31.8) |
| Non-interest expense | **(930,982)** | (848,777) | (805,901) | **82,205** | 42,876 | 9.7 | 5.3 |
| Income taxes | **(134,549)** | (132,358) | (145,711) | **2,191** | (13,353) | 1.7 | (9.2) |
| Income (expense) attributable to non-controlling interest | **(8,117)** | (11,621) | (9,825) | **(3,504)** | 1,796 | (30.2) | 18.3 |
| **Net income attributable to Commerce Bancshares, Inc.** | **$ 477,060** | **$ 488,399** | **$ 530,765** | **$ (11,339)** | **$ (42,366)** | **(2.3)%** | **(8.0)%** |

*N.M. - Not meaningful.*

Net income attributable to Commerce Bancshares, Inc. (net income) for 2023 was $477.1 million, a decrease of $11.3 million, or 2.3%, compared to $488.4 million in 2022. Diluted income per common share was $3.64 in 2023, compared to $3.67 in 2022. The decrease in net income resulted mainly from an increase of $82.2 million in non-interest expense, partly offset by increases in net interest income of $55.9 million and non-interest income of $26.5 million. The return on average assets was 1.49% in 2023 compared to 1.45% in 2022, and the return on average common equity was 17.94% in 2023 compared to 17.31% in 2022. At December 31, 2023, the ratio of tangible common equity to tangible assets increased to 8.85%, compared to 7.32% at year end 2022.

During 2023, net interest income grew mainly due to increases of $338.1 million in interest income earned on loans and $88.2 million in interest income earned on deposits with banks, mainly due to higher average rates, partly offset by increases in interest expense on deposits and borrowings of $215.7 million and $110.2 million, respectively, mainly due to higher average rates paid. Total rates earned on average interest earning assets increased 134 basis points this year, while funding costs for deposits and borrowings increased 156 basis points. The provision for credit losses increased mainly due to higher net loan charge-offs and an increase in the estimate of the allowance for credit losses this year compared to last year. Net loan charge-offs increased $12.0 million, mainly due to higher credit card, consumer and business loan net charge-offs in 2023.

Non-interest income grew 4.9% in 2023, mainly due to increases in bank card and trust fees. Net investment securities gains of $15.0 million were recorded in 2023 and were comprised mainly of net fair value gains on the Company's private equity investment portfolio, partly offset by losses on sales of available for sale securities. Non-interest expense increased $82.2 million in 2023 compared to 2022, mainly due to higher salaries and benefits expense and deposit insurance expense.

Net income attributable to Commerce Bancshares, Inc. (net income) for 2022 was $488.4 million, a decrease of $42.4 million, or 8.0%, compared to $530.8 million in 2021. Diluted income per common share was $3.67 in 2022, compared to $3.91 in 2021. The decrease in net income resulted from an increase of $94.4 million in the provision for credit losses, as well as an increase of $42.9 million in non-interest expense and a decrease of $13.9 million in non-interest income. These decreases to net income were partly offset by increases in net interest income of $106.8 million and a decrease in income tax expense of $13.4 million. The return on average assets was 1.45% in 2022 compared to 1.55% in 2021, and the return on average common equity was 17.31% in 2022 compared to 15.37% in 2021. At December 31, 2022, the ratio of tangible common equity to assets decreased to 7.32%, compared to 9.01% at year end 2021.

During 2022, net interest income grew mainly due to increases of $77.6 million in interest income earned on investment securities, due to higher average rates earned and higher average balances, and $75.5 million in interest income earned on loans, mainly due to higher average rates earned, partly offset by an increase in interest expense on deposits and borrowings of $43.9 million, due to higher average rates paid. Total rates earned on average interest earning assets increased 41 basis points in 2022, while funding costs for deposits and borrowings increased 23 basis points. The provision for credit losses increased in 2022 compared to 2021 due to a significant reduction in the allowance for credit losses on loans during 2021, which did not reoccur in 2022. In addition, there was an increase in the liability for unfunded lending commitments during 2022, compared to a decrease in 2021. Net loan charge-offs increased $496 thousand, mainly due to business loan net charge-offs in 2022, compared to net loan recoveries recorded in 2021, partly offset by lower credit card loan net charge-offs in 2022.

Non-interest income fell 2.5% in 2022, mainly due to a decrease in loan fees and sales income. Net investment securities gains of $20.5 million were recorded in 2022 and were comprised mainly of net fair value gains on the Company's private

equity investment portfolio, partly offset by losses on sales of available for sale securities. Non-interest expense increased $42.9 million in 2022 compared to 2021, mainly due to higher salaries and benefits expense and data processing and software expense.

The Company distributed a 5% stock dividend for the 30th consecutive year on December 19, 2023. All per share and average share data in this report has been restated for the 2023 stock dividend.

**Critical Accounting Estimates and Related Policies**

The Company's consolidated financial statements are prepared based on the application of certain accounting policies, the most significant of which are described in Note 1 to the consolidated financial statements. Certain of these policies require numerous estimates and strategic or economic assumptions that may prove inaccurate or be subject to variations which may significantly affect the Company's reported results and financial position for the current period or future periods. The use of estimates, assumptions, and judgments are necessary when financial assets and liabilities are required to be recorded at, or adjusted to reflect, fair value. Current economic conditions may require the use of additional estimates, and some estimates may be subject to a greater degree of uncertainty due to the current instability of the economy. The Company has identified several policies as being critical because they require management to make particularly difficult, subjective and/or complex judgments about matters that are inherently uncertain and because of the likelihood that materially different amounts would be reported under different conditions or using different assumptions. These estimates and related policies are the Company's allowance for credit losses and fair value measurement policies.

*Allowance for Credit Losses*

The Company's Allowance for Credit Losses policies govern the processes and procedures used to estimate the collectability of its loan portfolio and unfunded lending commitments, and the potential for credit losses in its available for sale debt securities portfolio.

*Allowance for Credit Losses – Loans and Unfunded Lending Commitments*

The Company performs periodic and systematic detailed reviews of its loan portfolio and unfunded lending commitments to assess overall collectability. The level of the allowance for credit losses on loans and unfunded lending commitments reflects the Company's estimate of the losses expected in the loan portfolio and unfunded lending commitments over the assets' contractual term.

The allowance for credit loss is an estimate that is subject to uncertainty due to the various assumptions and judgments used in the estimation process.

The allowance for credit losses is measured on a collective (pool) basis. Loans are aggregated into pools based on similar risk characteristics including borrower type, collateral type and expected credit loss patterns. Loans that do not share similar risk characteristics, primarily large loans on non-accrual status, are evaluated on an individual basis.

The allowance for credit losses is measured using an average historical loss model which incorporates relevant information about past events (including historical credit loss experience on loans with similar risk characteristics), current conditions, and an economic forecast that may affect the collectability of the remaining cash flows over the contractual term of the loans. The calculated loss rate is increased or decreased to reflect expectations of future losses given a single path economic forecast. These adjustments to the loss rate are based on results from various regression models projecting the impact of the macroeconomic variables. The forecast is used for a reasonable and supportable period before reverting to historical averages using a straight-line method.

Additionally, the allowance for credit losses considers other qualitative factors not included in historical loss rates or macroeconomic forecast such as changes in portfolio composition, underwriting practices, or significant unique events or conditions.

Adjustments to the allowance for credit losses are made by increases to or reductions in the provision for credit losses, which are reflected in the consolidated statements of income.

**Assumptions, Judgments, and Uncertainties:** The uncertainty in the estimation of the allowance for credit losses is created because key assumptions and judgements are applied throughout the process. Key assumptions include segmentation of the portfolio into pools, calculations of life of a loan using a combination of contractual terms and expected prepayment speeds and forecast of macroeconomic conditions. The Company utilizes a third-party macro-economic forecast

that continuously changes due to economic conditions and events. The single path economic forecast includes key macroeconomic variables including GDP, disposable income, unemployment rate, various interest rates, consumer price index (CPI) inflation rate, housing price index (HPI), commercial real estate price index (CREPI) and market volatility. Each reporting period, the base macroeconomic forecast scenario is evaluated to ensure it is not inconsistent with management's expectations. Changes in the forecast cause fluctuations in the estimates of the allowance for credit losses on loans and the liability for unfunded lending commitments. Potential changes in any one economic variable *may or may not* affect the overall allowance because a variety of economic variables and inputs are considered in estimating the allowance, and changes in those variables and inputs may not occur at the same rate, may not be consistent across product types and may have offsetting impacts to other changing variables and inputs.

Data points such as loan mix, level of loan balances outstanding, portfolio performance, line utilization trends and risk ratings change throughout the life of a portfolio which could cause changes to the expected credit losses.

Qualitative factors not included in historical information or macroeconomic forecast require significant judgment to identify and determine how to apply to the estimate for credit losses. The qualitative factors continuously evolve in reaction to other changing assumptions, data inputs and industry trends.

The Company uses its best judgment to assess the macroeconomic forecast, key assumptions and internal and external data in estimating the allowance for credit losses on loans and the liability for unfunded lending commitments. These estimates are subject to continuous refinement based on changes in the underlying external and internal data.

**Impact if actual results differ from assumptions**: The allowance for credit losses represents management's best estimate of expected current credit losses in the loan portfolio and within the Company's unfunded lending commitments, but changes in the inputs and assumptions described above could significantly impact the calculated estimated credit losses. Therefore, actual credit losses may differ significantly from estimated results. Significant deterioration in circumstances relating to loan quality and economic conditions could result in a requirement for additional allowance. Likewise, an upturn in loan quality and improved economic conditions may require a reduction in the allowance for credit losses. In either instance, changes could have a significant impact on our financial condition and results of operations.

*Allowance for Credit Losses - Available for Sale Debt Securities*

The level of the allowance for credit losses on available for sale securities reflects the Company's estimate of the losses expected in the available for sale debt security portfolio. In order to estimate the allowance for credit losses on available for sale debt securities, the Company performs quarterly reviews of its investment portfolio to identify securities in an unrealized loss position.

Changes to the allowance for credit losses are made by changes to or reductions in the provision for credit losses, which are reflected in the consolidated statements of income.

**Assumptions, Judgments, and Uncertainties:** The Company's model for establishing its allowance for credit losses uses cash flows projected to be received over the estimated life of the securities, discounted to present value, and compared to the current amortized cost bases of the securities. Securities for which fair value is less than amortized cost are reviewed for impairment. Special emphasis is placed on securities whose credit rating has fallen below Baa3 (Moody's) or BBB- (Standard & Poor's), whose fair values have fallen more than 20% below purchase price, or those which have been identified based on management's judgment. These securities are placed on a watch list and cash flow analyses are prepared on an individual security basis. Certain securities are analyzed using a projected cash flow model, discounted to present value, and compared to the current amortized cost bases of the securities. The model uses input factors such as cash flow projections, contractual payments required, expected delinquency rates, credit support from other tranches, prepayment speeds, collateral loss severity rates (including loan to values), and various other information related to the underlying collateral. Securities not analyzed using the cash flow model are analyzed by reviewing risk ratings, credit support agreements, and industry knowledge to project future cash flows and any possible credit impairment.

**Impact if actual results differ from assumptions**: The allowance for credit losses represents management's best estimate of expected credit losses in the available for sale debt securities portfolio, but significant change in interest rates and deterioration in economic conditions could result in a requirement for additional allowance. Likewise, an increase in interest rates and improved economic conditions may require a reduction in the allowance for credit losses. In either instance, anticipated changes could have a significant impact on our financial condition and results of operations.

*Fair Value Measurement*

Investment securities, including available for sale debt, trading, equity and other securities, residential mortgage loans held for sale, derivatives and deferred compensation plan assets and associated liabilities are recorded at fair value on a recurring basis. Additionally, from time to time, other assets and liabilities may be recorded at fair value on a nonrecurring basis, such as loan values that have been reduced based on the fair value of the underlying collateral, other real estate (primarily foreclosed property), non-marketable equity securities and certain other assets and liabilities. These nonrecurring fair value adjustments typically involve write-downs of individual assets or application of lower of cost or fair value accounting.

**Assumptions, Judgments, and Uncertainties:** Fair value is an estimate of the exchange price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (i.e., not a forced transaction, such as a liquidation or distressed sale) between market participants at the measurement date and is based on the assumptions market participants would use when pricing an asset or liability. Fair value measurement and disclosure guidance establishes a three-level hierarchy for disclosure of assets and liabilities recorded at fair value.

Fair value is measured based on a variety of inputs. Fair value may be based on quoted market prices for identical assets or liabilities traded in active markets (Level 1 valuations). If market prices are not available, quoted market prices for similar instruments traded in active markets, quoted prices for identical or similar instruments in markets that are not active, or model-based valuation techniques for which all significant assumptions are observable in the market are used (Level 2 valuations). Where observable market data is not available, the valuation is generated from model-based techniques that use significant assumptions not observable in the market (Level 3 valuations). Unobservable assumptions reflect the Company's estimates for assumptions that market participants would use in pricing the asset or liability. Valuation techniques typically include discounted cash flow models and similar techniques, but may also include the use of market prices of assets or liabilities that are not directly comparable to the subject asset or liability.

The selection and weighting of the various fair value techniques may result in a fair value higher or lower than carrying value. Considerable judgment may be involved in determining the amount that is most representative of fair value.

For assets and liabilities recorded at fair value, the Company looks to active and observable market data when developing fair value measurements for those items where there is an active market. Certain assets and liabilities are not actively traded in observable markets, and the Company must use alternative valuation techniques to derive an estimated fair value measurement. In doing so, the Company may be required to make judgments about assumptions market participants would use in estimating the fair value of the financial instrument. The assumptions used to determine fair value adjustments are regularly evaluated by management for relevance under current facts and circumstances.

Changes in market conditions may reduce the availability of quoted prices or observable data. For example, reduced liquidity in the capital markets or changes in secondary market activities could result in observable market inputs becoming unavailable. When market data is not available, the Company uses valuation techniques requiring more management judgment to estimate the appropriate fair value.

Impairment analysis also relates to long-lived assets and core deposit and other intangible assets. An impairment loss is recognized if the carrying amount of the asset is not likely to be recoverable and exceeds its fair value. In determining the fair value, management uses models and applies the techniques and assumptions previously discussed.

At December 31, 2023, assets and liabilities measured using observable inputs that are classified as either Level 1 or Level 2 represented 98.2% and 99.6% of total assets and liabilities recorded at fair value, respectively. Valuations generated from model-based techniques that use at least one significant assumption not observable in the market are considered Level 3, and the Company's Level 3 assets totaled $177.8 million, or 1.8% of total assets recorded at fair value on a recurring basis. The fair value hierarchy, the extent to which fair value is used to measure assets and liabilities, and the valuation methodologies and key inputs used are discussed in Note 17 on Fair Value Measurements.

**Impact if actual results differ from assumptions**: Changes in fair value are recorded either in earnings or accumulated other comprehensive income. Adjustments in the inputs and assumptions described above could significantly impact the fair values of the Company's assets and liabilities and have a significant impact on our financial condition and results of operations.

## Net Interest Income

Net interest income, the largest source of revenue, results from the Company's lending, investing, borrowing, and deposit gathering activities. It is affected by both changes in the level of interest rates and changes in the amounts and mix of interest earning assets and interest bearing liabilities. The following table summarizes the changes in net interest income on a fully taxable equivalent basis, by major category of interest earning assets and interest bearing liabilities, identifying changes related to volumes and rates. Changes not solely due to volume or rate changes are allocated to rate.

| | **2023** | | | 2022 | | |
|---|---|---|---|---|---|---|
| | **Change due to** | | | Change due to | | |
| *(In thousands)* | **Average Volume** | **Average Rate** | **Total** | Average Volume | Average Rate | Total |
| **Interest income, fully taxable-equivalent basis** | | | | | | |
| Loans: | | | | | | |
| Business | **$ 15,048** | **$ 113,212** | **$ 128,260** | $ (14,493) | $ 25,763 | $ 11,270 |
| Real estate - construction and land | **12,264** | **43,081** | **55,345** | 3,034 | 18,157 | 21,191 |
| Real estate - business | **15,551** | **64,631** | **80,182** | 6,909 | 22,671 | 29,580 |
| Real estate - personal | **4,589** | **11,262** | **15,851** | 1,452 | 1,159 | 2,611 |
| Consumer | **840** | **36,426** | **37,266** | 2,516 | 5,167 | 7,683 |
| Revolving home equity | **1,023** | **9,127** | **10,150** | (200) | 3,002 | 2,802 |
| Consumer credit card | **1,663** | **10,728** | **12,391** | (3,377) | 3,935 | 558 |
| Total interest on loans | **50,978** | **288,467** | **339,445** | (4,159) | 79,854 | 75,695 |
| Loans held for sale | **(137)** | **83** | **(54)** | (434) | 191 | (243) |
| Investment securities: | | | | | | |
| U.S. government and federal agency obligations | **(3,589)** | **(12,585)** | **(16,174)** | 12,468 | (4,261) | 8,207 |
| Government-sponsored enterprise obligations | **205** | **185** | **390** | 92 | 21 | 113 |
| State and municipal obligations | **(12,406)** | **(3,435)** | **(15,841)** | 1,089 | (1,689) | (600) |
| Mortgage-backed securities | **(14,481)** | **7,436** | **(7,045)** | (82) | 40,827 | 40,745 |
| Asset-backed securities | **(17,460)** | **17,062** | **(398)** | 12,336 | 13,675 | 26,011 |
| Other securities | **2,859** | **(1,819)** | **1,040** | 4,599 | (2,133) | 2,466 |
| Total interest on investment securities | **(44,872)** | **6,844** | **(38,028)** | 30,502 | 46,440 | 76,942 |
| Federal funds sold | **27** | **220** | **247** | 61 | 347 | 408 |
| Securities purchased under agreements to resell | **(11,987)** | **2,989** | **(8,998)** | 6,449 | (21,179) | (14,730) |
| Interest earning deposits with banks | **6,630** | **81,520** | **88,150** | (1,375) | 13,271 | 11,896 |
| **Total interest income** | **639** | **380,123** | **380,762** | 31,044 | 118,924 | 149,968 |
| **Interest expense** | | | | | | |
| Interest bearing deposits: | | | | | | |
| Savings | **(60)** | **76** | **16** | 107 | (496) | (389) |
| Interest checking and money market | **(4,055)** | **125,332** | **121,277** | 732 | 17,247 | 17,979 |
| Certificates of deposit of less than $100,000 | **610** | **36,611** | **37,221** | (174) | 485 | 311 |
| Certificates of deposit of $100,000 and over | **5,231** | **51,928** | **57,159** | (499) | 1,820 | 1,321 |
| Federal funds purchased | **9,117** | **14,312** | **23,429** | 42 | 1,777 | 1,819 |
| Securities sold under agreements to resell | **(124)** | **49,266** | **49,142** | 31 | 22,362 | 22,393 |
| Other borrowings | **28,598** | **9,058** | **37,656** | 1,817 | 18 | 1,835 |
| **Total interest expense** | **39,317** | **286,583** | **325,900** | 2,056 | 43,213 | 45,269 |
| **Net interest income, fully taxable-equivalent basis** | **$ (38,678)** | **$ 93,540** | **$ 54,862** | $ 28,988 | $ 75,711 | $ 104,699 |

Net interest income totaled $998.1 million in 2023, increasing $55.9 million, or 5.9%, compared to $942.2 million in 2022. On a fully taxable-equivalent (FTE) basis, net interest income totaled $1.0 billion, and increased $54.9 million over 2022. This growth was mainly due to increases of $339.4 million in interest earned on loans and $88.2 million in interest earned on balances at the Federal Reserve, both mainly due to higher average rates earned. These increases were partly offset by an increase of $325.9 million in interest expense on deposits and borrowings, mainly due to higher average rates paid, and lower interest earned on investment securities of $38.0 million, mainly due to lower average balances. The net yield on earning assets (FTE) was 3.16% in 2023 compared with 2.85% in 2022. The fully taxable-equivalent basis uses a federal income tax rate of 21%.

During 2023, loan interest income (FTE) grew $339.4 million over 2022 mainly due to an increase in rates earned for all loan categories and a $1.2 billion, or 7.8%, increase in average loan balances. The average fully taxable-equivalent rate earned on the loan portfolio increased 172 basis points to 5.90% in 2023 compared to 4.18% in 2022. The higher rates earned on the loan portfolio were partly related to actions taken by the Federal Reserve to raise short-term interest rates, which caused most of the Company's variable rate loan portfolio to re-price higher. Additionally, fixed rate loans were generally originated in 2023 at higher interest rates than the weighted-average of the portfolio of fixed rate loans. Increased interest earned on business, business real estate and construction and land loans was the main driver of overall higher interest income. Business loan interest income increased $128.3 million due to a 196 basis point increase in the average rate earned and an increase of $405.2 million, or 7.5%, in average balances. Business real estate loan interest grew $80.2 million in 2023 compared to 2022 as a result of an increase of 181 basis points in the average rate earned and higher average balances of $372.0 million, or 11.6%. Interest earned on construction and land loans increased $55.3 million due to an increase of 292 basis points in the average rate earned and growth of $243.8 million, or 19.8%, in average balances. Interest on personal real estate loans increased $15.9 million as the average rate earned increased 38 basis points and the average balance grew $137.4 million. Interest on consumer loans grew $37.3 million over the prior year as the average rate earned increased 174 basis points. Revolving home equity loan interest increased $10.2 million due to an increase of 301 basis points in the average rate earned and growth in average balances of $22.7 million. Interest on consumer credit card loans was higher by $12.4 million due to an increase of 191 basis points in the average rate earned and a $14.0 million increase in average balances.

Fully taxable-equivalent interest income on total investment securities decreased $38.0 million during 2023, as average balances declined $2.6 billion, while the average rate earned increased 14 basis points. The average rate on the total investment securities portfolio was 2.29% in 2023 compared to 2.15% in 2022, while the average balance of the total investment securities portfolio (excluding unrealized fair value adjustments on available for sale debt securities) was $12.4 billion in 2023 compared to an average balance of $14.9 billion in 2022. The decrease in interest income was mainly due to lower interest income earned on U.S. government securities, state and municipal securities and mortgage-backed securities. Interest earned on U.S. government securities decreased $16.2 million mainly due to lower treasury inflation-protected securities (TIPS) interest income of $14.3 million. Average balances of U.S. government securities decreased $96.0 million and the average rate earned declined 125 basis points. The decrease of $15.8 million in interest earned on state and municipal securities was due to a decrease of $542.8 million in average balances and a decline of 23 basis points in average rate earned. Interest earned on mortgage-backed securities decreased $7.0 million due to a lower average balances of $742.6 million, partly offset by an increase of 12 basis points in the average rate earned. Interest earned on asset-backed securities decreased $398 thousand, due to a decline in average balances of $1.2 billion, mostly offset by an increase of 62 basis points in the average rate earned.

Interest on securities purchased under resell agreements decreased $9.0 million compared to 2022 due to a decrease in average balances of $793.8 million, partly offset by growth of 43 basis points in the average rate. Interest income on balances at the Federal Reserve increased $88.2 million over 2022, mainly due to a 416 basis point increase in the average rate earned and growth in average balances of $597.3 million.

During 2023, interest expense on deposits increased $215.7 million over 2022 and resulted mainly from a 126 basis point increase in the overall average rate paid on deposits. Interest expense on interest checking and money market accounts increased $121.3 million mainly due to higher rates paid, which grew 94 basis points, slightly offset by lower average balances of $1.4 billion. Interest expense on certificates of deposit grew $94.4 million, mainly due to a 350 basis point increase in the average rate paid, coupled with a $1.4 billion increase in average balances. The overall rate paid on total deposits increased from .18% in 2022 to 1.44% in the current year. Interest expense on borrowings increased $110.2 million mainly due to a 210 basis point increase in the rate paid on securities sold under repurchase agreements and an increase in $711.3 million in average Federal Home Loan Bank (FHLB) borrowings. The Company did not have any outstanding FHLB borrowings at December 31, 2023. The overall average rate incurred on all interest bearing liabilities was 1.86% in 2023, compared to .30% in 2022.

Net interest income totaled $942.2 million in 2022, increasing $106.8 million, or 12.8%, compared to $835.4 million in 2021. On an FTE basis, net interest income totaled $951.8 million, and increased $104.7 million over 2021. This growth was mainly due to an increase of $75.7 million in interest earned on loans, due to higher average rates earned and an increase of $76.9 million in interest earned on investment securities, due to higher rates and average balances, partly offset by an increase of $45.3 million in interest expense on deposits and borrowings, due to higher average rates paid. The net yield on earning assets (FTE) was 2.85% in 2022 compared with 2.58% in 2021.

During 2022, loan interest income (FTE) grew $75.7 million over 2021 mainly due to an increase in rates earned for all loan categories. The average fully taxable-equivalent rate earned on the loan portfolio increased 51 basis points to 4.18% in 2022 compared to 3.67% in 2021. The higher rates earned on the loan portfolio were mostly related to actions taken by the Federal Reserve in 2022 to raise short-term interest rates, which caused most of the Company's variable rate loan portfolio to re-price higher. Additionally, fixed rate loans were generally originated in 2022 at higher interest rates than the weighted-average of the portfolio of fixed rate loans. The increase in interest rates earned was partly offset a decline in average loan balances of $102.4 million, or .7%, in 2022. Increased interest earned on business real estate and construction and land loans was the main driver of overall higher interest income. Business real estate loan interest grew $29.6 million in 2022 compared to 2021 as a result of an increase of 71 basis points in the average rate earned and higher average balances of $199.1 million, or 6.6%. Interest earned on construction and land loans increased $21.2 million due to an increase of 147 basis points in the average rate earned and growth of $85.2 million, or 7.4%, in average balances. Business loan interest income increased $11.3 million mainly due to a 49 basis point increase in the average rate earned, partly offset by a decrease of $462.1 million in average balances. Average balances of business loans included average balances of $41.9 million in Paycheck Protection Program (PPP) loans at December 31, 2022, which was a decline of $812.2 million from balances of $854.1 million at December 31, 2021. Interest on personal real estate loans increased $2.6 million as the average balance grew $44.0 million and the average rate earned increased four basis points. Interest on consumer loans grew $7.7 million over 2021 as the average rate earned increased 25 basis points and average balances were higher by $66.2 million. Revolving home equity loan interest increased $2.8 million due to an increase of 108 basis points in the average rate earned, slightly offset by lower average balances of $5.8 million. Interest on consumer credit card loans was higher by $558 thousand due to an increase of 72 basis points in the average rate earned, mostly offset by a decline of $30.3 million, or 5.3%, in average balances.

Fully taxable-equivalent interest income on total investment securities increased $76.9 million during 2022, as average balances grew $1.5 billion and the average rate earned increased 34 basis points. The average rate on the total investment securities portfolio was 2.15% in 2022 compared to 1.81% in 2021, while the average balance of the total investment securities portfolio (excluding unrealized fair value adjustments on available for sale debt securities) was $14.9 billion in 2022 compared to an average balance of $13.5 billion in 2021. The increase in interest income was mainly due to higher interest income earned on mortgage-backed, asset-backed and U.S. government securities. Interest earned on mortgage-backed securities increased $40.7 million due to a 59 basis point increase in the average rate earned. The increase of $26.0 million in interest earned on asset-backed securities was due to an increase of 35 basis points in the average rate earned coupled with growth of $1.1 billion in average balances. Interest earned on U.S. government securities grew $8.2 million and was mainly impacted by growth of $7.3 million in inflation income on TIPS. Average balances of U.S. government securities increased $301.9 million, while the average rate earned declined 39 basis points.

Interest on securities purchased under resell agreements decreased $14.7 million compared to 2021 due to a decrease of 142 basis points in the average rate, partly offset by growth in average balances of $220.1 million. Interest earned on deposits with banks increased $11.9 million over 2021, mainly due to a 98 basis point increase in the average rate earned, partly offset by a decline in average balances of $1.1 billion.

During 2022, interest expense on deposits increased $19.2 million over 2021 and resulted mainly from an 11 basis point increase in the overall average rate paid on deposits. Interest expense on interest checking and money market accounts increased $18.0 million mainly due to higher rates paid, which grew 12 basis points, coupled with higher average balances of $1.1 billion. Interest expense on certificates of deposit over $100,000 grew $1.3 million, mainly due to a 37 basis point increase in the average rate paid. The overall rate paid on total deposits increased from .07% in 2021 to .18% in the current year. Interest expense on borrowings increased $26.0 million mainly due to a 95 basis point increase in the rate paid on securities sold under repurchase agreements. The overall average rate incurred on all interest bearing liabilities was .30% in 2022, compared to .07% in 2021.

**Provision for Credit Losses**

The provision for credit losses is comprised of provisions for credit losses on loans and unfunded lending commitments and is recorded to adjust the allowance for credit losses on loans and the liability for unfunded lending commitments to a level deemed adequate by management based on the factors mentioned in the “Allowance for Credit Losses on Loans and Liability for Unfunded Lending Commitments” section of this discussion. The provision for credit losses was $35.5 million in 2023, an increase of $7.4 million over the 2022 provision.

The provision for credit losses on loans for the year ended December 31, 2023 was $43.3 million, compared to $19.2 million in 2022. The allowance for credit losses on loans totaled $162.4 million at December 31, 2023, an increase of $12.3 million compared to the prior year, and represented .94% of loans at year end 2023, compared to .92% at December 31, 2022.

The provision for unfunded lending commitments was a benefit of $7.9 million during 2023, compared to a provision of $8.9 million in 2022. The liability for unfunded lending commitments was $25.2 million at December 31, 2023, compared to $33.1 million at December 31, 2022.

## Non-Interest Income

| | | | | % Change | |
|---|---|---|---|---|---|
| *(Dollars in thousands)* | **2023** | 2022 | 2021 | **'23-'22** | '22-'21 |
| Bank card transaction fees | **$ 191,156** | $ 176,144 | $ 167,891 | **8.5%** | 4.9% |
| Trust fees | **190,954** | 184,719 | 188,227 | **3.4** | (1.9) |
| Deposit account charges and other fees | **90,992** | 94,381 | 97,217 | **(3.6)** | (2.9) |
| Consumer brokerage services | **17,223** | 19,117 | 18,362 | **(9.9)** | 4.1 |
| Capital market fees | **14,100** | 14,231 | 15,943 | **(0.9)** | (10.7) |
| Loan fees and sales | **11,165** | 13,141 | 29,720 | **(15.0)** | (55.8) |
| Other | **57,455** | 44,802 | 43,033 | **28.2** | 4.1 |
| **Total non-interest income** | **$ 573,045** | $ 546,535 | $ 560,393 | **4.9%** | (2.5)% |
| Non-interest income as a % of total revenue* | **36.5%** | 36.7% | 40.1% | | |
| Total revenue per full-time equivalent employee | **$ 333.0** | $ 324.1 | $ 305.6 | | |

* *Total revenue is calculated as net interest income plus non-interest income.*

Below is a summary of net bank card transaction fees for the years ended December 31, 2023, 2022 and 2021, respectively.

| | | | | % Change | |
|---|---|---|---|---|---|
| *(Dollars in thousands)* | **2023** | 2022 | 2021 | **'23-'22** | '22-'21 |
| Net corporate card fees | **$ 110,641** | $ 100,012 | $ 91,701 | **10.6%** | 9.1% |
| Net debit card fees | **43,881** | 40,968 | 41,010 | **7.1** | (.1) |
| Net merchant fees | **22,186** | 20,604 | 20,036 | **7.7** | 2.8 |
| Net credit card fees | **14,448** | 14,560 | 15,144 | **(0.8)** | (3.9) |
| **Total bank card transaction fees** | **$ 191,156** | $ 176,144 | $ 167,891 | **8.5%** | 4.9% |

Non-interest income totaled $573.0 million, an increase of $26.5 million, or 4.9%, compared to $546.5 million in 2022. Bank card fees increased $15.0 million, or 8.5%, over the prior year, mainly due to increases in net corporate card fees of $10.6 million, net debit card fees of $2.9 million and net merchant fees of $1.6 million. The growth in net corporate card fees over the prior year was mainly due to lower rewards and network expense coupled with higher interchange income. Net debit card fees increased mainly due to lower network expense, while net merchant fees increased mainly due to higher merchant discount fees. Trust fee income increased $6.2 million, or 3.4%, as a result of higher private client trust fees (up 4.3%), which comprised 80.4% of trust fee income in 2023. The market value of total customer trust assets totaled $68.9 billion at year end 2023, which was an increase of 14.2% over year end 2022 balances. Deposit account fees decreased $3.4 million, or 3.6%, mainly due to lower overdraft and return item fees of $8.3 million, partly offset by growth in corporate cash management fees of $3.8 million. In 2023, corporate cash management fees comprised 61.9% of total deposit fees, while overdraft fees comprised 12.8% of total deposit fees. Revenue from consumer brokerage services decreased $1.9 million, or 9.9%, mainly due to lower annuity fees, while loan fees and sales decreased $2.0 million, or 15.0%, mainly due to lower mortgage banking revenue. Other non-interest income increased $12.7 million, or 28.2%, over the prior year mainly due to higher letter of credit fees of $3.2 million, cash sweep commissions of $2.9 million, gains on the sale of real estate of $2.1 million and swap fees of $1.1 million. In addition, increases of $6.4 million in fair value adjustments were recorded on the Company's deferred compensation plan, which are held in a trust and recorded as both an asset and a liability, affecting both other income and other expense. These increases were partly offset by lower tax credit sales income of $2.4 million.

During 2022, non-interest income totaled $546.5 million, a decrease of $13.9 million, or 2.5%, compared to $560.4 million in 2021. Trust fee income decreased $3.5 million, or 1.9%, as a result of lower institutional (down 7.0%), mutual fund (down 10.9%) and private client trust fees (down .3%). Private client trust fees comprised 79.7% of trust fee income in 2022. The market value of total customer trust assets totaled $60.3 billion at year end 2022, which was a decrease of 13.0% from year end 2021 balances. Bank card fees increased $8.3 million, or 4.9%, over 2021, mainly due to an increase in net corporate card fees of $8.3 million. The growth in net corporate card fees over 2021 was mainly due to higher interchange income, partly offset by higher rewards expense. Deposit account fees decreased $2.8 million, or 2.9%, mainly due to lower overdraft and return item fees of $4.2 million and personal account deposit fees of $1.2 million, partly offset by growth in corporate cash management

fees of $2.5 million. In 2022, corporate cash management fees comprised 55.6% of total deposit fees, while overdraft fees comprised 21.1% of total deposit fees. In September 2022, the Company implemented enhancements to consumer checking accounts that eliminated return items fees and lowered overdraft fees. Capital market fees decreased $1.7 million, or 10.7%, compared to 2021, while revenue from consumer brokerage services increased $755 thousand, or 4.1%, mainly due to growth in annuity fees. Loan fees and sales decreased $16.6 million, or 55.8%, mainly due to lower mortgage banking revenue. Other non-interest income increased $1.8 million, or 4.1%, over 2021 mainly due to higher cash sweep commissions of $8.2 million and lease income of $1.3 million, income of $2.2 million from a life insurance death benefit recorded in the second quarter of 2022, a $2.6 million loss on an equity method investment recorded in 2021 and a lease impairment of $1.1 million recorded in 2021. These increases were partly offset by gains of $5.6 million recorded mainly on the sales of branch properties in 2021. In addition, a decrease of $6.6 million in fair value adjustments was recorded on the Company's deferred compensation plan.

**Investment Securities Gains (Losses), Net**

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Net gains (losses) on sales of available for sale debt securities | **$ (8,444)** | $ (20,273) | $ (3,284) |
| Net gains (losses) on sales of equity securities | **—** | 17 | — |
| Fair value adjustments on equity securities, net | **(487)** | (943) | 187 |
| Net gains (losses) on sales of private equity investments | **(100)** | (2,128) | 1,452 |
| Fair value adjustments of private equity investments | **24,016** | 43,833 | 31,704 |
| **Total investment securities gains (losses), net** | **$ 14,985** | $ 20,506 | $ 30,059 |

Net gains and losses on investment securities during 2023, 2022 and 2021 are shown in the table above. Included in these amounts are gains and losses arising from sales of securities from the Company's available for sale debt portfolio and gains and losses relating to private equity investments, which are primarily held by the Parent's majority-owned private equity subsidiary. The gains and losses on private equity investments include fair value adjustments, in addition to gains and losses realized upon disposition. The portions of private equity investment gains and losses that are attributable to minority interests are reported as non-controlling interest in the consolidated statements of income, and resulted in expense of $4.8 million in 2023, $8.5 million in 2022, and $6.5 million in 2021.

Net securities gains of $15.0 million were recorded in 2023, which included net gains of $24.0 million in fair value adjustments on private equity investments. This increase was partly offset by net losses of $8.4 million realized on sales resulting from the Company's sale of approximately $1.1 billion (book value) in bonds, mainly state and municipal securities and asset-backed securities, net losses of $100 thousand on sales of private equity investments, and net losses of $487 thousand in fair value adjustments on equity securities.

Net securities gains of $20.5 million were recorded in 2022, which included net gains of $43.8 million in fair value adjustments on private equity investments. This increase was partly offset by losses of $20.3 million realized on sales resulting from the Company's sale of approximately $105 million (book value) in bonds, mainly mortgage-backed and corporate bond securities, net losses of $2.1 million on sales of private equity investments, and net losses of $943 thousand in fair value adjustments on equity securities.

Net securities gains of $30.1 million were recorded in 2021, which included $1.5 million in net gains realized on sales of private equity investments, net gains of $31.7 million in fair value adjustments on private equity investments, and net gains of $187 thousand in fair value adjustments on equity investments. These net gains were offset by losses of $3.3 million realized on bond sales resulting from the Company's sale of approximately $73 million (book value) of bonds, mainly mortgage-backed securities and municipal securities.

**Non-Interest Expense**

| *(Dollars in thousands)* | **2023** | 2022 | 2021 | % Change **'23-'22** | % Change '22-'21 |
|---|---|---|---|---|---|
| Salaries | **$ 492,977** | $ 471,260 | $ 447,238 | **4.6%** | 5.4% |
| Employee benefits | **91,086** | 82,787 | 78,010 | **10.0** | 6.1 |
| Data processing and software | **118,758** | 110,692 | 101,792 | **7.3** | 8.7 |
| Net occupancy | **53,629** | 49,117 | 48,185 | **9.2** | 1.9 |
| Deposit insurance | **33,163** | 10,583 | 9,094 | **213.4** | 16.4 |
| Marketing | **24,511** | 23,827 | 21,856 | **2.9** | 9.0 |
| Equipment | **19,548** | 19,359 | 18,089 | **1.0** | 7.0 |
| Supplies and communication | **19,420** | 18,101 | 17,118 | **7.3** | 5.7 |
| Other | **77,890** | 63,051 | 64,519 | **23.5** | (2.3) |
| **Total non-interest expense** | **$ 930,982** | $ 848,777 | $ 805,901 | **9.7%** | 5.3% |
| Efficiency ratio | **59.2%** | 56.9% | 57.6% | | |
| Salaries and benefits as a % of total non-interest expense | **62.7%** | 65.3% | 65.2% | | |
| Number of full-time equivalent employees | **4,718** | 4,594 | 4,567 | | |

Non-interest expense was $931.0 million in 2023, an increase of $82.2 million, or 9.7%, over the previous year. Salaries and benefits expense increased $30.0 million, or 5.4%, mainly due to higher costs for full-time salaries, healthcare expense and payroll taxes, partly offset by lower incentive compensation expense. Full-time equivalent employees totaled 4,718 at December 31, 2023, compared to 4,594 at December 31, 2022. Data processing and software expense increased $8.1 million, or 7.3%, primarily due to increased costs for service providers and higher bank card processing fees. Net occupancy expense increased $4.5 million, or 9.2%, mainly due to higher depreciation expense and real estate taxes, partly offset by higher rent income. Deposit insurance expense increased $22.6 million due to a $16.0 million accrual during the fourth quarter of 2023 for a one-time special assessment by the FDIC to replenish the Deposit Insurance Fund. Marketing expense increased $684 thousand, or 2.9%, while supplies and communication expense increased $1.3 million, or 7.3%, mainly due to higher postage expense, bank card reissuance fees and office supplies expense. Other non-interest expense increased $14.8 million, or 23.5%, mainly due to higher costs for travel and entertainment expense (up $1.9 million), miscellaneous losses (up $2.1 million), pension plan expense ($1.5 million) and lower deferred origination costs (up $1.6 million). In addition, an increase of $6.4 million in fair value adjustments were recorded on the Company's deferred compensation plan, and deconversion costs of $2.1 million relating to the transition of Commerce Financial Advisors support to LPL Financial's Institution Services platform were recorded in 2023.

In 2022, non-interest expense was $848.8 million, an increase of $42.9 million, or 5.3%, over 2021. Salaries and benefits expense increased $28.8 million, or 5.5%, mainly due to higher costs for full-time salaries, incentive compensation, stock compensation, payroll taxes and 401(k) expense. Salaries expense included expense of $5.4 million for special bonuses paid to non-incentivized full-time and part-time employees in 2022. Full-time equivalent employees totaled 4,594 at December 31, 2022, reflecting a 1% increase over 2021. Data processing and software expense increased $8.9 million, or 8.7%, primarily due to higher bank card processing fees, software amortization and expense, and increased costs for service providers. Net occupancy expense increased $932 thousand, or 1.9%, mainly due to higher depreciation, utilities and outside services expense, partly offset by lower real estate taxes expense. Equipment expense increased $1.3 million, or 7.0%, mainly due to higher depreciation and equipment service contract expense, while marketing expense increased $2.0 million, or 9.0%. Supplies and communication expense increased $983 thousand, or 5.7%, mainly due to higher postage and courier expense and bank card reissuance fees, partly offset by lower data network expense. Other non-interest expense increased slightly over 2021. Higher costs for travel and entertainment expense (up $5.1 million), insurance expense (up $1.9 million), depreciation expense on leased assets (up $958 thousand) and airplane expense (up $864 thousand) were offset by $8.2 million in non-recurring litigation settlement costs recorded in 2021. In addition, the previously mentioned fair value adjustments on the Company's deferred compensation plan assets decreased $6.6 million from 2021.

**Income Taxes**

Income tax expense was $134.5 million in 2023, compared to $132.4 million in 2022 and $145.7 million in 2021. The effective tax rate, including the effect of non-controlling interest, was 22.0% in 2023 compared to 21.3% in 2022 and 21.5% in 2021. Additional information about income tax expense is provided in Note 9 to the consolidated financial statements.

## Financial Condition

### Loan Portfolio Analysis

Classifications of consolidated loans by major category at December 31, 2023 and 2022 are shown in the table below. This portfolio consists of loans which were acquired or originated with the intent of holding to their maturity. Loans held for sale are separately discussed in a following section. A schedule of average balances invested in each loan category below is disclosed within the Average Balance Sheets section of Management's Discussion and Analysis of Financial Condition and Results of Operations below.

| | Balance at December 31 | |
|---|---|---|
| *(In thousands)* | **2023** | 2022 |
| **Commercial:** | | |
| Business | **$ 6,019,036** | $ 5,661,725 |
| Real estate — construction and land | **1,446,764** | 1,361,095 |
| Real estate — business | **3,719,306** | 3,406,981 |
| **Personal banking:** | | |
| Real estate — personal | **3,026,041** | 2,918,078 |
| Consumer | **2,077,723** | 2,059,088 |
| Revolving home equity | **319,894** | 297,207 |
| Consumer credit card | **589,913** | 584,000 |
| Overdrafts | **6,802** | 14,957 |
| **Total loans** | **$ 17,205,479** | $ 16,303,131 |

The table below presents contractual maturities of the loan portfolio, based on payment due dates, as well as a breakdown of fixed rate and floating rate loans at December 31, 2023.

| | Principal Payments Due | | | | |
|---|---|---|---|---|---|
| *(In thousands)* | In One Year or Less | After One Year Through Five Years | After Five Years Through Fifteen Years | After Fifteen Years | Total |
| **Commercial:** | | | | | |
| Business | $ 2,567,095 | $ 3,009,541 | $ 435,052 | $ 7,348 | $ 6,019,036 |
| Real estate — construction and land | 372,555 | 1,010,254 | 58,802 | 5,153 | 1,446,764 |
| Real estate — business | 821,868 | 2,452,951 | 435,628 | 8,859 | 3,719,306 |
| **Personal banking:** | | | | | |
| Real estate — personal | 172,385 | 546,966 | 881,128 | 1,425,562 | 3,026,041 |
| Consumer | 790,458 | 1,097,854 | 186,399 | 3,012 | 2,077,723 |
| Revolving home equity | 16,887 | 84,981 | 218,026 | — | 319,894 |
| Consumer credit card | 67,023 | 200,115 | 322,775 | — | 589,913 |
| Overdrafts | 6,802 | — | — | — | 6,802 |
| **Total loans** | $ 4,815,073 | $ 8,402,662 | $ 2,537,810 | $ 1,449,934 | $ 17,205,479 |
| | | | | | |
| Loans with fixed rates | $ 1,343,238 | $ 3,946,618 | $ 1,359,742 | $ 704,169 | $ 7,353,767 |
| Loans with floating rates | 3,471,835 | 4,456,044 | 1,178,068 | 745,765 | 9,851,712 |
| **Total loans** | $ 4,815,073 | $ 8,402,662 | $ 2,537,810 | $ 1,449,934 | $ 17,205,479 |

The following table shows loan balances at December 31, 2023, segregated between those with fixed interest rates and those with variable rates that fluctuate with an index.

| *(In thousands)* | Fixed Rate Loans | Variable Rate Loans | Total | % Variable Rate Loans |
|---|---|---|---|---|
| Business | $ 2,386,522 | $ 3,632,514 | $ 6,019,036 | 60.4% |
| Real estate — construction and land | 48,130 | 1,398,634 | 1,446,764 | 96.7 |
| Real estate — business | 1,515,970 | 2,203,336 | 3,719,306 | 59.2 |
| Real estate — personal | 1,846,408 | 1,179,633 | 3,026,041 | 39.0 |
| Consumer | 1,522,230 | 555,493 | 2,077,723 | 26.7 |
| Revolving home equity | — | 319,894 | 319,894 | 100.0 |
| Consumer credit card | 27,705 | 562,208 | 589,913 | 95.3 |
| Overdrafts | 6,802 | — | 6,802 | — |
| **Total loans** | $ 7,353,767 | $ 9,851,712 | $ 17,205,479 | 57.3% |

Total loans at December 31, 2023 were $17.2 billion, an increase of $902.3 million, or 5.5%, over balances at December 31, 2022. The increase in loans during 2023 occurred in all categories over the previous year, with the exception of overdrafts. Business loans increased $357.3 million, or 6.3%, mainly due to a $173.9 million increase in commercial and industrial loans and a $95.1 million increase in lease loans. Commercial card and tax-advantaged lending, included within business loans, also increased during 2023. Construction loans increased $85.7 million, or 6.3%, mainly due to growth in commercial construction lending. Business real estate loans increased $312.3 million, or 9.2%, due mainly to increases in industrial, hotel and senior living lending, while multi-family and office building lending declined. Personal real estate loans increased $108.0 million, or 3.7%. The Company sells certain long-term fixed rate mortgage loans to the secondary market, and loan sales in 2023 totaled $29.9 million, compared to $111.3 million in 2022. Consumer loans increased $18.6 million, or .9%, mainly due to growth in consumer auto lending. Health services financing and fixed rate home equity loans also increased, offset by declines in other vehicle and equipment lending (mostly comprised of motorcycle loans) and continued run off of marine and recreational vehicle loan balances. Consumer credit card loans increased $5.9 million, or 1.0%, and revolving home equity loan balances increased $22.7 million, or 7.6%, compared to balances at year end 2022.

The Company currently holds approximately 31% of its loan portfolio in the Kansas City market, 25% in the St. Louis market, and 44% in other regional markets. The portfolio is diversified from a business and retail standpoint, with 65% in loans to businesses and 35% in loans to consumers. The Company believes a diversified approach to loan portfolio management, strong underwriting criteria and an aversion toward credit concentrations from an industry, geographic and product perspective, have contributed to low levels of problem loans and credit losses on loans experienced over the last several years.

The Company participates in credits of large, publicly traded companies which are defined by regulation as shared national credits, or SNCs. Regulations define SNCs as loans exceeding $100 million that are shared by three or more financial institutions. The Company typically participates in these loans when business operations are maintained in the local communities or regional markets and opportunities to provide other banking services are present. At December 31, 2023, the balance of SNC loans totaled approximately $1.5 billion, with an additional $2.2 billion in unfunded commitments, compared to a balance of $1.4 billion, with an additional $2.0 billion in unfunded commitments, at year end 2022.

**Commercial Loans**

*Business*

Total business loans amounted to $6.0 billion at December 31, 2023 and includes loans used mainly to fund customer accounts receivable, inventories, and capital expenditures. The business loan portfolio includes tax-advantaged loans and leases which carry tax-free interest rates. These loans totaled $666.1 million at December 31, 2023, an increase of $48.0 million, or 7.8%, from December 31, 2022 balances. In addition to tax-advantaged leases, the business loan portfolio also includes other direct financing and sales type leases totaling $709.7 million at December 31, 2023, an increase of $95.1 million, or 15.5%, from December 31, 2022. These loans are used by commercial customers to finance capital purchases ranging from computer equipment to office and transportation equipment. Additionally, the Company has $260.8 million of outstanding loans included within its $272.0 million oil and gas energy-related loan portfolio at December 31, 2023, which is further discussed within the Oil and Gas Energy Lending section of the Risk Elements of Loan Portfolio section located within Management's Discussion and Analysis of Financial Condition and Results of Operations. Also included in the business portfolio are corporate card loans, which totaled $407.6 million at December 31, 2023 and are made in conjunction with the Company’s corporate card

business for corporate trade purchases. Corporate card loans are made to corporate, non-profit and government customers nationwide, but have very short-term maturities, which limits credit risk.

Business loans, excluding corporate card loans, are made primarily to customers in the regional trade area of the Company, generally the central Midwest, encompassing the states of Missouri, Kansas, Illinois, and nearby Midwestern markets, including Iowa, Oklahoma, Colorado, Texas, Tennessee, Michigan, Indiana, and Ohio. This portfolio is diversified from an industry standpoint and includes businesses engaged in manufacturing, wholesaling, retailing, agribusiness, insurance, financial services, public utilities, health care, and other service businesses. Emphasis is upon middle-market and community businesses with known local management and financial stability. Consistent with management's strategy and emphasis upon relationship banking, most borrowing customers also maintain deposit accounts and utilize other banking services. Net loan charge-offs in this category totaled $3.1 million in 2023 compared to $1.1 million in 2022. Non-accrual business loans were $3.6 million (.1% of business loans) at December 31, 2023 compared to $6.8 million at December 31, 2022.

*Real Estate-Construction and Land*

The portfolio of loans in this category amounted to $1.4 billion at December 31, 2023, an increase of $85.7 million, or 6.3%, from the prior year and comprised 8.4% of the Company's total loan portfolio. Commercial construction and land development loans totaled $1.3 billion, or 88.0% of total construction loans at December 31, 2023. These loans increased $100.9 million from 2022 year end balances, driving the growth in the total construction portfolio. Commercial construction loans are made during the construction phase for small and medium-sized office and medical buildings, manufacturing and warehouse facilities, apartment complexes, shopping centers, hotels and motels, and other commercial properties. Commercial land development loans relate to land owned or developed for use in conjunction with business properties. Residential construction and land development loans at December 31, 2023 totaled $173.1 million, or 12.0% of total construction loans. A stable construction market has contributed to low loss rates on these loans, with net loan recoveries of $115 thousand and no net loan charge-offs in 2023 and 2022, respectively.

*Real Estate-Business*

Total business real estate loans were $3.7 billion at December 31, 2023 and comprised 21.6% of the Company's total loan portfolio. This category includes mortgage loans for small and medium-sized office and medical buildings, manufacturing and warehouse facilities, distribution facilities, multi-family housing, farms, shopping centers, hotels and motels, churches, and other commercial properties. The business real estate borrowers and/or properties are generally located in local and regional markets where Commerce does business, and emphasis is placed on owner-occupied lending (31.6% of this portfolio), which presents lower risk levels. Additional information about business real estate loans by borrower is disclosed within the Real Estate - Business Loans section of the Risk Elements of Loan Portfolio section located within Management's Discussion and Analysis of Financial Condition and Results of Operations. At December 31, 2023, balances of non-accrual loans amounted to $60 thousand, less than .1% of business real estate loans, down from $189 thousand at year end 2022. The Company experienced net loan charge-offs of $104 thousand in 2023, compared to net loan recoveries of $20 thousand in 2022.

**Personal Banking Loans**

*Real Estate-Personal*

At December 31, 2023, there were $3.0 billion in outstanding personal real estate loans, which comprised 17.6% of the Company's total loan portfolio. The mortgage loans in this category are mainly for owner-occupied residential properties. The Company originates both adjustable and fixed rate mortgage loans, and at December 31, 2023, 39% of the portfolio was comprised of adjustable rate loans, while 61% was comprised of fixed rate loans. The Company does not purchase any loans from outside parties or brokers.

The Company originates certain mortgage loans with the intent to sell to the secondary market, generally FNMA or FHLMC conforming fixed rate loans. The remaining loans are originated with the intent to hold to maturity. Of the $510 million of mortgage loans originated in 2023, $29.9 million were sold to the secondary market. This compares to $699 million of mortgage loans originated and $111.3 million of loans sold to the secondary market in 2022. The decrease in loan sales during 2023 compared to 2022 was mainly due to lower demand for mortgage loans. Net loan recoveries in 2023 totaled $37 thousand, and net loan recoveries were $74 thousand in 2022. Balances of non-accrual loans in this category were $1.7 million at December 31, 2023, compared to $1.4 million at year end 2022.

*Consumer*

Consumer loans consist of private banking, automobile, motorcycle, marine, tractor/trailer, recreational vehicle (RV), fixed rate home equity, patient health care financing and other types of consumer loans. These loans totaled $2.1 billion at

December 31, 2023. Approximately 39% of the consumer portfolio consists of automobile loans, 32% in private banking loans, 11% in fixed rate home equity loans, and 10% in healthcare financing loans. Total consumer loans increased $18.6 million at year end 2023 compared to year end 2022. Growth of $21.7 million in auto loans was supplemented by increases of $13.7 million and $4.5 million in patient healthcare financing and fixed rate home equity loans, respectively. These increases in consumer loan balances were partially offset by declines of $13.7 million in other vehicle and equipment loans and $3.7 million in marine and RV loans. Net charge-offs on total consumer loans were $6.2 million in 2023, compared to $3.8 million in 2022, averaging .30% and .18% of consumer loans in 2023 and 2022, respectively.

*Revolving Home Equity*

Revolving home equity loans, of which 100% are adjustable rate loans, totaled $319.9 million at year end 2023. An additional $900.0 million was available in unused lines of credit, which can be drawn at the discretion of the borrower. Home equity loans are secured mainly by second mortgages (and less frequently, first mortgages) on residential property of the borrower. The underwriting terms for the home equity line product permit borrowing availability, in the aggregate, generally up to 80% or 90% of the appraised value of the collateral property at the time of origination. Net loan recoveries were $57 thousand in 2023, compared to net loan recoveries of $60 thousand in 2022.

*Consumer Credit Card*

Total consumer credit card loans amounted to $589.9 million at December 31, 2023 and comprised 3.4% of the Company's total loan portfolio. The credit card portfolio is concentrated within regional markets served by the Company. The Company offers a variety of credit card products, including affinity cards, rewards cards, and standard and premium credit cards, and emphasizes its credit card relationship product, Special Connections. Approximately 37% of the households that own a Commerce credit card product also maintain a deposit relationship with the subsidiary bank. Approximately 95% of the outstanding credit card loan balances had a floating interest rate at year end 2023, unchanged from year end 2022. Net charge-offs amounted to $19.1 million in 2023, an increase of $6.4 million from $12.7 million in 2022.

**Loans Held for Sale**

At December 31, 2023, loans held for sale were comprised of certain long-term fixed rate personal real estate loans and loans extended to students while attending colleges and universities. The personal real estate loans are carried at fair value and totaled $1.6 million at December 31, 2023. The student loans, carried at the lower of cost or fair value, totaled $2.2 million at December 31, 2023. This portfolio is further discussed in Note 2 to the consolidated financial statements.

**Allowance for Credit Losses on Loans and Liability for Unfunded Lending Commitments**

To determine the amount of the allowance for credit losses on loans and the liability for unfunded lending commitments, the Company has established a process which assesses the risks and losses expected in its portfolios. This process provides an allowance based on estimates of allowances for pools of loans and unfunded lending commitments, as well as a second, smaller component based on certain individually evaluated loans and unfunded lending commitments. The Company's policies and processes for determining the allowance for credit losses on loans and the liability for unfunded lending commitments are discussed in Note 1 to the consolidated financial statements and in the "*Allowance for Credit Losses*" discussion within *Critical Accounting Policies* above.

Loans subject to individual evaluation generally consist of business, construction, business real estate and personal real estate loans on non-accrual status. These non-accrual loans are evaluated individually for impairment based on factors such as payment history, borrower financial condition and collateral. For collateral dependent loans, appraisals of collateral (including exit costs) are normally obtained annually but discounted based on the date last received and market conditions. From these evaluations of expected cash flows and collateral values, specific allowances are determined.

Loans which are not individually evaluated are segregated by loan type and sub-type and are collectively evaluated. These loans consist of commercial loans (business, construction and business real estate) which have been graded pass, special mention, or substandard, and also include all personal banking loans except personal real estate loans on non-accrual status.

The allowance for credit losses on loans and the liability for unfunded lending commitments are estimates that require significant judgment including projections of the macro-economic environment. The Company utilizes a third-party macro-economic forecast that continuously changes due to economic conditions and events. These changes in the forecast cause fluctuations in the allowance for credit losses on loans and the liability for unfunded lending commitments. The Company uses judgment to assess the macro-economic forecast and internal loss data in estimating the allowance for credit losses on loans and the liability for unfunded lending commitments. These estimates are subject to periodic refinement based on changes in the underlying external and internal data.

At December 31, 2023, the allowance for credit losses on loans was $162.4 million, compared to $150.1 million at December 31, 2022. The allowance for credit losses related to commercial loans increased $4.9 million during 2023, while the allowance for credit losses related to personal banking loans increased $7.4 million. The increase in the allowance for credit losses was due to an increase in outstanding loan balances, slower prepayment speeds, changes in forecast assumptions, and increases in past due consumer and consumer credit card loans. The percentage of allowance to loans increased to .94% at December 31, 2023, compared to .92% at December 31, 2022. See Note 2 to the consolidated financial statements for the various model assumptions utilized in the Company's CECL estimate at December 31, 2023.

Net loan charge-offs totaled $31.1 million in 2023, representing a $12.0 million increase compared to net charge-offs of $19.1 million in 2022. The increase was largely due to higher net charge-offs of $6.4 million, $2.5 million, $2.1 million, and $1.1 million on consumer credit card loans, consumer loans, business loans, and overdrafts, respectively, during 2023. Consumer credit card loan net charge-offs were 3.40% of average consumer credit card loans in 2023, compared to 2.31% in 2022, and consumer loan net charge-offs were .30% of average consumer loans in 2023, compared to .18% in 2022. The ratio of net loan charge-offs to total average loans outstanding was .19% in 2023 and .12% in both 2022 and 2021.

Total loans delinquent 90 days or more and still accruing were $21.9 million at December 31, 2023, an increase of $6.0 million compared to year end 2022. The increase was mainly driven by growth of $2.9 million in personal real estate loans. Non-accrual loans at December 31, 2023 were $7.3 million, a decrease of $994 thousand from the prior year, mainly due to a decrease in business non-accrual loans of $3.1 million, partly offset by an increase of $2.0 million in revolving home equity non-accrual loans. The allowance for credit losses as a percentage of non-accrual loans was 2,220.9% at December 31, 2023, compared to 1,807.6% at December 31, 2022. The increase in the ratio of the allowance to non-accrual loans was driven by the decrease in non-accrual loans outstanding and an increase in the allowance for credit losses. The 2023 year-end balance of non-accrual loans was comprised of $3.6 million of business loans, $1.7 million of personal real estate loans, $2.0 million of revolving home equity loans, and $60 thousand of business real estate loans.

At December 31, 2023, the liability for unfunded lending commitments was $25.2 million, an decrease of $7.9 million compared to December 31, 2022. The decrease in the liability for unfunded lending commitments during 2023 was driven primarily by decreases in the balance of unfunded lending commitments. The Company's unfunded lending commitments primarily relate to construction loans, and the Company's estimate for credit losses in its unfunded lending commitments utilizes the same model and forecast as its estimate for credit losses on loans. See Note 2 for further discussion of the model inputs utilized in the Company's estimate of credit losses.

The Company considers the allowance for credit losses on loans and the liability for unfunded lending commitments adequate to cover losses expected in the loan portfolio, including unfunded commitments, at December 31, 2023.

The schedules which follow summarize the relationship between loan balances and activity in the allowance for credit losses on loans:

| | Years Ended December 31 | | |
|---|---|---|---|
| *(Dollars in thousands)* | **2023** | 2022 | 2021 |
| **Loans outstanding at end of year[(A)]** | **$ 17,205,479** | $ 16,303,131 | $ 15,176,359 |
| **Average loans outstanding[(A)]** | **$ 16,777,150** | $ 15,561,987 | $ 15,664,388 |
| Allowance for credit losses: | | | |
| Balance at end of prior year | **$ 150,136** | $ 150,044 | $ 220,834 |
| Provision for credit losses on loans | **43,325** | 19,155 | (52,223) |
| Loans charged off: | | | |
| Business | **3,751** | 1,474 | 810 |
| Real estate — construction and land | **—** | — | 3 |
| Real estate — business | **134** | 6 | 155 |
| Real estate — personal | **41** | 159 | 134 |
| Consumer | **8,323** | 6,073 | 5,370 |
| Revolving home equity | **11** | 77 | 188 |
| Consumer credit card | **24,105** | 19,039 | 27,461 |
| Overdrafts | **3,803** | 2,414 | 1,506 |
| Total loans charged off | **40,168** | 29,242 | 35,627 |
| Recoveries of loans previously charged off: | | | |
| Business | **647** | 421 | 5,568 |
| Real estate — construction and land | **115** | — | 2 |
| Real estate — business | **30** | 26 | 219 |
| Real estate — personal | **78** | 233 | 232 |
| Consumer | **2,075** | 2,283 | 2,814 |
| Revolving home equity | **68** | 137 | 185 |
| Consumer credit card | **5,052** | 6,381 | 7,453 |
| Overdrafts | **1,037** | 698 | 587 |
| Total recoveries | **9,102** | 10,179 | 17,060 |
| Net loans charged off | **31,066** | 19,063 | 18,567 |
| **Balance at end of year** | **$ 162,395** | $ 150,136 | $ 150,044 |
| Ratio of allowance to loans at end of year | **.94%** | .92% | .99 % |
| Ratio of provision to average loans outstanding | **.26%** | .12 % | (.33)% |
| Non-accrual loans | **$ 7,312** | $ 8,306 | $ 9,157 |
| Ratio of non-accrual loans to total loans outstanding | **.04%** | .05% | .06 % |
| Ratio of allowance for credit losses on loans to non-accrual loans | **2,220.94** | 1,807.56 | 1,638.57 |

*(A) Net of unearned income, before deducting allowance for credit losses on loans, excluding loans held for sale.*

| | Years Ended December 31 | | |
|---|---|---|---|
| | **2023** | 2022 | 2021 |
| Ratio of net charge-offs (recoveries) to average loans outstanding, by loan category: | | | |
| Business | **.05%** | .02 % | (.08%) |
| Real estate — construction and land | **(.01)** | — | — |
| Consumer | **.30** | .18 | .13 |
| Revolving home equity | **(.02)** | (.02) | — |
| Consumer credit card | **3.40** | 2.31 | 3.47 |
| Overdrafts | **56.19** | 30.40 | 21.20 |
| Ratio of total net charge-offs to total average loans outstanding | **.19%** | .12% | .12% |

*Average loans outstanding by loan class are listed on the Company's average balance sheet on page 60.*

The following schedule provides a breakdown of the allowance for credit losses on loans (ACL) by loan category and the percentage of each loan category to total loans outstanding at year end.

| *(Dollars in thousands)* | **2023** | | | 2022 | | |
|---|---|---|---|---|---|---|
| | **Credit Loss Allowance Allocation** | **% of Loans to Total Loans** | **% of ACL to Loan Category** | Credit Loss Allowance Allocation | % of Loans to Total Loans | % of ACL to Loan Category |
| Business | **$ 47,114** | **35.0%** | **.78%** | $ 46,340 | 34.8% | .82% |
| RE — construction and land | **31,373** | **8.4** | **2.17** | 28,799 | 8.3 | 2.12 |
| RE — business | **29,714** | **21.6** | **.80** | 28,154 | 20.9 | .83 |
| RE — personal | **11,999** | **17.6** | **.40** | 10,047 | 17.9 | .34 |
| Consumer | **11,665** | **12.1** | **.56** | 10,252 | 12.6 | .50 |
| Revolving home equity | **1,753** | **1.9** | **.55** | 1,576 | 1.8 | .53 |
| Consumer credit card | **28,667** | **3.4** | **4.86** | 24,858 | 3.6 | 4.26 |
| Overdrafts | **110** | **—** | **1.62** | 110 | .1 | .74 |
| Total | **$ 162,395** | **100.0%** | **.94%** | $ 150,136 | 100.0% | .92% |

The following schedule shows the liability for unfunded lending commitments.

| | Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| **LIABILITY FOR UNFUNDED LENDING COMMITMENTS** | | | |
| **Balance at beginning of period** | **$ 33,120** | $ 24,204 | $ 38,307 |
| Provision for credit losses on unfunded lending commitments | **(7,874)** | 8,916 | (14,103) |
| **Balance at end of period** | **$ 25,246** | $ 33,120 | $ 24,204 |

**Risk Elements of the Loan Portfolio**

Management reviews the loan portfolio continuously for evidence of problem loans. During the ordinary course of business, management becomes aware of borrowers that may not be able to meet the contractual requirements of loan agreements. Such loans are placed under close supervision with consideration given to placing the loan on non-accrual status, the need for an additional allowance for credit loss, and (if appropriate) partial or full loan charge-off. Loans are placed on non-accrual status when management does not expect to collect payments consistent with acceptable and agreed upon terms of repayment. After a loan is placed on non-accrual status, any interest previously accrued but not yet collected is reversed against current income. Interest is included in income only as received and only after all previous loan charge-offs have been recovered, so long as management is satisfied there is no impairment of collateral values. The loan is returned to accrual status only when the borrower has brought all past due principal and interest payments current, and, in the opinion of management, the borrower has demonstrated the ability to make future payments of principal and interest as scheduled. Loans that are 90 days past due as to principal and/or interest payments are generally placed on non-accrual, unless they are both well-secured and in the process of collection, or they are comprised of those personal banking loans that are exempt under regulatory rules from being classified as non-accrual. Consumer installment loans and related accrued interest are normally charged down to the fair value of related collateral (or are charged off in full if no collateral) once the loans are more than 120 days delinquent. Credit card loans and the related accrued interest are charged off when the receivable is more than 180 days past due.

The following schedule shows non-performing assets and loans past due 90 days and still accruing interest.

| | December 31 | | | | |
|---|---|---|---|---|---|
| *(Dollars in thousands)* | **2023** | 2022 | 2021 | 2020 | 2019 |
| Total non-accrual loans | **$ 7,312** | $ 8,306 | $ 9,157 | $ 26,540 | $ 10,220 |
| Real estate acquired in foreclosure | **270** | 96 | 115 | 93 | 365 |
| **Total non-performing assets** | **$ 7,582** | $ 8,402 | $ 9,272 | $ 26,633 | $ 10,585 |
| Non-performing assets as a percentage of total loans | **.04 %** | .05 % | .06 % | .16 % | .07 % |
| Non-performing assets as a percentage of total assets | **.02 %** | .03 % | .03 % | .08 % | .04 % |
| **Loans past due 90 days and still accruing interest** | **$ 21,864** | $ 15,830 | $ 11,726 | $ 22,190 | $ 19,859 |

Non-accrual loans totaled $7.3 million at year end 2023, a decrease of $994 thousand from the balance at year end 2022. The decrease from December 31, 2022 occurred mainly in business loans, which decreased $3.1 million. This decrease was partially offset by an increase in revolving home equity loans of $2.0 million. At December 31, 2023, non-accrual loans were comprised of business (49.6%), revolving home equity (27.0%), personal real estate (22.6%), and business real estate (0.8%) loans. Foreclosed real estate totaled $270 thousand at December 31, 2023, an increase of $174 thousand when compared to December 31, 2022. Total non-performing assets remain low compared to the overall banking industry in 2023, with the non-performing assets to total loans ratio at .04% at December 31, 2023. Total loans past due 90 days or more and still accruing interest were $21.9 million as of December 31, 2023, an increase of $6.0 million when compared to December 31, 2022. Balances by class for non-accrual loans and loans past due 90 days and still accruing interest are shown in the *"Delinquent and non-accrual loans"* section of Note 2 to the consolidated financial statements.

In addition to the non-performing and past due loans mentioned above, the Company also has identified loans for which management has concerns about the ability of the borrowers to meet existing repayment terms. They are classified as substandard under the Company's internal rating system. The loans are generally secured by either real estate or other borrower assets, reducing the potential for loss should they become non-performing. Although these loans are generally identified as potential problem loans, they may never become non-performing. Such loans totaled $216.4 million at December 31, 2023, compared with $259.7 million at December 31, 2022, resulting in a decrease of $43.3 million or 16.7%. The decrease in potential problem loans was largely driven by a $47.5 million decrease in construction and land loans and a $41.7 million decrease in business real estate loans, partly offset by a $45.3 million increase in business loans.

| | December 31 | |
|---|---|---|
| *(In thousands)* | **2023** | 2022 |
| Potential problem loans: | | |
| Business | **$ 74,760** | $ 29,455 |
| Real estate – construction and land | **—** | 47,493 |
| Real estate – business | **140,800** | 182,526 |
| Real estate – personal | **827** | 250 |
| **Total potential problem loans** | **$ 216,387** | $ 259,724 |

### ***Loans with Special Risk Characteristics***

Management relies primarily on an internal risk rating system, in addition to delinquency status, to assess risk in the loan portfolio, and these statistics are presented in Note 2 to the consolidated financial statements. However, certain types of loans are considered at a higher risk of loss due to their terms, location, or special conditions. Construction and land loans and business real estate loans are subject to higher risk because of the impact that volatile interest rates and a changing economy can have on real estate value, and because of the potential volatility of the real estate industry. Certain home equity loans have contractual features that could increase credit exposure in a market of declining real estate prices, when interest rates are steadily increasing, or when a geographic area experiences an economic downturn. For these home equity loans, higher risks could exist when 1) loan terms require a minimum monthly payment that covers only interest, or 2) loan-to-collateral value (LTV) ratios at origination are above 80%, with no private mortgage insurance. Information presented below for home equity loans is based on LTV ratios which were calculated with valuations at loan origination date. The Company does not obtain updated appraisals or valuations unless the loans become significantly delinquent or are in the process of being foreclosed upon. For credit monitoring purposes, the Company analyzes delinquency information, current FICO scores, and line utilization. This has remained an effective means of evaluating credit trends and identifying problem loans, partly because the Company offers standard, conservative lending products.

*Real Estate - Construction and Land Loans*

The Company's portfolio of construction and land loans, as shown in the table below, amounted to 8.4% of total loans outstanding at December 31, 2023. The largest component of construction and land loans was commercial construction, which increased $100.9 million during the year ended December 31, 2023. At December 31, 2023, multi-family residential construction loans totaled approximately $414.6 million, or 33.9%, of the commercial construction loan portfolio.

| *(Dollars in thousands)* | **December 31, 2023** | **% of Total** | **% of Total Loans** | December 31, 2022 | % of Total | % of Total Loans |
|---|---|---|---|---|---|---|
| Commercial construction | **$ 1,222,961** | **84.5 %** | **7.1 %** | $ 1,122,105 | 82.4% | 6.9 % |
| Residential construction | **110,687** | **7.7** | **.6** | 138,311 | 10.2 | .8 |
| Residential land and land development | **62,417** | **4.3** | **.4** | 50,012 | 3.7 | .3 |
| Commercial land and land development | **50,699** | **3.5** | **.3** | 50,667 | 3.7 | .3 |
| **Total real estate – construction and land loans** | **$ 1,446,764** | **100.0 %** | **8.4 %** | $ 1,361,095 | 100.0% | 8.3 % |

*Real Estate – Business Loans*

Total business real estate loans were $3.7 billion at December 31, 2023 and comprised 21.6% of the Company's total loan portfolio. These loans include properties such as manufacturing and warehouse buildings, distribution facilities, small office and medical buildings, churches, hotels and motels, shopping centers, and other commercial properties, which have historically resulted in lower net charge-off rates than non-owner-occupied commercial real estate loans. Approximately 31.6% of these loans were for owner-occupied real estate properties, which have historically resulted in lower net charge-off rates than non-owner-occupied commercial real estate loans.

| *(Dollars in thousands)* | **December 31, 2023** | **% of Total** | **% of Total Loans** | December 31, 2022 | % of Total | % of Total Loans |
|---|---|---|---|---|---|---|
| Owner-occupied | **$ 1,175,476** | **31.6%** | **6.8%** | $ 1,136,189 | 33.3% | 7.0% |
| Industrial | **630,713** | **17.0** | **3.7** | 478,534 | 14.0 | 2.9 |
| Office | **489,320** | **13.2** | **2.8** | 497,601 | 14.6 | 3.1 |
| Retail | **366,693** | **9.9** | **2.1** | 322,971 | 9.5 | 2.0 |
| Hotels | **292,941** | **7.9** | **1.7** | 230,972 | 6.8 | 1.4 |
| Multi-family | **256,657** | **6.9** | **1.5** | 308,156 | 9.0 | 1.9 |
| Farm | **195,981** | **5.3** | **1.1** | 195,920 | 5.8 | 1.2 |
| Senior living | **183,778** | **4.9** | **1.1** | 131,217 | 3.9 | .8 |
| Other | **127,747** | **3.3** | **.8** | 105,421 | 3.1 | .6 |
| **Total real estate - business loans** | **$ 3,719,306** | **100.0%** | **21.6%** | $ 3,406,981 | 100.0% | 20.9% |

Information about the credit quality of the Company's business real estate loan portfolio as of December 31, 2023 and December 31, 2022 is provided in the table below.

| *(Dollars in thousands)* | Pass | Special Mention | Substandard | Non-Accrual | Total |
|---|---|---|---|---|---|
| **December 31, 2023** | | | | | |
| Owner-occupied | **$ 1,146,112** | **$ 10,376** | **$ 18,928** | **$ 60** | **$ 1,175,476** |
| Industrial | **630,644** | **69** | **—** | **—** | **630,713** |
| Office | **489,320** | **—** | **—** | **—** | **489,320** |
| Retail | **349,321** | **15,500** | **1,872** | **—** | **366,693** |
| Hotels | **282,105** | **9,253** | **1,583** | **—** | **292,941** |
| Multi-family | **255,507** | **1,150** | **—** | **—** | **256,657** |
| Farm | **195,981** | **—** | **—** | **—** | **195,981** |
| Senior living | **69,379** | **—** | **114,399** | **—** | **183,778** |
| Other | **127,505** | **242** | **—** | **—** | **127,747** |
| Total | **$ 3,545,874** | **$ 36,590** | **$ 136,782** | **$ 60** | **$ 3,719,306** |
| **December 31, 2022** | | | | | |
| Owner-occupied | $ 1,129,343 | $ 632 | $ 6,084 | $ 130 | $ 1,136,189 |
| Industrial | 478,534 | — | — | — | 478,534 |
| Office | 494,169 | 3,432 | — | — | 497,601 |
| Retail | 321,041 | — | 1,930 | — | 322,971 |
| Hotels | 174,558 | 9,725 | 46,689 | — | 230,972 |
| Multi-family | 286,202 | 1,975 | 19,979 | — | 308,156 |
| Farm | 195,685 | 177 | — | 58 | 195,920 |
| Senior living | 23,514 | — | 107,702 | 1 | 131,217 |
| Other | 105,144 | 277 | — | — | 105,421 |
| Total | $ 3,208,190 | $ 16,218 | $ 182,384 | $ 189 | $ 3,406,981 |

*Revolving Home Equity Loans*

The Company has revolving home equity loans that are generally collateralized by residential real estate. Most of these loans (91.9%) are written with terms requiring interest-only monthly payments. These loans are offered in three main product lines: LTV up to 80%, 80% to 90%, and 90% to 100%. As shown in the following tables, the percentage of loans with LTV ratios greater than 80% has remained a small segment of this portfolio, and delinquencies have been low and stable. The weighted average FICO score for the total portfolio balance at December 31, 2023 was 785. At maturity, the accounts are re-underwritten and if they qualify under the Company's credit, collateral and capacity policies, the borrower is given the option to renew the line of credit or to convert the outstanding balance to an amortizing loan. If criteria are not met, amortization is required, or the borrower may pay off the loan. Over the next three years, approximately 17.3% of the Company's current outstanding balances are expected to mature. Of these balances, 84.0% have a FICO score above 700. The Company does not expect a significant increase in losses as these loans mature, due to their high FICO scores, low LTVs, and low historical loss levels.

| *(Dollars in thousands)* | Principal Outstanding at December 31, 2023 | * | New Lines Originated During 2023 | * | Unused Portion of Available Lines at December 31, 2023 | * | Balances Over 30 Days Past Due | * |
|---|---|---|---|---|---|---|---|---|
| Loans with interest-only payments | $ 293,847 | 91.9 % | $ 230,809 | 72.2 % | $ 876,328 | 273.9 % | $ 3,752 | 1.2 % |
| Loans with LTV: | | | | | | | | |
| Between 80% and 90% | 30,231 | 9.5 | 10,125 | 3.2 | 45,523 | 14.2 | 604 | .2 |
| Over 90% | 2,053 | 0.6 | 195 | .1 | 2,151 | 0.7 | — | — |
| Over 80% LTV | $ 32,284 | 10.1 % | $ 10,320 | 3.2 % | $ 47,674 | 14.9 % | $ 604 | .2 % |
| Total loan portfolio from which above loans were identified | $ 319,894 | | $ 237,719 | | $ 899,980 | | | |

** Percentage of total principal outstanding of $319.9 million at December 31, 2023.*

| (Dollars in thousands) | | Principal Outstanding at December 31, 2022 | * | | New Lines Originated During 2022 | * | | Unused Portion of Available Lines at December 31, 2022 | * | | Balances Over 30 Days Past Due | * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Loans with interest-only payments | $ | 271,772 | 91.4 % | $ | 232,767 | 78.3 % | $ | 822,413 | 276.7 % | $ | 1,757 | .6 % |
| Loans with LTV: | | | | | | | | | | | | |
| Between 80% and 90% | | 30,110 | 10.1 | | 18,229 | 6.1 | | 49,154 | 16.5 | | 97 | — |
| Over 90% | | 2,288 | 0.8 | | 820 | .3 | | 2,469 | 0.8 | | 16 | — |
| Over 80% LTV | $ | 32,398 | 10.9 % | $ | 19,049 | 6.4 % | $ | 51,623 | 17.4 % | $ | 113 | — % |
| Total loan portfolio from which above loans were identified | $ | 297,207 | | $ | 244,310 | | $ | 846,361 | | | | |

** Percentage of total principal outstanding of $297.2 million at December 31,* 2022.

*Consumer Loans*

The Company's consumer loans totaled $2.1 billion and comprised 12% of total loans outstanding at December 31, 2023. Within the consumer loan portfolio are several direct and indirect product lines comprised mainly of loans secured by automobiles, motorcycles, marine, and RVs. Auto loans comprised 39% of the consumer loan portfolio at December 31, 2023, and outstanding balances in the auto loan portfolio were $820.3 million and $798.6 million at December 31, 2023 and 2022, respectively. The balances over 30 days past due amounted to $9.5 million at December 31, 2023, compared to $9.9 million at the end of 2022, and comprised 1.2% of the outstanding balances of these loans at both December 31, 2023 and 2022. For the year ended December 31, 2023, $364.9 million of new auto loans were originated, compared to $329.3 million during 2022. At December 31, 2023, the automobile loan portfolio had a weighted average FICO score of 756, and net charge-offs on auto loans were .5% of average auto loans.

The Company's consumer loan portfolio also includes fixed rate home equity loans, typically for home repair or remodeling, and these loans comprised 11% of the consumer loan portfolio at December 31, 2023. Losses on these loans have historically been low, and the Company had net recoveries of $68 thousand in 2023. Private banking loans comprised 32% of the consumer loan portfolio at December 31, 2023. The Company's private banking loans are generally well-collateralized and at December 31, 2023 were secured primarily by assets held by the Company's trust department. The remaining portion of the Company's consumer loan portfolio is comprised of health services financing, motorcycles, marine and RV loans. Net charge-offs on private banking, health services financing, motorcycle and marine and RV loans totaled $2.4 million in 2023 and were .3% of the average balances of these loans at December 31, 2023.

*Consumer Credit Card Loans*

The Company offers low introductory rates on selected consumer credit card products. Out of a portfolio at December 31, 2023 of $589.9 million in consumer credit card loans outstanding, approximately $114.8 million, or 19.5%, carried a low promotional rate. Within the next six months, $47.8 million of these loans are scheduled to convert to the ongoing higher contractual rate. To mitigate some of the risk involved with this credit card promotional feature, the Company performs credit checks and detailed analysis of the customer borrowing profile before approving the loan application. Management believes that the risks in the consumer loan portfolio are reasonable and the anticipated loss ratios are within acceptable parameters.

*Oil and Gas Energy Lending*

The Company's energy lending portfolio was comprised of lending to the petroleum and natural gas sectors and totaled $272.0 million at December 31, 2023, a decrease of $24.4 million from year end 2022, as shown in the table below.

| (In thousands) | | **December 31, 2023** | | December 31, 2022 | | **Unfunded commitments at December 31, 2023** |
|---|---|---|---|---|---|---|
| Extraction | **$** | **219,828** | $ | 235,933 | **$** | **125,445** |
| Mid-stream shipping and storage | | **35,505** | | 43,432 | | **99,026** |
| Downstream distribution and refining | | **8,890** | | 7,675 | | **11,290** |
| Support activities | | **7,811** | | 9,387 | | **5,027** |
| **Total energy lending portfolio** | **$** | **272,034** | $ | 296,427 | **$** | **240,788** |

**Investment Securities Analysis**

Investment securities are comprised of securities that are classified as available for sale, equity, trading or other. The largest component, available for sale debt securities, decreased 20.6% during 2023 to $10.9 billion (excluding unrealized gains/losses in fair value) at year end 2023. During 2023, debt securities of $138.8 million were purchased, which included $100.3 million in U.S. government and federal agency obligations and $37.6 million in government-sponsored enterprise obligations. Total sales, maturities and pay downs of available for sale debt securities were $3.0 billion during 2023. During 2024, maturities and pay downs of approximately $1.8 billion are expected to occur. The Company's tax-exempt investment portfolio is primarily comprised of tax-exempt municipal bonds. In 2023 the Company's tax-exempt investment portfolio represented 30% of the Company's total state and municipal investment portfolio, as compared to 50% in 2022. The average tax equivalent yield earned on total investment securities was 2.29% in 2023 and 2.15% in 2022.

At December 31, 2023, the fair value of available for sale securities was $9.7 billion, which included a net unrealized loss in fair value of $1.2 billion, compared to a net unrealized loss of $1.5 billion at December 31, 2022. The overall unrealized loss in fair value at December 31, 2023 included net losses of $24.8 million is U.S. government and federal agency obligations, net losses of $149.2 million in state and municipal securities, and net losses of $987.1 million in mortgage and asset-backed securities. For the year ended December 31, 2023, the Company did not recognize a credit loss expense on any available for sale debt securities.

Available for sale investment securities at year end for the past two years are shown below:

| *(In thousands)* | December 31 | |
|---|---|---|
| | **2023** | 2022 |
| **Amortized Cost** | | |
| U.S. government and federal agency obligations | **$ 841,267** | $ 1,078,807 |
| Government-sponsored enterprise obligations | **55,658** | 55,729 |
| State and municipal obligations | **1,346,633** | 1,965,028 |
| Agency mortgage-backed securities | **4,621,821** | 5,087,893 |
| Non-agency mortgage-backed securities | **1,331,288** | 1,423,469 |
| Asset-backed securities | **2,200,712** | 3,588,025 |
| Other debt securities | **507,386** | 539,255 |
| **Total available for sale debt securities** | **$ 10,904,765** | $ 13,738,206 |
| **Fair Value** | | |
| U.S. government and federal agency obligations | **$ 816,514** | $ 1,035,406 |
| Government-sponsored enterprise obligations | **43,962** | 43,108 |
| State and municipal obligations | **1,197,419** | 1,767,109 |
| Agency mortgage-backed securities | **3,901,346** | 4,308,427 |
| Non-agency mortgage-backed securities | **1,157,898** | 1,211,607 |
| Asset-backed securities | **2,107,485** | 3,397,801 |
| Other debt securities | **460,136** | 474,858 |
| **Total available for sale debt securities** | **$ 9,684,760** | $ 12,238,316 |

At December 31, 2023, the available for sale portfolio included $3.9 billion of agency mortgage-backed securities, which are collateralized bonds issued by agencies including FNMA, GNMA, FHLMC, FHLB, and Federal Farm Credit Banks. Non-agency mortgage-backed securities totaled $1.2 billion and included $336.0 million collateralized by commercial mortgages and $821.9 million collateralized by residential mortgages at December 31, 2023.

At December 31, 2023, U.S. government obligations included TIPS of $404.4 million, at fair value. Other debt securities include corporate bonds, notes and commercial paper.

The types of securities held in the available for sale security portfolio at year end 2023 are presented in the table below. Additional detail by maturity category is provided in Note 3 to the consolidated financial statements.

| | December 31, 2023 | | |
|---|---|---|---|
| | Percent of Total Debt Securities | Weighted Average Yield | Estimated Average Maturity* |
| **Available for sale debt securities:** | | | |
| U.S. government and federal agency obligations | 8.4% | 1.19% | 2.3 years |
| Government-sponsored enterprise obligations | 0.5 | 2.38 | 12.4 |
| State and municipal obligations | 12.2 | 1.78 | 7.0 |
| Agency mortgage-backed securities | 40.3 | 2.10 | 6.9 |
| Non-agency mortgage-backed securities | 12.0 | 2.37 | 5.9 |
| Asset-backed securities | 21.8 | 2.33 | 1.9 |
| Other debt securities | 4.8 | 1.91 | 4.8 |

**Based on call provisions and estimated prepayment speeds.*

Equity securities include common and preferred stock with readily determinable fair values that totaled $5.7 million at December 31, 2023, compared to $6.2 million at December 31, 2022.

Other securities totaled $222.5 million at December 31, 2023 and $225.0 million at December 31, 2022. These include Federal Reserve Bank stock and Federal Home Loan Bank (Des Moines) stock held by the bank subsidiary in accordance with debt and regulatory requirements. These are restricted securities and are carried at cost. Also included in other securities are private equity investments which are held by a subsidiary qualified as a Small Business Investment Company. These investments are carried at estimated fair value, but are not readily marketable. While the nature of these investments carries a higher degree of risk than the normal lending portfolio, this risk is mitigated by the overall size of the investments and oversight provided by management, and management believes the potential for long-term gains in these investments outweighs the potential risks.

Other securities at year end for the past two years are shown below:

| | **December 31** | |
|---|---|---|
| *(In thousands)* | **2023** | 2022 |
| Federal Reserve Bank stock | **$ 35,166** | $ 34,795 |
| Federal Home Loan Bank stock | **10,640** | 10,678 |
| Equity method investments | — | 1,434 |
| Private equity investments in debt securities | **67,322** | 66,899 |
| Private equity investments in equity securities | **109,345** | 111,228 |
| **Total other securities** | **$ 222,473** | $ 225,034 |

In addition to its holdings in the investment securities portfolio, the Company invests in securities purchased under agreements to resell, which totaled $450.0 million at December 31, 2023 and $825.0 million at December 31, 2022. Of the total resale agreements outstanding at December 31, 2023, $325.0 million mature in 2024 and $125.0 million mature in 2025. The resale agreements have fixed rates or variable rates that fluctuate with published indices. The counterparties to these agreements are other financial institutions from whom the Company has accepted collateral of $479.0 million in marketable investment securities at December 31, 2023. The average rate earned on these agreements during 2023 was 1.9%, compared to 1.5% in 2022.

At December 31, 2022, the Company also held offsetting repurchase and resale agreements totaling $200.0 million, which are further discussed in Note 20 to the consolidated financial statements. These agreements involve the exchange of collateral under simultaneous repurchase and resale agreements with the same financial institution counterparty. These repurchase and resale agreements have been offset against each other in the balance sheet, as permitted under current accounting guidance. The agreements matured in 2023 and earned an average of 30 basis points during 2023, compared to 29 basis points in 2022.

### Deposits and Borrowings

Deposits, including both individual and corporate customer deposits, are the primary funding source for the Bank and are acquired from a broad base of local markets. Total period-end deposits were $25.4 billion at December 31, 2023, compared to $26.2 billion last year, reflecting a decrease of $823.5 million, or 3.1%.

Average deposits decreased $2.8 billion, or 9.9%, in 2023 compared to 2022, resulting from decreases of $6.1 billion and $2.7 billion in money market account balances and business demand deposits, respectfully. Partially offsetting these decreases were increases in interest checking and certificate of deposit account balances of $4.7 billion and $1.4 billion, respectively.

The following table shows year end deposit balances by type, as a percentage of total deposits.

| | December 31 | |
|---|---|---|
| | **2023** | 2022 |
| Non-interest bearing | **31.4%** | 38.4% |
| Savings, interest checking and money market | **57.2** | 57.8 |
| Certificates of deposit of less than $100,000 | **3.7** | 1.5 |
| Certificates of deposit of $100,000 and over | **7.7** | 2.3 |
| **Total deposits** | **100.0%** | 100.0% |

Core deposits, which include non-interest bearing, interest checking, savings, and money market deposits, supported 72% and 81% of average earning assets in 2023 and 2022, respectively. Average balances by major deposit category for the last six years are disclosed in the Average Balance Sheets section of Management's Discussion and Analysis of Financial Condition and Results of Operations. A maturity schedule of all certificates of deposits outstanding at December 31, 2023 is included in Note 7 on Deposits in the consolidated financial statements.

Total uninsured deposits were calculated using the same methodology that the Company uses to determine uninsured deposits for regulatory reporting and amounted to $10.8 billion and $11.0 billion at December 31, 2023 and December 31, 2022. The following table shows a detailed breakdown of the maturities of uninsured certificates of deposit at December 31, 2023. The Company estimated the uninsured deposits in the following table by aggregating all deposit balances by customer and assuming federal deposit insurance would first apply to demand deposits, followed by savings deposits, and lastly to time deposits (beginning with the earliest maturity deposits).

| *(In thousands)* | Uninsured Certificates of Deposit at December 31, 2023 | |
|---|---|---|
| Due in 3 months or less | $ | 957,796 |
| Due in over 3 through 6 months | | 234,012 |
| Due in over 6 through 12 months | | 246,055 |
| Due in over 12 months | | 96,924 |
| **Total** | **$** | **1,534,787** |

The Company's primary sources of overnight borrowings are federal funds purchased and securities sold under agreements to repurchase (repurchase agreements). Balances in these accounts can fluctuate significantly on a day-to-day basis and generally have one day maturities. Total balances of federal funds purchased and repurchase agreements outstanding at December 31, 2023 were $2.9 billion, comprised of federal funds purchased of $261.3 million and repurchase agreements of $2.6 billion. Compared to balances at December 31, 2022, December 31, 2023 balances of federal funds purchased increased $101.4 million and repurchase agreements outstanding decreased $34.4 million. On an average basis, these borrowings increased $400.4 million, or 16.4%, during 2023, due to an increase of $412.5 million in average federal funds purchased and a decrease of $12.2 million (average) in repurchase agreements. The average rates paid on federal funds purchased and repurchase agreements were 5.1% and 3.12%, respectively, during 2023, compared to rates of 2.21% on federal funds purchased and 1.02% paid on repurchase agreements during 2022.

In addition to the funding sources above, the Company may borrow from the FHLB on a short-term basis or long-term basis. During 2023, the Company had average short-term borrowings from the FHLB of $756.4 million. All of the short-term borrowings were repaid by the Company before December 31, 2023, and the average rate paid on the FHLB borrowings during 2023 was 5.22%. During 2022, the Company had average short-term borrowings from the FHLB of $45.1 million. All of the

short-term borrowings were repaid by the Company before December 31, 2022, and the average rate paid on the FHLB borrowings was 4.02%. The Company did not borrow any long-term funds from the FHLB during 2023 or 2022.

## Liquidity and Capital Resources

### Liquidity Management

Liquidity is managed within the Company in order to satisfy cash flow requirements of deposit and borrowing customers while at the same time meeting its own cash flow needs. The Company has taken numerous steps to address liquidity risk and has developed a variety of liquidity sources which it believes will provide the necessary funds for future growth or to replace deposit runoff during periods of stress and uncertainty in the banking industry. The Company manages its liquidity position through a variety of actions and sources including:

- A portfolio of liquid investments with overnight maturities,
- A portfolio of liquid available for sale debt securities,
- A diversified customer deposit base spread across three business segments,
- Access to the brokered certificate of deposit market,
- A loan to deposit ratio lower than industry average,
- Maintaining excellent debt ratings from both Standard & Poor's and Moody's national rating services,
- Available borrowing capacity of unsecured, overnight federal funds purchased, and
- Available borrowing capacity from the FHLB and Federal Reserve Bank.

The Company’s most liquid assets include balances at the Federal Reserve Bank, federal funds sold, available for sale debt securities, and securities purchased under agreements to resell. At December 31, 2023 and 2022, such assets were as follows:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Balances at the Federal Reserve Bank | **$ 2,239,010** | $ 389,140 |
| Federal funds sold | **5,025** | 49,505 |
| Securities purchased under agreements to resell | **450,000** | 825,000 |
| Available for sale debt securities | **9,684,760** | 12,238,316 |
| **Total** | **$ 12,378,795** | $ 13,501,961 |

Interest earning balances at the Federal Reserve Bank, which have overnight maturities and are used for general liquidity purposes, totaled $2.2 billion at December 31, 2023. There were $5.0 million federal funds sold at December 31, 2023, which are funds lent to the Company’s correspondent bank customers with overnight maturities. The fair value of the available for sale debt portfolio was $9.7 billion at December 31, 2023 and included an unrealized loss of $1.2 billion. The total net unrealized loss included net losses of $987.1 million on mortgage-backed and asset-backed securities, $149.2 million on state and municipal obligations, and $47.3 million on other debt securities.

Resale agreements totaled $450.0 million at December 31, 2023, with $325.0 million of the agreements maturing in the first quarter of 2024 and $125.0 million maturing in the first quarter of 2025. Under these agreements, the Company lends funds to upstream financial institutions and holds marketable securities, safe-kept by a third-party custodian, as collateral. This collateral totaled $479.0 million in fair value at December 31, 2023.

The available for sale debt securities portfolio has a diverse mix of high quality and liquid investment securities with a duration of 4.1 years. Approximately $1.8 billion of the available for sale debt portfolio is expected to mature or pay down during 2024, and these funds offer substantial resources to meet either new loan demand or offset potential reductions in the Company's deposit funding base. The Company pledges portions of its investment securities portfolio to secure public fund deposits, securities sold under agreements to repurchase, trust funds, letters of credit issued by the FHLB, and borrowing capacity at the FHLB and the Federal Reserve Bank. At December 31, 2023 and 2022, total investment securities pledged for these purposes were as follows:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Investment securities pledged for the purpose of securing: | | |
| Federal Reserve Bank borrowings | **$ 2,636,523** | $ 11,469 |
| FHLB borrowings and letters of credit | **301,617** | 1,817 |
| Repurchase agreements * | **2,710,616** | 2,950,240 |
| Other deposits | **1,818,092** | 1,772,974 |
| Total pledged securities | **7,466,848** | 4,736,500 |
| Unpledged and available for pledging | **2,211,243** | 6,545,695 |
| Ineligible for pledging | **6,669** | 956,121 |
| **Total available for sale debt securities, at fair value** | **$ 9,684,760** | $ 12,238,316 |

** Includes securities pledged for collateral swaps, as discussed in Note 20 to the consolidated financial statements*

The average loans to deposits ratio is a measure of a bank's liquidity, and the Company's average loans to deposits ratio was 66.3% for the year ended December 31, 2023. Core customer deposits, defined as non-interest bearing, interest checking, savings, and money market deposit accounts, totaled $22.5 billion and represented 88.7% of the Company's total deposits at December 31, 2023. These core deposits are normally less volatile, often with customer relationships tied to other products offered by the Company promoting long lasting relationships and stable funding sources. Core deposits decreased $2.7 billion at year end 2023 compared to year end 2022, primarily due to decreases in consumer and commercial deposits of $1.6 billion and $935 million, respectively. While the Company considers core consumer and wealth management deposits less volatile, corporate deposits could decline if interest rates increase significantly, encouraging corporate customers to increase investing activities, or if the economy deteriorates and companies experience lower cash inflows, reducing deposit balances. If these corporate deposits decline, the Company's funding needs may be met by liquidity supplied by investment security maturities and pay downs expected to total $1.8 billion over the next year, as noted above. In addition, as shown in the table of collateral available for future advances below, the Company has borrowing capacity of $6.8 billion through advances from the FHLB and the Federal Reserve.

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Core deposit base: | | |
| Non-interest bearing | **$ 7,975,935** | $ 10,066,356 |
| Interest checking | **7,020,134** | 1,854,336 |
| Savings and money market | **7,492,139** | 13,272,645 |
| **Total** | **$ 22,488,208** | $ 25,193,337 |

Certificates of deposit of $100,000 or greater totaled $1.9 billion at December 31, 2023. These deposits are normally considered more volatile and higher costing, and comprised 7.7% of total deposits at December 31, 2023.

Amid the banking sector's period of uncertainty during the second quarter of 2023, the Company issued several tranches of short-term brokered certificates of deposit totaling $1.2 billion, which all matured by December 31, 2023. While it is not clear how many brokered certificates of deposit the market would allow the Company to issue, the Company believes brokered certificates of deposits may be an additional, reliable source of liquidity during periods of stress in the banking industry.

Other important components of liquidity are the level of borrowings from third party sources and the availability of future credit. The Company's outside borrowings are mainly comprised of federal funds purchased and repurchase agreements, as follows:

| *(In thousands)* | | **2023** | | 2022 |
|---|---|---|---|---|
| Borrowings: | | | | |
| Federal funds purchased | **$** | **261,305** | $ | 159,860 |
| Securities sold under agreements to repurchase | | **2,647,510** | | 2,681,874 |
| Other debt | | **1,404** | | 9,672 |
| **Total** | **$** | **2,910,219** | $ | 2,851,406 |

Federal funds purchased, which totaled $261.3 million at December 31, 2023, are unsecured overnight borrowings obtained mainly from upstream correspondent banks with which the Company maintains approved lines of credit. At December 31, 2023, the Company had approved lines of credit totaling $4.0 billion. Since these borrowings are unsecured and limited by market trading activity, their availability may be less certain than collateralized sources of borrowings. Retail repurchase agreements are offered to customers wishing to earn interest in highly liquid balances and are used by the Company as a funding source considered to be stable, but short-term in nature. Repurchase agreements are collateralized by securities in the Company's investment portfolio. Total repurchase agreements at December 31, 2023 were comprised of non-insured customer funds totaling $2.6 billion, and securities pledged as collateral for these retail agreements totaled $2.7 billion.

The Company pledges certain assets, including loans and investment securities, to both the Federal Reserve Bank and the FHLB as security to establish lines of credit and borrow from these entities. Based on the amount and type of collateral pledged, the FHLB establishes a collateral value from which the Company may draw advances against the collateral. Additionally, this collateral is used to enable the FHLB to issue letters of credit in favor of public fund depositors of the Company. The Federal Reserve Bank also establishes a collateral value of assets pledged and permits borrowings from the discount window. The following table reflects the collateral value of assets pledged, borrowings, and letters of credit outstanding, in addition to the estimated future funding capacity available to the Company at December 31, 2023.

| | December 31, 2023 | | | | | |
|---|---|---|---|---|---|---|
| *(In thousands)* | | FHLB | | Federal Reserve | | Total |
| Total collateral value established by FHLB and FRB | $ | 2,521,750 | $ | 4,877,381 | $ | 7,399,131 |
| Letters of credit issued | | (639,525) | | — | | (639,525) |
| **Available for future advances** | **$** | **1,882,225** | **$** | **4,877,381** | **$** | **6,759,606** |

The Company receives outside ratings from both Standard & Poor's and Moody's on both the consolidated company and its subsidiary bank, Commerce Bank. These ratings are as follows:

| | Standard & Poor's | Moody's |
|---|---|---|
| **Commerce Bancshares, Inc.** | | |
| Issuer rating | A- | |
| Rating outlook | Stable | |
| **Commerce Bank** | | |
| Issuer rating | A | A3 |
| Baseline credit assessment | | a2 |
| Short-term rating | A-1 | P-1 |
| Rating outlook | Stable | Stable |

The Company considers these ratings to be indications of a sound capital base and strong liquidity and believes that these ratings would help ensure the ready marketability of its commercial paper, should the need arise. No commercial paper has been outstanding during the past ten years. The Company has no subordinated or hybrid debt instruments which would affect future borrowing capacity. Because of its lack of significant long-term debt, the Company believes that, through its Capital Markets Group or in other public debt markets, it could generate additional liquidity from sources such as jumbo certificates of deposit, privately-placed corporate notes or other forms of debt.

The cash flows from the operating, investing and financing activities of the Company resulted in a net increase in cash, cash equivalents and restricted cash of $1.8 billion in 2023, as reported in the consolidated statements of cash flows. Operating activities, consisting mainly of net income adjusted for certain non-cash items, provided cash flow of $488.8 million and has historically been a stable source of funds. Investing activities provided cash of $2.2 billion. Sales and maturities proceeds (net of purchases) of investment securities provided cash of $2.8 billion, repayments of securities purchased under agreements to resell (net of securities purchased under agreements to resell) provided cash of $375.0 million, and a net increase in the loan portfolio used cash of $933.7 million. Investing activities are somewhat unique to financial institutions in that, while large sums of cash flow are normally used to fund growth in investment securities, loans, or other bank assets, they are normally dependent on the financing activities described below.

During 2023, financing activities used cash of $883.1 million. This decrease in cash was largely driven by a decline in deposits, which used cash of $730.8 million. The Company paid cash dividends of $134.7 million on common stock, and treasury stock purchases used cash of $76.4 million during 2023. Federal funds purchases and short-term securities sold under agreements to repurchase provided cash of $67.1 million. Future short-term liquidity needs for daily operations are not expected to vary significantly, and the Company believes it maintains adequate liquidity to meet these cash flows.

Cash outflows resulting from the Company’s transactions in its common stock were as follows:

| *(In millions)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Purchases of treasury stock | **$ 76.4** | $ 186.6 | $ 129.4 |
| Common cash dividends paid | **134.7** | 127.5 | 122.7 |
| **Cash used** | **$ 211.1** | $ 314.1 | $ 252.1 |

The Parent faces unique liquidity constraints due to legal limitations on its ability to borrow funds from its bank subsidiary. The Parent obtains funding to meet its obligations from two main sources: dividends received from bank and non-bank subsidiaries (within regulatory limitations) and management fees charged to subsidiaries as reimbursement for services provided by the Parent, as presented below:

| *(In millions)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Dividends received from subsidiaries | **$ 280.0** | $ 300.0 | $ 340.0 |
| Management fees | **47.8** | 38.6 | 36.3 |
| **Total** | **$ 327.8** | $ 338.6 | $ 376.3 |

These sources of funds are used mainly to pay cash dividends on outstanding stock, pay general operating expenses, and purchase treasury stock. At December 31, 2023, the Parent’s investment securities totaled $16.5 million at fair value, consisting mainly of corporate bonds and preferred stock. To support its various funding commitments, the Parent maintains a $20.0 million line of credit with its subsidiary bank. There were no borrowings outstanding under the line during 2023 or 2022.

Company senior management is responsible for measuring and monitoring the liquidity profile of the organization with oversight by the Company’s Asset/Liability Committee. This is done through a series of controls, including a written Contingency Funding Policy and risk monitoring procedures, which include daily, weekly and monthly reporting. In addition, the Company prepares forecasts to project changes in the balance sheet affecting liquidity and to allow the Company to better plan for forecasted changes.

### Material Cash Requirements, Contractual Obligations, Commitments, and Off-Balance Sheet Arrangements

The Company's material cash requirements include commitments for contractual obligations (both short-term and long-term), commitments to extend credit, and off-balance sheet arrangements. The Company's material cash requirements for the next 12 months are primarily to fund loan growth. Additionally, the Company will utilize cash to fund deposit maturities and withdrawals that may occur in the next 12 months. Other contractual obligations, purchase commitments, lease obligations, and unfunded commitments may require cash payments by the Company within the next 12 months, and these, along with longer-term obligations, are discussed below.

A table summarizing contractual cash obligations of the Company at December 31, 2023, and the expected timing of these payments follows:

| | Payments Due by Period | | | | |
|---|---|---|---|---|---|
| *(In thousands)* | In One Year or Less | After One Year Through Three Years | After Three Years Through Five Years | After Five Years | Total |
| Operating lease obligations | $ 6,393 | $ 8,475 | $ 7,124 | $ 12,861 | $ 34,853 |
| Purchase obligations | 271,288 | 442,052 | 135,445 | 77,485 | 926,270 |
| Certificates of Deposit* | 2,647,310 | 214,803 | 13,577 | — | 2,875,690 |
| **Total** | **$ 2,924,991** | **$ 665,330** | **$ 156,146** | **$ 90,346** | **$ 3,836,813** |

**Includes principal payments only.*

In the normal course of business, various commitments and contingent liabilities arise that are not required to be recorded on the balance sheet. The most significant of these are loan commitments totaling $14.5 billion (including approximately $5.4 billion in unused, approved credit card lines) and the contractual amount of standby letters of credit totaling $590.6 million at December 31, 2023. As many commitments expire unused or only partially used, these totals do not necessarily reflect future cash requirements. The allowance for these commitments is recorded in the Company's liability for unfunded lending commitments within other liabilities on its consolidated balance sheets. At December 31, 2023, the liability for unfunded commitments totaled $25.2 million. See further discussion of the liability for unfunded lending commitments in Note 2 to the consolidated financial statements.

The Company funds a defined benefit pension plan for a portion of its employees. Under the funding policy for the plan, contributions are made as necessary to provide for current service and for any unfunded accrued actuarial liabilities over a reasonable period. No contributions to the defined benefit plan were made in 2023, 2022 or 2021, and the Company is not required nor does it expect to make a contribution in 2024.

The Company has investments in low-income housing partnerships generally within the areas it serves. These partnerships supply funds for the construction and operation of apartment complexes that provide affordable housing to that segment of the population with lower family income. If these developments successfully attract a specified percentage of residents falling in that lower income range, federal (and sometimes state) income tax credits are made available to the partners. The tax credits are normally recognized over ten years, and they play an important part in the anticipated yield from these investments. In order to continue receiving the tax credits each year over the life of the partnership, the low-income residency targets must be maintained. Under the terms of the partnership agreements, the Company has a commitment to fund a specified amount that will be due in installments over the life of the agreements, which ranges from 3 to 19 years. At December 31, 2023, the investments totaled $76.6 million and are recorded as other assets in the Company's consolidated balance sheet. Unfunded commitments, which are recorded as liabilities, amounted to $48.4 million at December 31, 2023.

The Company regularly purchases various state tax credits arising from third-party property redevelopment. These credits are either resold to third parties for a profit or retained for use by the Company. During 2023, purchases and sales of tax credits amounted to $112.1 million and $54.0 million, respectively. Income from the sales of tax credits were $3.1 million, $5.4 million and $4.5 million in 2023, 2022 and 2021, respectively. At December 31, 2023, the Company had outstanding purchase commitments totaling $187.1 million that it expects to fund in 2024. These commitments, along with the commitments for the next five years, are included in the table above.

Through the various sources of liquidity described above, the Company maintains a liquidity position that it believes will adequately satisfy its financial obligations.

## Capital Management

Under Basel III capital guidelines, at December 31, 2023 and 2022, the Company met all capital adequacy requirements and had regulatory capital ratios in excess of the levels established for well-capitalized institutions, as shown in the following table.

| *(Dollars in thousands)* | **2023** | 2022 | Minimum Capital Requirement | Capital Conservation Buffer | Minimum Ratios Requirement including Capital Conservation Buffer | Minimum Ratios for Well-Capitalized Banks* |
|---|---|---|---|---|---|---|
| Risk-adjusted assets | **$ 24,216,527** | $ 24,178,423 | | | | |
| Tier I common risk-based capital | **3,693,089** | 3,417,223 | | | | |
| Tier I risk-based capital | **3,693,089** | 3,417,223 | | | | |
| Total risk-based capital | **3,881,024** | 3,600,920 | | | | |
| Tier I common risk-based capital ratio | **15.25%** | 14.13% | 4.50% | 2.50% | 7.00% | 6.50% |
| Tier I risk-based capital ratio | **15.25** | 14.13 | 6.00 | 2.50 | 8.50 | 8.00 |
| Total risk-based capital ratio | **16.03** | 14.89 | 8.00 | 2.50 | 10.50 | 10.00 |
| Tier I leverage ratio | **11.25** | 10.34 | 4.00 | N/A | 4.00 | 5.00 |
| Tangible common equity to tangible assets | **8.85** | 7.32 | | | | |
| Dividend payout ratio | **28.24** | 26.10 | | | | |

** Under Prompt Corrective Action requirements*

The Company is subject to a 2.5% capital conservation buffer, which is an amount above the minimum ratios under capital adequacy guidelines, and is intended to absorb losses during periods of economic stress. Failure to maintain the buffer will result in constraints on dividends, share repurchases, and executive compensation.

In the first quarter of 2020, the interim final rule of the Federal Reserve Bank and other U.S. banking agencies became effective, providing banks that adopted CECL (ASU 2016-13) during the 2020 calendar year the option to delay recognizing the estimated impact on regulatory capital until after a two year deferral period, followed by a three year transition period. In connection with the adoption of CECL on January 1, 2020, the Company elected to utilize this option. As a result, the two year deferral period for the Company extended through December 31, 2021. Beginning on January 1, 2022, the Company was required to phase in 25% of the previously deferred estimated capital impact of CECL, with an additional 25% to be phased in at the beginning of each subsequent year until fully phased in by the first quarter of 2025.

The Company maintains a treasury stock buyback program under authorizations by its Board of Directors and periodically purchases stock in the open market. During 2022, the Company purchased 2.7 million shares, and during 2023 the Company purchased 1.4 million shares. At December 31, 2023, 1.8 million shares remained available for purchase under the current Board authorization.

The Company's common stock dividend policy reflects its earnings outlook, desired payout ratios, the need to maintain adequate capital levels and alternative investment options. Per share cash dividends paid by the Company increased 7.1% in 2023 compared with 2022, and the Company increased its first quarter 2024 cash dividend 5.1%, making 2024 the Company's 56th consecutive year of regular cash dividend increases. The Company also distributed its 30th consecutive annual 5% stock dividend in December 2023.

## Interest Rate Sensitivity

The Company's Asset/Liability Management Committee (ALCO) measures and manages the Company's interest rate risk on a monthly basis to identify trends and establish strategies to maintain stability in net interest income throughout various rate environments. Analytical modeling techniques provide management insight into the Company's exposure to changing rates. These techniques include net interest income simulations and market value analysis. Management has set guidelines specifying acceptable limits within which net interest income and market value may change under various rate change scenarios.

The Company's main interest rate measurement tool, income simulation, projects net interest income under various rate change scenarios in order to quantify the magnitude and timing of potential rate-related changes. Income simulations are able to capture option risks within the balance sheet where expected cash flows may be altered under various rate environments. Modeled rate movements include "shocks, ramps and twists." Shocks are intended to capture interest rate risk under extreme conditions by immediately shifting rates up and down, while ramps measure the impact of gradual changes and twists measure yield curve risk. The size of the balance sheet is assumed to remain constant so that results are not influenced by growth predictions.

The Company also employs a sophisticated simulation technique known as a stochastic income simulation. This technique allows management to see a range of results from hundreds of income simulations. The stochastic simulation creates a vector of potential rate paths around the market's best guess (forward rates) concerning the future path of interest rates and allows rates to randomly follow paths throughout the vector. This allows for the modeling of non-biased rate forecasts around the market consensus. Results give management insight into a likely range of rate-related risk as well as worst and best-case rate scenarios.

Additionally, the Company uses market value analyses to help identify longer-term risks that may reside on the balance sheet. This is considered a secondary risk measurement tool by management. The Company measures the market value of equity as the net present value of all asset and liability cash flows discounted along the current swap curve plus appropriate market risk spreads. It is the change in the market value of equity under different rate environments, or effective duration, that gives insight into the magnitude of risk to future earnings due to rate changes. Market value analyses also help management understand the price sensitivity of non-marketable bank products under different rate environments.

The tables below show the effects of gradual shifts in interest rates over a twelve month period on the Company's net interest income versus the Company's net interest income in a flat rate scenario. The simulation presents three rising rate scenarios and three falling rate scenarios and in each scenario, rates are assumed to change evenly over 12 months. In these scenarios, the current balance sheet is held constant.

The Company utilizes this simulation for monitoring interest rate risk. While the future effects of rising and falling rates on deposit balances cannot be known, the Company maintains a practice of running multiple rate scenarios to better understand interest rate risk and its effect on the Company's performance.

| | **December 31, 2023** | | | September 30, 2023 | | |
|---|---|---|---|---|---|---|
| *(Dollars in millions)* | **$ Change in Net Interest Income** | **% Change in Net Interest Income** | **Assumed Deposit Attrition** | $ Change in Net Interest Income | % Change in Net Interest Income | Assumed Deposit Attrition |
| 300 basis points rising | **$ (13.4)** | **(1.32)%** | **$ —** | $ (20.6) | (2.08)% | $ — |
| 200 basis points rising | **(13.1)** | **(1.29)** | **—** | (17.7) | (1.79) | — |
| 100 basis points rising | **(6.9)** | **(.68)** | **—** | (9.1) | (.92) | — |
| 100 basis points falling | **(2.6)** | **(0.26)** | **—** | (0.6) | (0.06) | — |
| 200 basis points falling | **(15.4)** | **(1.52)** | **—** | (11.0) | (1.11) | — |
| 300 basis points falling | **(32.9)** | **(3.24)** | **—** | (27.0) | (2.71) | — |

Under the simulation, in the three rising rate scenarios interest rate risk is less rate sensitive and in the three falling rate scenarios interest rate risk is more rate sensitive than the previous quarter. This is mainly due to a change in the funding mix. The Company has less wholesale borrowings, which are more rate sensitive, and higher deposits, which are less rate sensitive. Deposits are held constant for this simulation in both the current and previous quarters.

## Derivative Financial Instruments

The Company maintains an overall interest rate risk management strategy that permits the use of derivative instruments to modify exposure to interest rate risk. Such instruments include interest rate swaps, interest rate floors, interest rate caps, credit risk participation agreements, mortgage loan commitments, forward sale contracts, and forward to-be-announced (TBA) contracts. The Company's interest rate risk management strategy includes the ability to modify the re-pricing characteristics of certain assets and liabilities so that changes in interest rates do not adversely affect the net interest margin and cash flows.

In addition to using derivatives to manage interest rate risk, the Company enters into foreign exchange derivative instruments as an accommodation to customers and offsets the related foreign exchange risk by entering into offsetting third-party forward contracts with approved, reputable counterparties. This trading activity is managed within a policy of specific controls and limits.

In all of these contracts, the Company is exposed to credit risk in the event of nonperformance by counterparties, who may be bank customers or other financial institutions. The Company controls the credit risk of its financial contracts through credit approvals, limits and monitoring procedures. Because the Company generally only enters into transactions with high quality counterparties, there have been no losses associated with counterparty nonperformance on derivative financial instruments.

The following table summarizes the notional amounts and estimated fair values of the Company's derivative instruments at December 31, 2023 and 2022. Notional amount, along with the other terms of the derivative, is used to determine the amounts to be exchanged between the counterparties. Because the notional amount does not represent amounts exchanged by the parties, it is not a measure of loss exposure related to the use of derivatives nor of exposure to liquidity risk. All of these derivative instruments utilized by the Company are further discussed in Note 19 on Derivative Instruments in the consolidated financial statements.

| | **2023** | | | 2022 | | |
|---|---|---|---|---|---|---|
| *(In thousands)* | **Notional Amount** | **Positive Fair Value** | **Negative Fair Value** | Notional Amount | Positive Fair Value | Negative Fair Value |
| Interest rate swaps | **$ 2,166,393** | **$ 35,816** | **$ (35,816)** | $ 1,981,821 | $ 23,894 | $ (51,742) |
| Interest rate floors | **2,000,000** | **78,960** | **—** | 1,000,000 | 33,371 | — |
| Interest rate caps | **336,682** | **1,391** | **(1,391)** | 152,784 | 2,705 | (2,705) |
| Credit risk participation agreements | **653,887** | **77** | **(194)** | 579,925 | 34 | (119) |
| Foreign exchange contracts | **30,401** | **534** | **(479)** | 27,991 | 488 | (418) |
| Mortgage loan commitments | **3,004** | **89** | **(1)** | — | — | — |
| Mortgage loan forward sale contracts | **1,349** | **8** | **—** | — | — | — |
| Forward TBA contracts | **3,000** | **1** | **(18)** | — | — | — |
| **Total at December 31** | **$ 5,194,716** | **$ 116,876** | **$ (37,899)** | $ 3,742,521 | $ 60,492 | $ (54,984) |

## Operating Segments

The Company segregates financial information for use in assessing its performance and allocating resources among three operating segments. The results are determined based on the Company's management accounting process, which assigns balance sheet and income statement items to each responsible segment. These segments are defined by customer base and product type. The management process measures the performance of the operating segments based on the management structure of the Company and is not necessarily comparable with similar information for any other financial institution. Each segment is managed by executives who, in conjunction with the Chief Executive Officer, make strategic business decisions regarding that segment. The three reportable operating segments are Consumer, Commercial, and Wealth. Additional information is presented in Note 13 on Segments in the consolidated financial statements.

The Company uses a funds transfer pricing method to value funds used (e.g., loans, fixed assets, cash, etc.) and funds provided (deposits, borrowings, and equity) by the business segments and their components. This process assigns a specific value to each new source or use of funds with a maturity, based on current swap rates, thus determining an interest spread at the time of the transaction. Non-maturity assets and liabilities are valued using weighted average pools. The funds transfer pricing process attempts to remove interest rate risk from valuation, allowing management to compare profitability under various rate environments. The Company also assigns loan charge-offs and recoveries (labeled in the table below as "provision for credit

losses") directly to each operating segment instead of allocating an estimated credit loss provision. The operating segments also include a number of allocations of income and expense from various support and overhead centers within the Company.
The table below is a summary of segment pre-tax income results for the past three years.

| *(Dollars in thousands)* | Consumer | Commercial | Wealth | Segment Totals | Other/ Elimination | Consolidated Totals |
|---|---|---|---|---|---|---|
| **Year ended December 31, 2023:** | | | | | | |
| Net interest income | **$ 413,856** | **$ 482,389** | **$ 73,251** | **$ 969,496** | **$ 28,633** | **$ 998,129** |
| Provision for credit losses | **(27,459)** | **(3,513)** | **(28)** | **(31,000)** | **(4,451)** | **(35,451)** |
| Non-interest income | **99,910** | **246,183** | **218,241** | **564,334** | **8,711** | **573,045** |
| Investment securities gains (losses), net | — | — | — | — | **14,985** | **14,985** |
| Non-interest expense | **(326,838)** | **(391,980)** | **(157,679)** | **(876,497)** | **(54,485)** | **(930,982)** |
| Income before income taxes | **$ 159,469** | **$ 333,079** | **$ 133,785** | **$ 626,333** | **$ (6,607)** | **$ 619,726** |
| **Year ended December 31, 2022:** | | | | | | |
| Net interest income | $ 366,749 | $ 452,686 | $ 74,416 | $ 893,851 | $ 48,334 | $ 942,185 |
| Provision for loan losses | (17,832) | (1,196) | (8) | (19,036) | (9,035) | (28,071) |
| Non-interest income | 106,538 | 224,890 | 213,388 | 544,816 | 1,719 | 546,535 |
| Investment securities gains (losses), net | — | — | — | — | 20,506 | 20,506 |
| Non-interest expense | (308,899) | (365,276) | (144,914) | (819,089) | (29,688) | (848,777) |
| Income before income taxes | $ 146,556 | $ 311,104 | $ 142,882 | $ 600,542 | $ 31,836 | $ 632,378 |
| **2023 vs 2022** | | | | | | |
| Increase (decrease) in income before income taxes: | | | | | | |
| Amount | **$ 12,913** | **$ 21,975** | **$ (9,097)** | **$ 25,791** | **$ (38,443)** | **$ (12,652)** |
| Percent | **8.8%** | **7.1%** | **(6.4)%** | **4.3%** | **(120.8)%** | **(2.0)%** |
| **Year ended December 31, 2021:** | | | | | | |
| Net interest income | $ 348,565 | $ 453,692 | $ 71,522 | $ 873,779 | $ (38,355) | $ 835,424 |
| Provision for loan losses | (23,224) | 4,845 | (52) | (18,431) | 84,757 | 66,326 |
| Non-interest income | 126,218 | 211,048 | 213,617 | 550,883 | 9,510 | 560,393 |
| Investment securities gains (losses), net | — | — | — | — | 30,059 | 30,059 |
| Non-interest expense | (299,998) | (329,313) | (136,356) | (765,667) | (40,234) | (805,901) |
| Income before income taxes | $ 151,561 | $ 340,272 | $ 148,731 | $ 640,564 | $ 45,737 | $ 686,301 |
| **2022 vs 2021** | | | | | | |
| Increase (decrease) in income before income taxes: | | | | | | |
| Amount | $ (5,005) | $ (29,168) | $ (5,849) | $ (40,022) | $ (13,901) | $ (53,923) |
| Percent | (3.3) % | (8.6) % | (3.9) % | (6.2) % | 30.4% | (7.9) % |

*Consumer*

The Consumer segment includes consumer deposits, consumer finance, and consumer debit and credit cards. During 2023, income before income taxes for the Consumer segment increased $12.9 million, or 8.8%, compared to 2022. This increase was due to growth in net interest income of $47.1 million, or 12.8%, partly offset by higher non-interest expense of $17.9 million, or 5.8%, an increase in the provision for credit losses of $9.6 million, or 54.0%, and a decline in non-interest income of $6.6 million, or 6.2%. Net interest income increased due to a $59.3 million increase in net allocated funding credits assigned to the Consumer segment's loan and deposit portfolios and a $41.8 million increase in loan interest income, partly offset by an increase of $54.0 million in deposit interest expense. Non-interest income decreased mainly due to lower deposit account fees (mainly overdraft and return item fees) and mortgage banking revenue, partly offset by growth in net debit card fees. Non-interest expense increased over the previous year mainly due to higher salaries and benefits expense, FDIC insurance expense, data processing and software expense and allocated support costs for consumer administration and operations and information technology. The provision for credit losses totaled $27.5 million, a $9.6 million increase over the prior year, which resulted mainly from higher consumer credit card and personal loan net charge-offs. Total average loans in this segment increased $127.4 million, or 3.4%, in 2023 compared to 2022 mainly due to increases in personal real estate loans and revolving and fixed

rate home equity loans. Average deposits decreased $1.2 billion, or 8.8%, from the prior year, resulting from declines in money market, interest checking and savings deposit account balances, partly offset by growth in certificate of deposit account balances.

During 2022, income before income taxes for the Consumer segment decreased $5.0 million, or 3.3%, compared to 2021. This decrease was due to a decline in non-interest income of $19.7 million, or 23.2%, and higher non-interest expense of $8.9 million, or 3.0%. These decreases to income were partly offset by growth in net interest income of $18.1 million, or 5.2%, and a decrease in the provision for credit losses of $5.4 million, or 23.2%. Net interest income increased due to an $18.7 million increase in net allocated funding credits assigned to the Consumer segment's loan and deposit portfolios. Non-interest income decreased mainly due to declines of $13.2 million in mortgage banking revenue and $4.0 million in overdraft and return item fees. Non-interest expense increased over the prior year mainly due to higher occupancy expense, insurance expense and allocated service and support costs (mainly bank card fraud operations and information technology), partly offset by lower allocated service costs for branch employees and mortgage operations. The provision for credit losses totaled $17.8 million, a $5.4 million decrease from 2021, which resulted mainly from lower credit card loan net charge-offs, slightly offset by higher consumer loan net charge-offs. Total average loans in this segment decreased $145.3 million, or 3.8%, in 2022 compared to 2021 mainly due to declines in consumer credit card and auto loans. Average deposits increased $561.0 million, or 4.4%, over 2021, resulting from growth in personal demand, savings and interest checking and money market deposit account balances.

*Commercial*

The Commercial segment provides lending (including the Small Business Banking product line within the branch network), leasing, international services, and business, government deposit, and related commercial cash management services, as well as merchant and commercial bank card products. The segment includes the Capital Markets Group, which sells fixed-income securities to correspondent banks, corporations, public institutions, municipalities, and individuals and also provides securities safekeeping and bond accounting services. Pre-tax income for 2023 increased $22.0 million, or 7.1%, compared to 2022, mainly due to increases net interest income and non-interest income, partly offset by increases in non-interest expense and the provision for credit losses. Net interest income increased $29.7 million, or 6.6%, due to higher loan interest income of $272.9 million. This increase was partly offset by a decrease of $78.1 million in net allocated funding credits assigned to the Commercial segment's loan and deposit portfolios and increases in interest expense on customer repurchase agreements and deposits of $49.4 million and $116.4 million, respectively. Non-interest income increased $21.3 million, or 9.5%, over 2022 due to growth in net bank card fees (mainly corporate card and merchant fees), deposit account fees (mainly corporate cash management fees), letter of credit fees and cash sweep commissions, partly offset by a decline in tax credit sales fees. Non-interest expense increased $26.7 million, or 7.3%, mainly due to higher salaries and benefits expense, FDIC insurance expense and allocated service and support costs (mainly bank operations, commercial payments and products and credit administration). These increases were partly offset by lower allocated support costs for information technology. The provision for credit losses increased $2.3 million over the same period last year, mainly due to higher business loan net charge-offs. Average segment loans increased $1.0 billion, or 10.4%, compared to 2022, mainly due to increases in business, business real estate, and construction loans. Average deposits decreased $1.6 billion, or 13.1%, mainly due to declines in business demand and money market deposit account balances, partly offset by increases in interest checking and certificate of deposit account balances.

Pre-tax income for 2022 decreased $29.2 million, or 8.6%, compared to 2021, mainly due to increases in non-interest expense and the provision for credit losses, partly offset by an increase in non-interest income. Net interest income decreased $1.0 million, or .2%, due to a $21.4 million decrease in net allocated funding credits, coupled with higher interest expense on customer repurchase agreements and deposits of $22.6 million and 18.5 million, respectively. The decreases were partly offset by a $61.2 million increase in loan interest income. The provision for credit losses increased $6.0 million due to net charge-offs recorded on business loans in 2022 compared to net recoveries recorded in 2021. Non-interest income increased $13.8 million, or 6.6%, over 2021 due to higher net bank card fees (mainly corporate card), deposit account fees (mainly corporate cash management fees), and higher cash sweep commissions. These increases were partly offset by lower capital market fees. Non-interest expense increased $36.0 million, or 10.9%, during 2022, mainly due to higher salaries and benefits expense, data processing and software expense, travel and entertainment expense, and allocated service and support costs (mainly bank operations expense, branch employee expense, and commercial banking expense). Average segment loans decreased $216.9 million, or 2.1%, compared to 2021, mainly due to a decline in business loans, partly offset by increases in business real estate and construction loans. Average deposits decreased $49.4 million, or .4%, mainly due to declines in business demand and certificate of deposit account balances, offset by increases in interest checking and money market deposit account balances.

*Wealth*

The Wealth segment provides traditional trust and estate planning, advisory and discretionary investment management services, brokerage services, and includes Private Banking accounts. At December 31, 2023, the Trust group managed investments with a market value of $41.2 billion and administered an additional $27.7 billion in non-managed assets. It also

provides investment management services to The Commerce Funds, a series of mutual funds with $2.6 billion in total assets at December 31, 2023. In 2023, pre-tax income for the Wealth segment was $133.8 million, compared to $142.9 million in 2022, a decrease of $9.1 million, or 6.4%. Net interest income decreased $1.2 million, or 1.6%, mainly due to a $26.2 million increase in deposit interest expense and a $7.2 million decline in net allocated funding credits assigned to the Wealth segment's loan and deposit portfolios, partly offset by a $32.3 million increase in loan interest income. Non-interest income increased $4.9 million, or 2.3%, over the prior year mainly due to higher private client trust fees and cash sweep commissions, partly offset by lower brokerage fees (mainly annuity fees). Non-interest expense increased $12.8 million, or 8.8%, mainly due to higher salaries and benefits expense and the deconversion costs previously mentioned. The provision for credit losses increased $20 thousand over the prior year. Average assets increased $54.9 million, or 3.0%, during 2023 mainly due to higher personal real estate loan balances, partly offset by lower business and fixed rate home equity loan balances. Average deposits decreased $427.4 million, or 15.2%, due to declines in interest checking and money market deposit account balances, partly offset by growth in certificate of deposit account balances.

In 2022, pre-tax income for the Wealth segment was $142.9 million, compared to $148.7 million in 2021, a decrease of $5.8 million, or 3.9%. Net interest income increased $2.9 million, or 4.0%, mainly due to a $16.4 million increase in loan interest income, partly offset by a $12.5 million decrease in net allocated funding credits and a $1.0 million increase in deposit interest expense. Non-interest income decreased $229 thousand, or .1%, from the prior year due to higher cash sweep commissions and brokerage fees, partly offset by lower mortgage banking revenue and trust fees. Non-interest expense increased $8.6 million, or 6.3%, resulting from higher salaries and benefits expense, travel and entertainment expense, and marketing expense. The provision for credit losses decreased $44 thousand, mainly due to net recoveries on revolving home equity loans. Average assets increased $253.3 million, or 16.0%, during 2022 mainly due to higher personal real estate and consumer loan balances. Average deposits decreased $161.0 million, or 5.4%, due to a decline in interest checking and money market deposit account balances.

The segment activity, as shown above, includes both direct and allocated items. Amounts in the “Other/Elimination” column include the activity of various support and overhead operating units of the Company, in addition to the investment securities portfolio, brokered deposits and other items not allocated to the segments. In accordance with the Company's transfer pricing procedures, the difference between the total provision and total net charge-offs/recoveries is not allocated to a business segment and is included in this category. In 2023, the pre-tax net loss in this category was $6.6 million, compared to net income of $31.8 million in 2022. Unallocated securities gains were $15.0 million in 2023, compared to securities gains of $20.5 million in 2022. Additionally, non-interest expense increased $24.8 million and net interest income decreased $19.7 million. These decreases were partly offset by a $7.0 million increase in non-interest income and a decrease in the provision for credit losses of $4.6 million. The decrease in the unallocated provision for credit losses was primarily driven by a decrease in the liability for unfunded lending commitments, partly offset by an increase in the provision for credit losses on loans, which are both not allocated to the segments for management reporting purposes. Net charge-offs are allocated to segments when incurred for management reporting purposes. For the year ended December 31, 2023, the Company's provision for credit losses on unfunded lending commitments was a benefit $7.9 million, compared to a provision of $8.9 million in 2022. The provision for credit losses on loans was $12.3 million in excess of net-charge offs in 2023, due to an increase in the allowance for credit losses on loans, while the provision was $92 thousand higher than net charge-offs in 2022.

## Impact of Recently Issued Accounting Standards

***Reference Rate Reform*** The Financial Accounting Standards Board ("FASB") issued ASU 2020-04, "Reference Rate Reform (Topic 848) - Facilitation of the Effects of Reference Rate Reform on Financial Reporting", in March 2020, and has been followed by additional clarifying guidance related to derivatives that are modified as a result of reference rate reform. The guidance provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if they reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. Further, the guidance applies to 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 expedients and exceptions provided by the new guidance do not apply to contract modifications made and hedging relationships entered into or evaluated for effectiveness after December 31, 2022, except for certain hedging relationships existing as of December 31, 2022. In December 2022, the FASB issued ASU 2022-06 which extended the sunset date under Topic 848 to December 31, 2024. The change is to align the temporary accounting relief guidance with the expected cessation date of LIBOR, which was postponed by administrators in 2021 to June 2023, a year after the current sunset date of ASU 2020-04. The Company's LIBOR Transition Steering Committee completed the Company's transition from LIBOR during the first half of 2023.

***Disclosure Improvements*** The FASB issued ASU 2023-06, "Disclosure Improvements: Codification Amendments in Response to the SEC's Disclosure Update and Simplification Initiative", in October 2023. The amendments in this Update modify the disclosure or presentation requirements of a variety of topics in the Codification. Certain of the amendments represent clarifications to or technical corrections of the current requirements. The effective date for each amendment will be the date on which the SEC's removal of that related disclosure from Regulation S-X or Regulation S-K becomes effective, with early adoption prohibited. The adoption is not expected to have a significant effect on the Company's consolidated financial statements.

***Segment Reporting*** The FASB issued ASU 2023-07, "Segment Reporting (Topic 280) - Improvements to Reportable Segment Disclosures", in November 2023. The amendments require disclosure of significant segment expenses and other segment items on an annual and interim basis. Public entities are required to disclose significant expense categories and amounts for each reportable segment, as well as the amount and a description of the composition of other segment items. Significant expense categories are derived from expenses that are regularly provided to an entity's chief operating decision-maker ("CODM"), and included in a segment's reported measures of profit or loss. Public entities are also required to disclose the title and position of the CODM and explain how the CODM uses the reported measures of profit or loss in assessing segment performance and deciding how to allocate resources. This Update requires interim disclosures of certain segment-related disclosures that previously were only required annually. This Update requires annual disclosures for fiscal years beginning January 1, 2024 and interim disclosures for fiscal years beginning January 1, 2025. Early adoption is permitted. The Company is required to apply the amendments in this Update retrospectively to all prior periods presented in the financial statements. Other than the inclusion of additional disclosures, the adoption of this ASU is not expected to have a significant effect on the Company's consolidated financial statements.

***Income Taxes*** The FASB issued ASU 2023-09, "Income Taxes (Topic 740) - Improvements to Income Tax Disclosures", in December 2023. The amendments in this Update require additional disclosures regarding the rate reconciliation and income taxes paid. This Update also removed certain existing disclosure requirements. This Update is effective for annual periods beginning January 1, 2025. Early adoption is permitted. The amendments in this Update should be applied on a prospective basis, though retrospective application is permitted. Other than the inclusion of additional disclosures, the adoption is not expected to have a significant effect on the Company's consolidated financial statements.

## Corporate Governance

The Company has adopted a number of corporate governance measures. These include corporate governance guidelines, a code of ethics that applies to its senior financial officers and the charters for its audit and risk committee, its committee on compensation and human resources, and its committee on governance/directors. This information is available on the Company's investor relations website at investor.commercebank.com/overview/corporate-governance.

## AVERAGE BALANCE SHEETS — AVERAGE RATES AND YIELDS

| | Years Ended December 31 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **2023** | | | 2022 | | | 2021 | | |
| *(Dollars in thousands)* | **Average Balance** | **Interest Income/ Expense** | **Average Rates Earned/Paid** | Average Balance | Interest Income/ Expense | Average Rates Earned/Paid | Average Balance | Interest Income/ Expense | Average Rates Earned/Paid |
| **ASSETS** | | | | | | | | | |
| Loans:[(A)] | | | | | | | | | |
| Business[(B)] | **$ 5,781,736** | **$ 326,498** | **5.65%** | $ 5,376,584 | $ 198,238 | 3.69% | $ 5,838,682 | $ 186,968 | 3.20% |
| Real estate – construction and land | **1,473,797** | **117,238** | **7.95** | 1,229,977 | 61,893 | 5.03 | 1,144,741 | 40,702 | 3.56 |
| Real estate – business | **3,577,093** | **214,091** | **5.99** | 3,205,061 | 133,909 | 4.18 | 3,005,943 | 104,329 | 3.47 |
| Real estate – personal | **2,979,014** | **110,729** | **3.72** | 2,841,626 | 94,878 | 3.34 | 2,797,635 | 92,267 | 3.30 |
| Consumer | **2,096,517** | **121,310** | **5.79** | 2,075,781 | 84,044 | 4.05 | 2,009,577 | 76,361 | 3.80 |
| Revolving home equity | **302,967** | **22,775** | **7.52** | 280,242 | 12,625 | 4.51 | 286,064 | 9,823 | 3.43 |
| Consumer credit card | **561,103** | **77,223** | **13.76** | 547,071 | 64,832 | 11.85 | 577,411 | 64,274 | 11.13 |
| Overdrafts | **4,923** | **—** | **—** | 5,645 | — | — | 4,335 | — | — |
| **Total loans** | **16,777,150** | **989,864** | **5.90** | 15,561,987 | 650,419 | 4.18 | 15,664,388 | 574,724 | 3.67 |
| Loans held for sale | **5,692** | **583** | **10.24** | 7,754 | 637 | 8.22 | 21,524 | 880 | 4.09 |
| Investment securities: | | | | | | | | | |
| U.S. government & federal agency obligations | **1,001,979** | **24,921** | **2.49** | 1,097,935 | 41,095 | 3.74 | 796,043 | 32,888 | 4.13 |
| Government-sponsored enterprise obligations | **63,436** | **1,683** | **2.65** | 54,768 | 1,293 | 2.36 | 50,789 | 1,180 | 2.32 |
| State & municipal obligations[(B)] | **1,518,835** | **31,280** | **2.06** | 2,061,620 | 47,121 | 2.29 | 2,015,635 | 47,721 | 2.37 |
| Mortgage-backed securities | **6,237,225** | **128,875** | **2.07** | 6,979,862 | 135,920 | 1.95 | 6,985,897 | 95,175 | 1.36 |
| Asset-backed securities | **2,732,093** | **58,318** | **2.13** | 3,888,405 | 58,716 | 1.51 | 2,824,993 | 32,705 | 1.16 |
| Other debt securities | **518,549** | **9,590** | **1.85** | 606,661 | 11,811 | 1.95 | 603,720 | 12,556 | 2.08 |
| Trading debt securities[(B)] | **41,092** | **1,968** | **4.79** | 41,205 | 1,129 | 2.74 | 36,534 | 452 | 1.24 |
| Equity securities[(B)] | **12,317** | **2,988** | **24.26** | 9,492 | 2,578 | 27.16 | 6,809 | 2,223 | 32.65 |
| Other securities[(B)] | **240,808** | **23,115** | **9.60** | 203,953 | 21,103 | 10.35 | 171,322 | 18,924 | 11.05 |
| **Total investment securities** | **12,366,334** | **282,738** | **2.29** | 14,943,901 | 320,766 | 2.15 | 13,491,742 | 243,824 | 1.81 |
| Federal funds sold | **12,464** | **659** | **5.29** | 11,701 | 412 | 3.52 | 677 | 4 | .59 |
| Securities purchased under agreements to resell | **702,110** | **13,649** | **1.94** | 1,495,956 | 22,647 | 1.51 | 1,275,837 | 37,377 | 2.93 |
| Interest earning deposits with banks | **1,960,185** | **103,248** | **5.27** | 1,362,863 | 15,098 | 1.11 | 2,420,533 | 3,202 | .13 |
| **Total interest earning assets** | **31,823,935** | **1,390,741** | **4.37** | 33,384,162 | 1,009,979 | 3.03 | 32,874,701 | 860,011 | 2.62 |
| Allowance for credit losses on loans | **(157,398)** | | | (141,341) | | | (188,758) | | |
| Unrealized gain (loss) on debt securities | **(1,443,659)** | | | (922,259) | | | 198,722 | | |
| Cash and due from banks | **304,610** | | | 323,296 | | | 339,431 | | |
| Premises and equipment - net | **454,360** | | | 409,235 | | | 408,537 | | |
| Other assets | **958,767** | | | 552,224 | | | 531,102 | | |
| **Total assets** | **$ 31,940,615** | | | $ 33,605,317 | | | $ 34,163,735 | | |
| **LIABILITIES AND EQUITY** | | | | | | | | | |
| Interest bearing deposits: | | | | | | | | | |
| Savings | **$ 1,464,639** | **756** | **.05** | $ 1,583,983 | 740 | .05 | $ 1,450,495 | 1,129 | .08 |
| Interest checking and money market | **13,099,305** | **145,636** | **1.11** | 14,475,089 | 24,359 | .17 | 13,370,226 | 6,380 | .05 |
| Certificates of deposit of less than $100,000 | **1,005,938** | **38,690** | **3.85** | 406,580 | 1,469 | .36 | 478,371 | 1,158 | .24 |
| Certificates of deposit of $100,000 and over | **1,486,403** | **61,057** | **4.11** | 670,472 | 3,898 | .58 | 1,244,757 | 2,577 | .21 |
| **Total interest bearing deposits** | **17,056,285** | **246,139** | **1.44** | 17,136,124 | 30,466 | .18 | 16,543,849 | 11,244 | .07 |
| Borrowings: | | | | | | | | | |
| Federal funds purchased | **495,798** | **25,265** | **5.10** | 83,255 | 1,836 | 2.21 | 23,623 | 17 | .07 |
| Securities sold under agreements to repurchase | **2,343,835** | **73,164** | **3.12** | 2,356,024 | 24,022 | 1.02 | 2,311,214 | 1,629 | .07 |
| Other borrowings[(C)] | **757,288** | **39,496** | **5.22** | 46,459 | 1,840 | 3.96 | 808 | 5 | .62 |
| **Total borrowings** | **3,596,921** | **137,925** | **3.83** | 2,485,738 | 27,698 | 1.11 | 2,335,645 | 1,651 | .07 |
| **Total interest bearing liabilities** | **20,653,206** | **384,064** | **1.86%** | 19,621,862 | 58,164 | .30% | 18,879,494 | 12,895 | .07% |
| Non-interest bearing deposits | **8,252,096** | | | 10,964,573 | | | 11,240,267 | | |
| Other liabilities | **375,855** | | | 198,002 | | | 591,459 | | |
| Equity | **2,659,458** | | | 2,820,880 | | | 3,452,515 | | |
| **Total liabilities and equity** | **$ 31,940,615** | | | $ 33,605,317 | | | $ 34,163,735 | | |
| **Net interest margin (FTE)** | | **$1,006,677** | | | $ 951,815 | | | $ 847,116 | |
| **Net yield on interest earning assets** | | | **3.16%** | | | 2.85% | | | 2.58% |
| **Percentage increase (decrease) in net interest margin (FTE) compared to the prior year** | | | **5.76%** | | | 12.36% | | | .51% |

*(A) Loans on non-accrual status are included in the computation of average balances. Included in interest income above are loan fees and late charges, net of amortization of deferred loan origination fees and costs, which are immaterial. Credit card income from merchant discounts and net interchange fees are not included in loan income.*

| Years Ended December 31 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2020 | | | 2019 | | | 2018 | | | |
| Average Balance | Interest Income/ Expense | Average Rates Earned/Paid | Average Balance | Interest Income/ Expense | Average Rates Earned/Paid | Average Balance | Interest Income/ Expense | Average Rates Earned/Paid | Average Balance Five Year Compound Growth Rate |
| $ 6,387,410 | $ 196,249 | 3.07% | $ 5,214,158 | $ 202,308 | 3.88% | $ 4,963,029 | $ 184,837 | 3.72% | 3.10% |
| 956,999 | 38,619 | 4.04 | 909,367 | 49,702 | 5.47 | 967,320 | 49,440 | 5.11 | 8.79 |
| 2,959,068 | 110,080 | 3.72 | 2,859,008 | 127,635 | 4.46 | 2,737,820 | 117,516 | 4.29 | 5.49 |
| 2,619,211 | 94,835 | 3.62 | 2,178,716 | 85,604 | 3.93 | 2,093,802 | 80,365 | 3.84 | 7.31 |
| 1,967,133 | 86,096 | 4.38 | 1,930,883 | 92,414 | 4.79 | 2,010,826 | 89,074 | 4.43 | .84 |
| 334,866 | 12,405 | 3.70 | 358,474 | 18,204 | 5.08 | 379,715 | 17,513 | 4.61 | (4.42) |
| 668,810 | 78,704 | 11.77 | 764,828 | 93,754 | 12.26 | 768,789 | 92,269 | 12.00 | (6.10) |
| 3,351 | — | — | 9,203 | — | — | 4,778 | — | — | .60 |
| 15,896,848 | 616,988 | 3.88 | 14,224,637 | 669,621 | 4.71 | 13,926,079 | 631,014 | 4.53 | 3.80 |
| 18,685 | 860 | 4.60 | 18,577 | 1,209 | 6.51 | 19,493 | 1,298 | 6.66 | (21.82) |
| 780,903 | 17,369 | 2.22 | 851,124 | 20,968 | 2.46 | 921,759 | 21,720 | 2.36 | 1.68 |
| 105,069 | 3,346 | 3.18 | 191,406 | 4,557 | 2.38 | 308,520 | 6,098 | 1.98 | (27.12) |
| 1,562,415 | 42,260 | 2.70 | 1,220,958 | 38,362 | 3.14 | 1,410,700 | 42,867 | 3.04 | 1.49 |
| 5,733,398 | 109,834 | 1.92 | 4,594,576 | 123,806 | 2.69 | 4,203,625 | 111,686 | 2.66 | 8.21 |
| 1,467,496 | 29,759 | 2.03 | 1,372,574 | 37,478 | 2.73 | 1,455,690 | 34,223 | 2.35 | 13.42 |
| 444,489 | 10,846 | 2.44 | 333,105 | 9,017 | 2.71 | 340,458 | 8,912 | 2.62 | 8.78 |
| 30,321 | 659 | 2.17 | 29,450 | 886 | 3.01 | 24,731 | 759 | 3.07 | 10.69 |
| 4,206 | 2,030 | 48.26 | 4,547 | 1,792 | 39.41 | 26,459 | 11,816 | 44.66 | (14.18) |
| 133,391 | 8,732 | 6.55 | 134,255 | 8,466 | 6.31 | 114,438 | 12,412 | 10.85 | 16.04 |
| 10,261,688 | 224,835 | 2.19 | 8,731,995 | 245,332 | 2.81 | 8,806,380 | 250,493 | 2.84 | 7.03 |
| 278 | 3 | 1.08 | 2,034 | 55 | 2.70 | 27,026 | 519 | 1.92 | (14.34) |
| 849,998 | 40,647 | 4.78 | 741,089 | 15,898 | 2.15 | 696,438 | 15,881 | 2.28 | .16 |
| 1,115,551 | 2,273 | .20 | 316,299 | 6,698 | 2.12 | 319,948 | 6,233 | 1.95 | 43.70 |
| 28,143,048 | 885,606 | 3.15 | 24,034,631 | 938,813 | 3.91 | 23,795,364 | 905,438 | 3.81 | 5.99 |
| (196,942) | | | (160,212) | | | (158,791) | | | (.18) |
| 292,898 | | | 74,605 | | | (113,068) | | | 66.43 |
| 343,516 | | | 370,709 | | | 360,732 | | | (3.33) |
| 399,228 | | | 380,350 | | | 343,636 | | | 5.75 |
| 634,949 | | | 513,442 | | | 438,362 | | | 16.94 |
| $ 29,616,697 | | | $ 25,213,525 | | | $ 24,666,235 | | | 5.30 |
| $ 1,123,413 | 1,053 | .09 | $ 918,896 | 1,021 | .11 | $ 867,150 | 973 | .11 | 11.05 |
| 11,539,717 | 16,798 | .15 | 10,607,224 | 38,691 | .36 | 10,817,169 | 26,830 | .25 | 3.90 |
| 585,695 | 4,897 | .84 | 610,807 | 6,368 | 1.04 | 603,137 | 3,215 | .53 | 10.77 |
| 1,358,389 | 12,948 | .95 | 1,396,760 | 26,945 | 1.93 | 1,114,825 | 14,658 | 1.31 | 5.92 |
| 14,607,214 | 35,696 | .24 | 13,533,687 | 73,025 | .54 | 13,402,281 | 45,676 | .34 | 4.94 |
| 126,203 | 794 | .63 | 247,126 | 5,332 | 2.16 | 82,179 | 1,582 | 1.93 | 43.25 |
| 1,840,276 | 5,297 | .29 | 1,574,972 | 24,083 | 1.53 | 1,431,965 | 18,073 | 1.26 | 10.36 |
| 126,585 | 1,029 | .81 | 43,919 | 952 | 2.17 | 1,747 | 45 | 2.58 | 236.82 |
| 2,093,064 | 7,120 | .34 | 1,866,017 | 30,367 | 1.63 | 1,515,891 | 19,700 | 1.30 | 18.86 |
| 16,700,278 | 42,816 | .26% | 15,399,704 | 103,392 | .67% | 14,918,172 | 65,376 | .44% | 6.72 |
| 8,890,263 | | | 6,376,204 | | | 6,728,971 | | | 4.17 |
| 715,033 | | | 360,587 | | | 247,520 | | | 8.71 |
| 3,311,123 | | | 3,077,030 | | | 2,771,572 | | | (.82) |
| $ 29,616,697 | | | $ 25,213,525 | | | $ 24,666,235 | | | 5.30% |
| | $ 842,790 | | | $ 835,421 | | | $ 840,062 | | |
| | | 2.99% | | | 3.48% | | | 3.53% | |
| | | .88% | | | (.55%) | | | 9.58% | |

*(B) Interest income and yields are presented on a fully taxable-equivalent basis using a federal income tax rate of 21%. Loan interest income includes tax free loan income (categorized as business loan income) which includes tax equivalent adjustments of $5,467,000 in 2023, $4,126,000 in 2022, $4,176,000 in 2021, $4,916,000 in 2020, $6,282,000 in 2019, and $5,931,000 in 2018. Investment securities interest income includes tax equivalent adjustments of $3,983,000 in 2023, $6,874,000 in 2022, $7,546,000 in 2021, $8,042,000 in 2020, $7,845,000 in 2019, and $10,306,000 in 2018. These adjustments relate to state and municipal obligations, trading securities, equity securities, and other securities.*

*(C) Interest expense of $903,000, $1,370,000, $29,000 and $14,000, which was capitalized on construction projects in 2023, 2022, 2021, and 2020, respectively,is not deducted from the interest expense shown above.*

## QUARTERLY AVERAGE BALANCE SHEETS — AVERAGE RATES AND YIELDS

| | Year ended December 31, 2023 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Fourth Quarter | | Third Quarter | | Second Quarter | | First Quarter | |
| *(Dollars in millions)* | Average Balance | Average Rates Earned/Paid | Average Balance | Average Rates Earned/Paid | Average Balance | Average Rates Earned/Paid | Average Balance | Average Rates Earned/Paid |
| **ASSETS** | | | | | | | | |
| Loans: | | | | | | | | |
| Business(A) | $ 5,861 | 5.91% | $ 5,849 | 5.77% | $ 5,756 | 5.58% | $ 5,657 | 5.31% |
| Real estate – construction and land | 1,524 | 8.34 | 1,509 | 8.17 | 1,450 | 7.92 | 1,411 | 7.33 |
| Real estate – business | 3,645 | 6.18 | 3,642 | 6.13 | 3,541 | 5.96 | 3,478 | 5.65 |
| Real estate – personal | 3,028 | 3.85 | 2,993 | 3.73 | 2,961 | 3.68 | 2,934 | 3.61 |
| Consumer | 2,117 | 6.21 | 2,102 | 5.97 | 2,099 | 5.63 | 2,067 | 5.31 |
| Revolving home equity | 310 | 7.70 | 304 | 7.76 | 301 | 7.55 | 297 | 7.03 |
| Consumer credit card | 568 | 13.83 | 564 | 13.77 | 556 | 13.77 | 556 | 13.68 |
| Overdrafts | 5 | — | 5 | — | 5 | — | 4 | — |
| **Total loans** | 17,058 | 6.15 | 16,968 | 6.02 | 16,669 | 5.84 | 16,404 | 5.56 |
| Loans held for sale | 5 | 9.93 | 6 | 10.55 | 6 | 10.17 | 6 | 10.30 |
| Investment securities: | | | | | | | | |
| U.S. government & federal agency obligations | 889 | 2.32 | 986 | 2.31 | 1,036 | 3.42 | 1,099 | 1.90 |
| Government-sponsored enterprise obligations | 56 | 2.36 | 56 | 2.36 | 56 | 2.38 | 87 | 3.21 |
| State & municipal obligations(A) | 1,364 | 1.94 | 1,392 | 1.95 | 1,533 | 2.04 | 1,794 | 2.26 |
| Mortgage-backed securities | 6,024 | 2.05 | 6,161 | 2.06 | 6,316 | 2.09 | 6,454 | 2.06 |
| Asset-backed securities | 2,325 | 2.30 | 2,554 | 2.20 | 2,828 | 2.08 | 3,234 | 2.01 |
| Other debt securities | 511 | 1.85 | 515 | 1.75 | 520 | 1.86 | 529 | 1.93 |
| Trading debt securities(A) | 37 | 5.05 | 35 | 5.11 | 46 | 4.53 | 46 | 4.59 |
| Equity securities(A) | 12 | 27.47 | 12 | 23.06 | 12 | 23.25 | 12 | 23.24 |
| Other securities(A) | 222 | 8.60 | 237 | 13.13 | 274 | 9.40 | 230 | 7.11 |
| **Total investment securities** | 11,440 | 2.27 | 11,948 | 2.33 | 12,621 | 2.37 | 13,485 | 2.18 |
| Federal funds sold | 1 | 6.65 | 3 | 6.56 | 7 | 5.63 | 39 | 5.09 |
| Securities purchased under agreements to resell | 450 | 1.64 | 712 | 2.08 | 825 | 1.99 | 825 | 1.94 |
| Interest earning deposits with banks | 2,387 | 5.47 | 2,338 | 5.39 | 2,284 | 5.14 | 810 | 4.67 |
| **Total interest earning assets** | 31,341 | 4.62 | 31,975 | 4.51 | 32,412 | 4.34 | 31,569 | 4.00 |
| Allowance for credit losses on loans | (162) | | (158) | | (159) | | (150) | |
| Unrealized gain (loss) on debt securities | (1,596) | | (1,458) | | (1,331) | | (1,387) | |
| Cash and due from banks | 299 | | 296 | | 310 | | 314 | |
| Premises and equipment – net | 473 | | 464 | | 449 | | 431 | |
| Other assets | 1,026 | | 990 | | 1,182 | | 631 | |
| **Total assets** | $ 31,381 | | $ 32,109 | | $ 32,863 | | $ 31,408 | |
| **LIABILITIES AND EQUITY** | | | | | | | | |
| Interest bearing deposits: | | | | | | | | |
| Savings | $ 1,358 | .05 | $ 1,436 | .05 | $ 1,517 | .05 | $ 1,550 | .05 |
| Interest checking and money market | 13,167 | 1.57 | 13,048 | 1.33 | 12,919 | .93 | 13,266 | .61 |
| Certificates of deposit under $100,000 | 1,097 | 4.21 | 1,424 | 4.32 | 1,075 | 3.78 | 415 | 1.39 |
| Certificates of deposit $100,000 & over | 1,839 | 4.55 | 1,718 | 4.37 | 1,472 | 3.93 | 903 | 2.98 |
| **Total interest bearing deposits** | 17,461 | 1.93 | 17,626 | 1.76 | 16,983 | 1.29 | 16,134 | .71 |
| Borrowings: | | | | | | | | |
| Federal funds purchased | 474 | 5.40 | 509 | 5.33 | 507 | 5.06 | 494 | 4.59 |
| Securities sold under agreements to repurchase | 2,467 | 3.25 | 2,283 | 3.20 | 2,207 | 3.09 | 2,419 | 2.93 |
| Other borrowings | 179 | 5.45 | 685 | 5.30 | 1,618 | 5.24 | 551 | 4.94 |
| **Total borrowings** | 3,120 | 3.71 | 3,477 | 3.93 | 4,332 | 4.13 | 3,464 | 3.49 |
| **Total interest bearing liabilities** | 20,581 | 2.20% | 21,103 | 2.12% | 21,315 | 1.87% | 19,598 | 1.20% |
| Non-interest bearing deposits | 7,749 | | 7,939 | | 8,224 | | 9,115 | |
| Other liabilities | 421 | | 369 | | 598 | | 112 | |
| Equity | 2,630 | | 2,698 | | 2,726 | | 2,583 | |
| **Total liabilities and equity** | $ 31,381 | | $ 32,109 | | $ 32,863 | | $ 31,408 | |
| **Net interest margin (FTE)** | $ 251 | | $ 251 | | $ 252 | | $ 253 | |
| **Net yield on interest earning assets** | | 3.17% | | 3.11% | | 3.12% | | 3.26% |

*(A) Stated on a fully taxable-equivalent basis using a federal income tax rate of 21%.*

| | Year ended December 31, 2022 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Fourth Quarter | | Third Quarter | | Second Quarter | | First Quarter | |
| *(Dollars in millions)* | Average Balance | Average Rates Earned/Paid | Average Balance | Average Rates Earned/Paid | Average Balance | Average Rates Earned/Paid | Average Balance | Average Rates Earned/Paid |
| **ASSETS** | | | | | | | | |
| Loans: | | | | | | | | |
| Business[(A)] | $ 5,478 | 4.68% | $ 5,318 | 3.94% | $ 5,384 | 3.16% | $ 5,324 | 2.93% |
| Real estate – construction and land | 1,269 | 6.80 | 1,289 | 5.27 | 1,225 | 4.09 | 1,135 | 3.76 |
| Real estate – business | 3,301 | 5.15 | 3,258 | 4.40 | 3,164 | 3.70 | 3,095 | 3.38 |
| Real estate – personal | 2,887 | 3.45 | 2,844 | 3.36 | 2,826 | 3.27 | 2,809 | 3.28 |
| Consumer | 2,090 | 4.77 | 2,102 | 4.17 | 2,071 | 3.62 | 2,040 | 3.59 |
| Revolving home equity | 294 | 5.89 | 281 | 4.82 | 272 | 3.69 | 274 | 3.48 |
| Consumer credit card | 559 | 12.64 | 550 | 12.05 | 538 | 11.32 | 541 | 11.35 |
| Overdrafts | 7 | — | 4 | — | 6 | — | 5 | — |
| **Total loans** | 15,885 | 5.03 | 15,646 | 4.37 | 15,486 | 3.72 | 15,223 | 3.54 |
| Loans held for sale | 7 | 10.09 | 7 | 8.80 | 8 | 8.14 | 9 | 6.48 |
| Investment securities: | | | | | | | | |
| U.S. government & federal agency obligations | 1,056 | 2.01 | 1,113 | 4.51 | 1,119 | 4.93 | 1,104 | 3.42 |
| Government-sponsored enterprise obligations | 56 | 2.36 | 56 | 2.36 | 56 | 2.39 | 52 | 2.33 |
| State & municipal obligations[(A)] | 1,991 | 2.29 | 2,053 | 2.27 | 2,126 | 2.30 | 2,078 | 2.29 |
| Mortgage-backed securities | 6,606 | 1.88 | 6,848 | 1.93 | 7,158 | 1.99 | 7,317 | 1.98 |
| Asset-backed securities | 3,714 | 1.96 | 3,871 | 1.62 | 4,038 | 1.35 | 3,934 | 1.13 |
| Other debt securities | 561 | 1.89 | 587 | 1.93 | 643 | 1.97 | 636 | 2.00 |
| Trading debt securities[(A)] | 44 | 3.81 | 36 | 2.74 | 44 | 2.46 | 41 | 1.84 |
| Equity securities[(A)] | 10 | 28.44 | 9 | 27.11 | 9 | 26.90 | 9 | 26.00 |
| Other securities[(A)] | 219 | 6.67 | 209 | 7.09 | 195 | 22.38 | 192 | 5.91 |
| **Total investment securities** | 14,257 | 2.07 | 14,782 | 2.18 | 15,388 | 2.36 | 15,363 | 1.97 |
| Federal funds sold | 28 | 4.27 | 13 | 2.77 | 4 | 1.79 | 1 | .39 |
| Securities purchased under agreements to resell | 1,174 | 2.36 | 1,379 | 1.72 | 1,704 | 1.03 | 1,734 | 1.24 |
| Interest earning deposits with banks | 640 | 3.69 | 980 | 2.25 | 1,249 | .78 | 2,608 | .18 |
| **Total interest earning assets** | 31,991 | 3.59 | 32,807 | 3.21 | 33,839 | 2.86 | 34,938 | 2.49 |
| Allowance for credit losses on loans | (143) | | (138) | | (135) | | (150) | |
| Unrealized gain (loss) on debt securities | (1,582) | | (1,065) | | (851) | | (174) | |
| Cash and due from banks | 327 | | 311 | | 315 | | 340 | |
| Premises and equipment – net | 419 | | 409 | | 402 | | 407 | |
| Other assets | 593 | | 538 | | 522 | | 557 | |
| **Total assets** | $ 31,605 | | $ 32,862 | | $ 34,092 | | $ 35,918 | |
| **LIABILITIES AND EQUITY** | | | | | | | | |
| Interest bearing deposits: | | | | | | | | |
| Savings | $ 1,567 | .06 | $ 1,596 | .04 | $ 1,610 | .04 | $ 1,563 | .05 |
| Interest checking and money market | 13,694 | .38 | 14,424 | .20 | 14,846 | .06 | 14,950 | .04 |
| Certificates of deposit under $100,000 | 388 | .73 | 397 | .41 | 412 | .20 | 430 | .13 |
| Certificates of deposit $100,000 & over | 597 | 1.42 | 578 | .60 | 649 | .29 | 862 | .20 |
| **Total interest bearing deposits** | 16,246 | .40 | 16,995 | .21 | 17,517 | .07 | 17,805 | .05 |
| Borrowings: | | | | | | | | |
| Federal funds purchased | 144 | 3.56 | 52 | 2.41 | 113 | .79 | 23 | .12 |
| Securities sold under agreements to repurchase | 2,260 | 2.29 | 2,200 | 1.37 | 2,258 | .48 | 2,713 | .10 |
| Other borrowings | 179 | 4.02 | 2 | 1.78 | 2 | 2.37 | 1 | .53 |
| **Total borrowings** | 2,583 | 2.48 | 2,254 | 1.39 | 2,373 | .50 | 2,737 | .10 |
| **Total interest bearing liabilities** | 18,829 | .69% | 19,249 | .34% | 19,890 | .12% | 20,542 | .06% |
| Non-interest bearing deposits | 10,361 | | 10,758 | | 11,210 | | 11,545 | |
| Other liabilities | 29 | | 124 | | 140 | | 505 | |
| Equity | 2,386 | | 2,731 | | 2,852 | | 3,326 | |
| **Total liabilities and equity** | $ 31,605 | | $ 32,862 | | $ 34,092 | | $ 35,918 | |
| **Net interest margin (FTE)** | $ 257 | | $ 249 | | $ 235 | | $ 211 | |
| **Net yield on interest earning assets** | | 3.18% | | 3.01% | | 2.79% | | 2.45% |

(A) *Stated on a fully taxable-equivalent basis using a federal income tax rate of 21%.*

## SUMMARY OF QUARTERLY STATEMENTS OF INCOME

| Year ended December 31, 2023 | For the Quarter Ended | | | |
|---|---|---|---|---|
| *(In thousands, except per share data)* | 12/31/2023 | 9/30/2023 | 6/30/2023 | 3/31/2023 |
| Interest income | $ 362,609 | $ 361,162 | $ 348,663 | $ 308,857 |
| Interest expense | (114,188) | (112,615) | (99,125) | (57,234) |
| Net interest income | 248,421 | 248,547 | 249,538 | 251,623 |
| Non-interest income | 144,879 | 142,949 | 147,605 | 137,612 |
| Investment securities gains (losses), net | 7,601 | 4,298 | 3,392 | (306) |
| Salaries and employee benefits | (147,456) | (146,805) | (145,429) | (144,373) |
| Other expense | (103,798) | (81,205) | (82,182) | (79,734) |
| Provision for credit losses | (5,879) | (11,645) | (6,471) | (11,456) |
| Income before income taxes | 143,768 | 156,139 | 166,453 | 153,366 |
| Income taxes | (32,307) | (33,439) | (35,990) | (32,813) |
| Non-controlling interest | (2,238) | (2,104) | (2,674) | (1,101) |
| Net income attributable to Commerce Bancshares, Inc. | $ 109,223 | $ 120,596 | $ 127,789 | $ 119,452 |
| Net income per common share — basic* | $ .84 | $ .92 | $ .97 | $ .91 |
| Net income per common share — diluted* | $ .84 | $ .92 | $ .97 | $ .91 |
| Weighted average shares — basic* | 129,507 | 129,904 | 130,079 | 130,204 |
| Weighted average shares — diluted* | 129,608 | 130,009 | 130,208 | 130,472 |

| Year ended December 31, 2022 | For the Quarter Ended | | | |
|---|---|---|---|---|
| *(In thousands, except per share data)* | 12/31/2022 | 9/30/2022 | 6/30/2022 | 3/31/2022 |
| Interest income | $ 286,377 | $ 262,666 | $ 238,154 | $ 211,782 |
| Interest expense | (31,736) | (16,293) | (5,769) | (2,996) |
| Net interest income | 254,641 | 246,373 | 232,385 | 208,786 |
| Non-interest income | 136,825 | 138,514 | 139,427 | 131,769 |
| Investment securities gains (losses), net | 8,904 | 3,410 | 1,029 | 7,163 |
| Salaries and employee benefits | (138,458) | (137,393) | (142,243) | (135,953) |
| Other expense | (78,282) | (75,491) | (71,262) | (69,695) |
| Provision for credit losses | (15,477) | (15,290) | (7,162) | 9,858 |
| Income before income taxes | 168,153 | 160,123 | 152,174 | 151,928 |
| Income taxes | (34,499) | (33,936) | (32,021) | (31,902) |
| Non-controlling interest | (2,026) | (3,364) | (4,359) | (1,872) |
| Net income attributable to Commerce Bancshares, Inc. | $ 131,628 | $ 122,823 | $ 115,794 | $ 118,154 |
| Net income per common share — basic* | $ 1.00 | $ .93 | $ .87 | $ .88 |
| Net income per common share — diluted* | $ 1.00 | $ .92 | $ .87 | $ .88 |
| Weighted average shares — basic* | 130,527 | 131,082 | 131,919 | 132,658 |
| Weighted average shares — diluted* | 130,819 | 131,372 | 132,212 | 132,979 |

| Year ended December 31, 2021 | For the Quarter Ended | | | |
|---|---|---|---|---|
| *(In thousands, except per share data)* | 12/31/2021 | 9/30/2021 | 6/30/2021 | 3/31/2021 |
| Interest income | $ 210,479 | $ 216,981 | $ 211,133 | $ 209,697 |
| Interest expense | (2,822) | (2,944) | (3,151) | (3,949) |
| Net interest income | 207,657 | 214,037 | 207,982 | 205,748 |
| Non-interest income | 147,699 | 137,506 | 139,143 | 136,045 |
| Investment securities gains (losses), net | (9,706) | 13,108 | 16,804 | 9,853 |
| Salaries and employee benefits | (132,640) | (132,824) | (130,751) | (129,033) |
| Other expense | (70,942) | (78,796) | (67,375) | (63,540) |
| Provision for credit losses | 7,054 | 7,385 | 45,655 | 6,232 |
| Income before income taxes | 149,122 | 160,416 | 211,458 | 165,305 |
| Income taxes | (33,764) | (34,662) | (45,209) | (32,076) |
| Non-controlling interest | (452) | (3,193) | (3,923) | (2,257) |
| Net income attributable to Commerce Bancshares, Inc. | $ 114,906 | $ 122,561 | $ 162,326 | $ 130,972 |
| Net income per common share — basic* | $ .85 | $ .91 | $ 1.20 | $ .96 |
| Net income per common share — diluted* | $ .85 | $ .91 | $ 1.19 | $ .96 |
| Weighted average shares — basic* | 133,362 | 134,095 | 134,473 | 134,585 |
| Weighted average shares — diluted* | 133,647 | 134,374 | 134,806 | 134,948 |

** Restated for the 5% stock dividend distributed in 2023.*

## Item 7a. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The information required by this item is disclosed within the Interest Rate Sensitivity section of Management's Discussion and Analysis of Financial Condition and Results of Operations.

## Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

### Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Commerce Bancshares, Inc.:

*Opinion on the Consolidated Financial Statements*

We have audited the accompanying consolidated balance sheets of Commerce Bancshares, Inc. and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 22, 2024 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

*Basis for Opinion*

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

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

*Critical Audit Matter*

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

*Assessment for credit losses related to loans collectively evaluated for impairment*

As discussed in Notes 1 and 2 to the consolidated financial statements, the allowance for credit losses related to loans evaluated on a collective basis (the December 31, 2023 collective ACL) was $161.2 million of a total allowance for credit losses of $162.4 million as December 31, 2023. The allowance for credit losses on loans and leases is measured on a collective (pool) basis whereas loans are aggregated into pools based on similar risk characteristics. The Company estimates the collective ACL utilizing average historical loss rates, calculated using historical net charge-offs and

outstanding loan balances during a lookback period for each pool. In certain pools, if the Company's own historical loss rate is not reflective of loss expectations, the historical loss rate is augmented by industry and peer data. The calculated average net charge-off rate is then adjusted for current conditions and reasonable and supportable forecasts (forecast adjusted loss rate). These adjustments increase or decrease the average historical loss rate to reflect expectations of future losses given a single path economic forecast of key macroeconomic variables. The adjustments are based on results from various regression models projecting the impact of the macroeconomic variables to loss rates. The forecast is used for a reasonable and supportable period before reverting back to historical averages using a straight-line method. The forecast adjustment loss rate is applied to the amortized cost of loans over the remaining contractual lives, adjusted for expected prepayments. The allowance is further adjusted for certain qualitative factors not included in historical loss rates or the macroeconomic forecast, which include changes in portfolio composition and characteristics, underwriting practices, watchlist trends, or significant unique events or conditions.

We identified the assessment of the December 31, 2023 collective ACL as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgement was involved in the assessment due to significant measurement uncertainty. Specifically, this assessment encompassed the evaluation of the conceptual soundness of the average historical loss model used to estimate the collective ACL, including the following key factors and assumptions (1) historical losses, (2) the reasonable and supportable forecast period, and (3) the development and evaluation of qualitative adjustments. In addition, auditor judgement was required to evaluate the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address the critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's measurement of the collective ACL estimates, including controls over the (1) development and approval of the collective ACL methodology, (2) performance monitoring of the collective ACL methodology and model, (3) identification and determination of the key factors and assumptions used to estimate the collective ACL, (4) development of qualitative adjustments, and (5) analysis of the collective ACL results, trends, and ratios. We evaluated the Company's process to develop the collective ACL estimates by testing certain sources of data, factors, and assumptions, and considered the relevance and reliability of such data, factors, and assumptions. We evaluated whether the historical losses in the Company's portfolio are representative of the credit characteristics of the current portfolio. We involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's collective ACL methodology for compliance with U.S. generally accepted accounting principles
- evaluating the collective ACL methodology and model for conceptual soundness by inspecting the methodology and model documentation to determine whether the methodology and model are suitable for intended use
- testing the historical losses period and the reasonable and supportable forecast period by comparing them to the Company's business environment and relevant industry practices
- evaluating the methodology used to develop the qualitative factors and the effect of those factors on the collective ACL compared with changes in the nature and volume of the entity's financial assets and identified limitations of the underlying quantitative model.

We assessed the sufficiency of the audit evidence obtained related to the Company's December 31, 2023 collective ACL by evaluating the cumulative results of the audit procedures, qualitative aspects of the Company's accounting practices and potential bias in the accounting estimates.

KPMG LLP

We have served as the Company's auditor since 1971.

Kansas City, Missouri
February 22, 2024

**Commerce Bancshares, Inc. and Subsidiaries**

**CONSOLIDATED BALANCE SHEETS**

| | December 31 | |
|---|---|---|
| | **2023** | 2022 |
| | *(In thousands)* | |
| **ASSETS** | | |
| Loans | $ **17,205,479** | $ 16,303,131 |
| Allowance for credit losses on loans | **(162,395)** | (150,136) |
| **Net loans** | **17,043,084** | 16,152,995 |
| Loans held for sale (including $1,585,000 and $— of residential mortgage loans carried at fair value at December 31, 2023 and 2022, respectively) | **4,177** | 4,964 |
| Investment securities: | | |
| Available for sale debt, at fair value (amortized cost of $10,904,765,000 and $13,738,206,000 at December 31, 2023 and 2022, respectively, and allowance for credit losses of $– at both December 31, 2023 and 2022) | **9,684,760** | 12,238,316 |
| Trading debt | **28,830** | 43,523 |
| Equity | **12,701** | 12,304 |
| Other | **222,473** | 225,034 |
| **Total investment securities** | **9,948,764** | 12,519,177 |
| Federal funds sold | **5,025** | 49,505 |
| Securities purchased under agreements to resell | **450,000** | 825,000 |
| Interest earning deposits with banks | **2,239,010** | 389,140 |
| Cash and due from banks | **443,147** | 452,496 |
| Premises and equipment – net | **469,059** | 418,909 |
| Goodwill | **146,539** | 138,921 |
| Other intangible assets – net | **14,179** | 15,234 |
| Other assets | **938,077** | 909,590 |
| **Total assets** | $ **31,701,061** | $ 31,875,931 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Deposits: | | |
| Non-interest bearing | $ **7,975,935** | $ 10,066,356 |
| Savings, interest checking and money market | **14,512,273** | 15,126,981 |
| Certificates of deposit of less than $100,000 | **930,432** | 387,336 |
| Certificates of deposit of $100,000 and over | **1,945,258** | 606,767 |
| **Total deposits** | **25,363,898** | 26,187,440 |
| Federal funds purchased and securities sold under agreements to repurchase | **2,908,815** | 2,841,734 |
| Other borrowings | **1,404** | 9,672 |
| Other liabilities | **462,714** | 355,508 |
| **Total liabilities** | **28,736,831** | 29,394,354 |
| Commerce Bancshares, Inc. stockholders' equity: | | |
| Common stock, $5 par value Authorized 190,000,000 shares at December 31, 2023 and 140,000,000 shares at December 31, 2022; issued 131,064,418 shares at December 31, 2023 and 125,863,879 shares at December 31, 2022 | **655,322** | 629,319 |
| Capital surplus | **3,162,622** | 2,932,959 |
| Retained earnings | **53,183** | 31,620 |
| Treasury stock of 611,546 shares at December 31, 2023 and 605,142 shares at December 31, 2022, at cost | **(35,599)** | (41,743) |
| Accumulated other comprehensive income (loss) | **(891,412)** | (1,086,864) |
| Total Commerce Bancshares, Inc. stockholders' equity | **2,944,116** | 2,465,291 |
| Non-controlling interest | **20,114** | 16,286 |
| **Total equity** | **2,964,230** | 2,481,577 |
| **Total liabilities and equity** | $ **31,701,061** | $ 31,875,931 |

*See accompanying notes to consolidated financial statements.*

**Commerce Bancshares, Inc. and Subsidiaries**

**CONSOLIDATED STATEMENTS OF INCOME**

| *(In thousands, except per share data)* | For the Years Ended December 31 | | |
|---|---|---|---|
| | **2023** | 2022 | 2021 |
| **INTEREST INCOME** | | | |
| Interest and fees on loans | **$ 984,397** | $ 646,293 | $ 570,549 |
| Interest on loans held for sale | **583** | 637 | 880 |
| Interest on investment securities | **278,755** | 313,892 | 236,278 |
| Interest on federal funds sold | **659** | 412 | 4 |
| Interest on securities purchased under agreements to resell | **13,649** | 22,647 | 37,377 |
| Interest on deposits with banks | **103,248** | 15,098 | 3,202 |
| **Total interest income** | **1,381,291** | 998,979 | 848,290 |
| **INTEREST EXPENSE** | | | |
| Interest on deposits: | | | |
| Savings, interest checking and money market | **146,392** | 25,099 | 7,509 |
| Certificates of deposit of less than $100,000 | **38,690** | 1,469 | 1,158 |
| Certificates of deposit of $100,000 and over | **61,057** | 3,898 | 2,577 |
| Interest on federal funds purchased | **25,265** | 1,836 | 16 |
| Interest on securities sold under agreements to repurchase | **73,164** | 24,022 | 1,630 |
| Interest on other borrowings | **38,594** | 470 | (24) |
| **Total interest expense** | **383,162** | 56,794 | 12,866 |
| **Net interest income** | **998,129** | 942,185 | 835,424 |
| Provision for credit losses | **35,451** | 28,071 | (66,326) |
| **Net interest income after credit losses** | **962,678** | 914,114 | 901,750 |
| **NON-INTEREST INCOME** | | | |
| Bank card transaction fees | **191,156** | 176,144 | 167,891 |
| Trust fees | **190,954** | 184,719 | 188,227 |
| Deposit account charges and other fees | **90,992** | 94,381 | 97,217 |
| Consumer brokerage services | **17,223** | 19,117 | 18,362 |
| Capital market fees | **14,100** | 14,231 | 15,943 |
| Loan fees and sales | **11,165** | 13,141 | 29,720 |
| Other | **57,455** | 44,802 | 43,033 |
| **Total non-interest income** | **573,045** | 546,535 | 560,393 |
| **INVESTMENT SECURITIES GAINS (LOSSES), NET** | **14,985** | 20,506 | 30,059 |
| **NON-INTEREST EXPENSE** | | | |
| Salaries and employee benefits | **584,063** | 554,047 | 525,248 |
| Data processing and software | **118,758** | 110,692 | 101,792 |
| Net occupancy | **53,629** | 49,117 | 48,185 |
| Deposit insurance | **33,163** | 10,583 | 9,094 |
| Marketing | **24,511** | 23,827 | 21,856 |
| Equipment | **19,548** | 19,359 | 18,089 |
| Supplies and communication | **19,420** | 18,101 | 17,118 |
| Other | **77,890** | 63,051 | 64,519 |
| **Total non-interest expense** | **930,982** | 848,777 | 805,901 |
| Income before income taxes | **619,726** | 632,378 | 686,301 |
| Less income taxes | **134,549** | 132,358 | 145,711 |
| Net income | **485,177** | 500,020 | 540,590 |
| Less non-controlling interest expense (income) | **8,117** | 11,621 | 9,825 |
| **Net income attributable to Commerce Bancshares, Inc.** | **$ 477,060** | $ 488,399 | $ 530,765 |
| Net income per common share - basic | **$ 3.64** | $ 3.68 | $ 3.92 |
| Net income per common share - diluted | **$ 3.64** | $ 3.67 | $ 3.91 |

*See accompanying notes to consolidated financial statements.*

**Commerce Bancshares, Inc. and Subsidiaries**

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

| | For the Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| **Net income** | **$ 485,177** | $ 500,020 | $ 540,590 |
| **Other comprehensive income (loss):** | | | |
| Net unrealized gains (losses) on other securities | **209,914** | (1,148,089) | (240,627) |
| Change in pension loss | **3,590** | 3,482 | 4,450 |
| Unrealized gains (losses) on cash flow hedge derivatives | **(18,052)** | (19,337) | (18,120) |
| **Other comprehensive income (loss)** | **195,452** | (1,163,944) | (254,297) |
| **Comprehensive income (loss)** | **680,629** | (663,924) | 286,293 |
| Less non-controlling interest (income) loss | **8,117** | 11,621 | 9,825 |
| **Comprehensive income (loss) attributable to Commerce Bancshares, Inc.** | **$ 672,512** | $ (675,545) | $ 276,468 |

*See accompanying notes to consolidated financial statements.*

## Commerce Bancshares, Inc. and Subsidiaries

## CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

| | Commerce Bancshares, Inc. Shareholders | | | | | | |
|---|---|---|---|---|---|---|---|
| *(In thousands, except per share data)* | **Common Stock** | **Capital Surplus** | **Retained Earnings** | **Treasury Stock** | **Accumulated Other Comprehensive Income (Loss)** | **Non-Controlling Interest** | **Total** |
| **Balance at December 31, 2020** | $ 589,352 | $ 2,436,288 | $ 73,000 | $ (32,970) | $ 331,377 | $ 2,925 | $ 3,399,972 |
| Net income | | | 530,765 | | | 9,825 | 540,590 |
| Other comprehensive income (loss) | | | | | (254,297) | | (254,297) |
| Distributions to non-controlling interest | | | | | | (1,065) | (1,065) |
| Purchases of treasury stock | | | | (129,361) | | | (129,361) |
| Sale of non-controlling interest of subsidiary | | 659 | | | | (659) | — |
| Cash dividends paid on common stock ($.907 per share) | | | (122,693) | | | | (122,693) |
| Stock-based compensation | | 15,415 | | | | | 15,415 |
| Issuance under stock purchase and equity compensation plans | | (21,799) | | 22,710 | | | 911 |
| 5% stock dividend, net | 21,452 | 259,331 | (388,579) | 106,648 | | | (1,148) |
| **Balance at December 31, 2021** | 610,804 | 2,689,894 | 92,493 | (32,973) | 77,080 | 11,026 | 3,448,324 |
| Net income | | | 488,399 | | | 11,621 | 500,020 |
| Other comprehensive income (loss) | | | | | (1,163,944) | | (1,163,944) |
| Distributions to non-controlling interest | | | | | | (6,361) | (6,361) |
| Purchases of treasury stock | | | | (186,622) | | | (186,622) |
| Cash dividends paid on common stock ($.961 per share) | | | (127,466) | | | | (127,466) |
| Stock-based compensation | | 16,995 | | | | | 16,995 |
| Issuance under stock purchase and equity compensation plans | | (19,563) | | 21,468 | | | 1,905 |
| 5% stock dividend, net | 18,515 | 245,633 | (421,806) | 156,384 | | | (1,274) |
| **Balance at December 31, 2022** | **629,319** | **2,932,959** | **31,620** | **(41,743)** | **(1,086,864)** | **16,286** | **2,481,577** |
| Net income | | | **477,060** | | | **8,117** | **485,177** |
| Other comprehensive income (loss) | | | | | **195,452** | | **195,452** |
| Distributions to non-controlling interest | | | | | | **(4,235)** | **(4,235)** |
| Purchases of treasury stock | | | | **(76,890)** | | | **(76,890)** |
| Sale of non-controlling interest of subsidiary | | **54** | | | | **(54)** | — |
| Cash dividends paid on common stock ($1.029 per share) | | | **(134,734)** | | | | **(134,734)** |
| Stock-based compensation | | **17,052** | | | | | **17,052** |
| Issuance under stock purchase and equity compensation plans | | **(21,732)** | | **23,439** | | | **1,707** |
| 5% stock dividend, net | **26,003** | **234,289** | **(320,763)** | **59,595** | | | **(876)** |
| **Balance at December 31, 2023** | **$ 655,322** | **$ 3,162,622** | **$ 53,183** | **$ (35,599)** | **$ (891,412)** | **$ 20,114** | **$ 2,964,230** |

*See accompanying notes to consolidated financial statements.*

**Commerce Bancshares, Inc. and Subsidiaries**

## CONSOLIDATED STATEMENTS OF CASH FLOWS

| | For the Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| **OPERATING ACTIVITIES** | | | |
| Net income | **$ 485,177** | $ 500,020 | $ 540,590 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Provision for credit losses | **35,451** | 28,071 | (66,326) |
| Depreciation and amortization | **49,513** | 46,856 | 44,866 |
| Amortization of investment security premiums, net | **17,666** | 18,805 | 66,934 |
| Deferred income tax (benefit) expense | **(7,399)** | 21,716 | 25,613 |
| Investment securities (gains) losses, net (A) | **(14,985)** | (20,506) | (30,059) |
| Net (gains) losses on sales of loans held for sale | **(1,026)** | (2,660) | (22,641) |
| Proceeds from sales of loans held for sale | **58,946** | 123,656 | 576,864 |
| Originations of loans held for sale | **(57,424)** | (118,850) | (524,597) |
| Net (increase) decrease in trading securities, excluding unsettled transactions | **28,478** | 4,152 | (29,885) |
| Purchase of interest rate floors | **(54,449)** | (35,799) | — |
| Stock-based compensation | **17,052** | 16,995 | 15,415 |
| (Increase) decrease in interest receivable | **(5,986)** | (28,439) | 19,788 |
| Increase (decrease) in interest payable | **46,650** | 3,054 | (3,179) |
| Increase (decrease) in income taxes payable | **4,586** | (12,936) | (5,175) |
| Other changes, net | **(113,481)** | 15,250 | (10,486) |
| **Net cash provided by operating activities** | **488,769** | 559,385 | 597,722 |
| **INVESTING ACTIVITIES** | | | |
| Cash paid in acquisition, net of cash received | **(6,365)** | — | — |
| Distributions received from equity-method investment | **1,434** | 400 | 13,540 |
| Proceeds from sales of investment securities (A) | **1,141,949** | 106,971 | 80,811 |
| Proceeds from maturities/pay downs of investment securities (A) | **1,935,552** | 2,691,260 | 3,459,106 |
| Purchases of investment securities (A) | **(246,286)** | (2,147,862) | (5,947,891) |
| Net (increase) decrease in loans | **(933,736)** | (1,146,292) | 1,134,533 |
| Securities purchased under agreements to resell | **—** | (200,000) | (900,000) |
| Repayments of securities purchased under agreements to resell | **375,000** | 1,000,000 | 125,000 |
| Purchases of premises and equipment | **(88,074)** | (65,191) | (56,716) |
| Sales of premises and equipment | **4,358** | 2,985 | 8,859 |
| **Net cash provided by (used in) investing activities** | **2,183,832** | 242,271 | (2,082,758) |
| **FINANCING ACTIVITIES** | | | |
| Net increase (decrease) in non-interest bearing, savings, interest checking and money market deposits | **(2,612,412)** | (3,254,081) | 3,291,466 |
| Net increase (decrease) in certificates of deposit | **1,881,587** | (448,511) | (402,077) |
| Net increase (decrease) in federal funds purchased and short-term securities sold under agreements to repurchase | **67,081** | (181,233) | 924,584 |
| FHLB short-term borrowings | **2,250,000** | — | — |
| Repayments of FHLB borrowings | **(2,250,000)** | — | — |
| Net increase (decrease) in other borrowings | **(8,268)** | (2,888) | 11,758 |
| Purchases of treasury stock | **(76,370)** | (186,622) | (129,361) |
| Cash dividends paid on common stock | **(134,734)** | (127,466) | (122,693) |
| Other, net | **(3)** | (8) | (15) |
| **Net cash provided by (used in) financing activities** | **(883,119)** | (4,200,809) | 3,573,662 |
| Increase (decrease) in cash, cash equivalents and restricted cash | **1,789,482** | (3,399,153) | 2,088,626 |
| Cash, cash equivalents and restricted cash at beginning of year | **897,801** | 4,296,954 | 2,208,328 |
| **Cash, cash equivalents and restricted cash at end of year** | **$ 2,687,283** | $ 897,801 | $ 4,296,954 |
| Income tax payments, net | **$ 130,957** | $ 116,995 | $ 119,665 |
| Interest paid on deposits and borrowings | **336,512** | 53,740 | 16,045 |
| Loans transferred to foreclosed real estate | **322** | 457 | 182 |

*(A) Available for sale debt securities, equity securities, and other securities.*
*See accompanying notes to consolidated financial statements.*

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies

*Nature of Operations*

Commerce Bancshares, Inc. and its subsidiaries (the Company) conducts its principal activities from approximately 257 branch and ATM locations throughout Missouri, Kansas, Illinois, Oklahoma and Colorado. Principal activities include retail and commercial banking, investment management, securities brokerage, mortgage banking, trust, and private banking services. The Company also maintains offices in Dallas, Houston, Cincinnati, Nashville, Des Moines, Indianapolis, and Grand Rapids that support customers in its commercial and/or wealth segments and operates a commercial payments business with sales representatives covering the continental U.S.

*Basis of Presentation, Use of Estimates, and Subsequent Events*

The consolidated financial statements include the accounts of the Company and its majority-owned subsidiaries. All material inter-company transactions have been eliminated through consolidation. Certain prior year amounts have been reclassified to conform to the current year presentation. Such reclassifications had no effect on net income or total assets.

The Company follows accounting principles generally accepted in the United States of America (GAAP) and reporting practices applicable to the banking industry. The preparation of financial statements under GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and notes. These estimates are based on information available to management at the time the estimates are made. While the consolidated financial statements reflect management's best estimates and judgments, actual results could differ from those estimates.

Management has evaluated subsequent events for potential recognition or disclosure through the date these consolidated financial statements were issued.

The Company, in the normal course of business, engages in a variety of activities that involve variable interest entities (VIEs). A VIE is a legal entity that lacks equity investors or whose equity investors do not have a controlling financial interest in the entity through their equity investments. However, an enterprise is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. An enterprise that is the primary beneficiary must consolidate the VIE. The Company's interests in VIEs are evaluated to determine if the Company is the primary beneficiary both at inception and when there is a change in circumstances that requires a reconsideration.

The Company is considered to be the primary beneficiary in a rabbi trust related to a deferred compensation plan offered to certain employees. The assets and liabilities of this trust, which are included in the accompanying consolidated balance sheets, are not significant. The Company also has variable interests in certain entities in which it is not the primary beneficiary. These entities are not consolidated. These interests include certain investments in entities accounted for using the equity method of accounting, as well as affordable housing limited partnership interests, holdings in its investment portfolio of various asset and mortgage-backed bonds that are issued by securitization trusts, and managed discretionary trust assets that are not included in the accompanying consolidated balance sheets.

*Adoption of ASU 2022-02*

The Company adopted ASU 2022-02 Financial Instruments—Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures on January 1, 2023, using the prospective transition method. This ASU eliminates the troubled debt restructuring recognition and measurement guidance and requires an entity to present gross write-offs by year of origination. The amendments also enhance disclosure requirements related to certain modifications of receivables made to borrowers experiencing financial difficulty. With the exception of enhanced disclosures, there was no material impact to the Company's consolidated financial statements from adoption of this ASU. Since the Company's adoption date, all restructurings are evaluated to determine whether they are modifications to a borrower experiencing financial difficulty. Loans that were accounted for under the troubled debt restructuring method as of December 31, 2022 will continue to be accounted for under that method until they are paid off or modified.

*Cash, Cash Equivalents and Restricted Cash*

In the accompanying consolidated statements of cash flows, cash and cash equivalents include “Cash and due from banks”, “Federal funds sold", "Securities purchased under agreements to resell”, and “Interest earning deposits with banks” as segregated in the accompanying consolidated balance sheets. Restricted cash is comprised of cash collateral on deposit with another financial institution to secure interest rate swap transactions. Restricted cash is included in other assets in the consolidated balance sheets and totaled $101 thousand and $6.7 million at December 31, 2023 and 2022, respectively.

During 2020, the Federal Reserve System, which historically required the Bank to maintain cash balances at the Federal Reserve Bank, reduced the reserve requirement ratios to zero percent effective March 26, 2020. Other interest earning cash balances held at the Federal Reserve Bank totaled $2.2 billion at December 31, 2023.

*Loans and Related Earnings*

The Company's portfolio of held-for-investment loans includes a net investment in direct financing and sales type leases to commercial and industrial and tax-exempt entities, and collectively, the Company's portfolio of loans and leases is referred to as its "loan portfolio" or "loans". Loans that management has the intent and ability to hold for the foreseeable future or until maturity or pay-off are reported at amortized cost, excluding accrued interest receivable. Amortized cost is the outstanding principal balance, net of any deferred fees and costs on originated loans. Origination fee income received on loans and amounts representing the estimated direct costs of origination are deferred and amortized to interest income over the life of the loan using the interest method.

Interest on loans is accrued based upon the principal amount outstanding. The Company has elected the practical expedient to exclude all accrued interest receivable from all required disclosures of amortized cost. Additionally, an election was made not to measure an allowance for credit losses for accrued interest receivables. The Company has also made the election that all interest accrued but ultimately not received is reversed against interest income.

Loan and commitment fees, net of costs, are deferred and recognized in interest income over the term of the loan or commitment as an adjustment of yield. Annual fees charged on credit card loans are capitalized to principal and amortized over 12 months to loan fees and sales. Other credit card fees, such as cash advance fees and late payment fees, are recognized in income as an adjustment of yield when charged to the cardholder’s account.

*Past Due Loans*

Management reports loans as past due on the day following the contractual repayment date if payment was not received by end of the business day. Loans, or portions of loans, are charged off to the extent deemed uncollectible. Loan charge-offs reduce the allowance for credit losses on loans, and recoveries of loans previously charged off are added back to the allowance. Business, business real estate, construction and land real estate, and personal real estate loans are generally charged down to estimated collectible balances when they are placed on non-accrual status. Consumer loans and related accrued interest are normally charged down to the fair value of related collateral (or are charged off in full if not collateralized) once the loans are more than 120 to 180 days delinquent, depending on the type of loan. Revolving home equity loans are charged down to the fair value of the related collateral once the loans are more than 180 days past due. Credit card loans are charged off against the allowance for credit losses when the receivable is more than 180 days past due.

*Non-Accrual Loans*

Loans are placed on non-accrual status when management does not expect to collect payments consistent with acceptable and agreed upon terms of repayment. Business, construction real estate, business real estate, and personal real estate loans that are contractually 90 days past due as to principal and/or interest payments are generally placed on non-accrual status, unless they are both well-secured and in the process of collection. Consumer, revolving home equity and credit card loans are exempt under regulatory rules from being classified as non-accrual. When a loan is placed on non-accrual status, any interest previously accrued but not collected is reversed against current interest income, and the loan is charged off to the extent uncollectible. Principal and interest payments received on non-accrual loans are generally applied to principal. Interest is included in income only after all previous loan charge-offs have been recovered and is recorded only as received. The loan is returned to accrual status only when the borrower has brought all past due principal and interest payments current, and, in the opinion of management, the borrower has demonstrated the ability to make future payments of principal and interest as scheduled. A six month history of sustained payment performance is generally required before reinstatement of accrual status.

*Modifications for Borrowers Experiencing Financial Difficulty*

The Company may renegotiate the terms of existing loans for a variety of reasons. When refinancing or restructuring a loan, the Company evaluates whether the borrower is experiencing financial difficulty. In making this determination, the Company considers whether the borrower is currently in default on any of its debt. In addition, the Company evaluates whether it is probable that the borrower would be in payment default on any of its debt in the foreseeable future without the modification and if the borrower (without the current modification) could obtain equivalent financing from another creditor at a market rate for similar debt. Modifications of loans to borrowers in these situations may indicate that the borrower is facing financial difficulty.

*Troubled Debt Restructurings*

Prior to the Company's adoption of ASU 2022-02, a loan was accounted for as a troubled debt restructuring if the Company, for economic or legal reasons related to the borrower's financial difficulties, granted a concession to the borrower that it would not otherwise consider. A troubled debt restructuring typically involves (1) modification of terms such as a reduction of the stated interest rate, loan principal, or accrued interest, (2) a loan renewal at a stated interest rate lower than the current market rate for a new loan with similar risk, or (3) debt that was not reaffirmed in bankruptcy. Business, business real estate, construction and land real estate and personal real estate troubled debt restructurings with impairment charges were placed on non-accrual status. The Company measured the impairment loss of a troubled debt restructuring at the time of modification based on the present value of expected future cash flows. Subsequent to modification, troubled debt restructurings were subject to the Company’s allowance for credit loss model, which is discussed below and in Note 2, Loans and Allowance for Credit Losses. Troubled debt restructurings that are performing under their contractual terms continue to accrue interest, which is recognized in current earnings. Loans that were accounted as troubled debt restructurings at of December 31, 2022 will continue to be accounted for under that method until they are either paid off or modified.

*Loans Held For Sale*

Loans held for sale include student loans and certain fixed rate residential mortgage loans. These loans are typically classified as held for sale upon origination based upon management's intent to sell the production of these loans. The student loans are carried at the lower of aggregate cost or fair value, and their fair value is determined based on sale contract prices. The mortgage loans are carried at fair value under the elected fair value option. Their fair value is based on secondary market prices for loans with similar characteristics, including an adjustment for embedded servicing value. Changes in fair value and gains and losses on sales are included in loan fees and sales. Deferred fees and costs related to these loans are not amortized but are recognized as part of the cost basis of the loan at the time it is sold. Interest income related to loans held for sale is accrued based on the principal amount outstanding and the loan's contractual interest rate.

Occasionally, other types of loans may be classified as held for sale in order to manage credit concentration. These loans are carried at the lower of cost or fair value with gains and losses on sales recognized in loan fees and sales.

*Allowance for Credit Losses on Loans*

The allowance for credit losses on loans is a valuation amount that is deducted from the amortized cost basis of loans not held at fair value to present the net amount expected to be collected over the contractual term of the loans. The allowance for credit losses on loans is measured using relevant information about past events, including historical credit loss experience on loans with similar risk characteristics, current conditions, and reasonable and supportable forecasts that affect the collectability of the remaining cash flows over the contractual term of the loans. An allowance will be created upon origination or acquisition of a loan and is updated at subsequent reporting dates. The methodology is applied consistently for each reporting period and reflects management’s current expectations of credit losses. Changes to the allowance for credit losses on loans resulting from periodic evaluations are recorded through increases or decreases to the credit loss expense for loans, which is recorded in provision for credit losses on the consolidated statements of income. Loans that are deemed to be uncollectible are charged off against the related allowance for credit losses on loans.

The allowance for credit losses on loans is measured on a collective (pool) basis. Loans are aggregated into pools based on similar risk characteristics including borrower type, collateral type and expected credit loss patterns. Loans that do not share similar risk characteristics, primarily large loans on non-accrual status, are evaluated on an individual basis. The allowance related to these large non-accrual loans is generally measured using the fair value of the collateral (less selling cost, if applicable) as most of these loans are collateral dependent and the borrower is facing financial difficulty.

As noted above, the allowance for credit losses on loans does not include an allowance for accrued interest.

*Liability for Unfunded Lending Commitments*

The Company's unfunded lending commitments are primarily unfunded loan commitments and letters of credit. Expected credit losses for these unfunded lending commitments are calculated over the contractual period during which the Company is exposed to the credit risk. The methodology used to measure credit losses for unfunded lending commitments is the same as the methodology used for loans, however, the estimate of credit risk for unfunded lending commitments takes into consideration the likelihood that funding will occur. The liability for unfunded lending commitments excludes any exposures that are unconditionally cancellable by the Company. The loss estimate is recorded within other liabilities on the consolidated balance sheet. Changes to the liability for unfunded lending commitments are recorded through increases or decreases to the provision for credit losses on the consolidated statements of income.

*Direct Financing and Sales Type Leases*

The net investment in direct financing and sales type leases is included in loans on the Company's consolidated balance sheets and consists of the present values of the sum of the future minimum lease payments and estimated residual value of the leased asset. Revenue consists of interest earned on the net investment and is recognized over the lease term as a constant percentage return thereon.

*Investments in Debt and Equity Securities*

The majority of the Company's investment portfolio is comprised of debt securities that are classified as available for sale. From time to time, the Company sells securities and utilizes the proceeds to reduce borrowings, fund loan growth, or modify its interest rate profile. Securities classified as available for sale are carried at fair value. Changes in fair value are reported in other comprehensive income (loss), a component of stockholders' equity. Securities are periodically evaluated for credit losses in accordance with the guidance provided in Accounting Standards Codification (ASC) 326. Further discussion of this evaluation is provided in "*Allowance for Credit Losses on Available for Sale Debt Securities"* below. Gains and losses realized upon sales of securities are calculated using the specific identification method and are included in investment securities gains (losses), net, in the consolidated statements of income. Purchase premiums and discounts are amortized to interest income using a level yield method over the estimated lives of the securities. For certain callable debt securities purchased at a premium, the amortization is recorded to the earliest call date. For mortgage and asset-backed securities, prepayment experience is evaluated quarterly to determine if a change in a bond's estimated remaining life is necessary. A corresponding adjustment is then made in the related amortization of premium or discount accretion.

Accrued interest receivable on available for sale debt securities is reported in other assets on the consolidated balance sheet. The Company has elected the practical expedient to exclude the accrued interest from all required disclosures of amortized cost of debt securities. Additionally, an election was made not to measure an allowance for credit losses for accrued interest receivables. Interest accrued but not received is reversed against interest income.

Equity securities include common and preferred stock and are carried at fair value. Certain equity securities do not have readily determinable fair values. The Company has elected to measure these equity securities without a readily determinable fair value at cost minus impairment, if any, plus or minus changes resulting from observable price changes for the identical or similar investment of the same issuer. The Company has not recorded any impairment or other adjustments to the carrying amount of these equity securities without readily determinable fair values.

Other securities include the Company's investments in Federal Reserve Bank stock and Federal Home Loan Bank stock, equity method investments, and private equity investments. Federal Reserve Bank stock and Federal Home Loan Bank stock are held for debt and regulatory purposes, are carried at cost and are periodically evaluated for impairment. The Company's equity method investments are carried at cost, adjusted to reflect the Company's portion of income, loss, or dividends of the investee. The Company's private equity investments in portfolio concerns, consisting of both debt and equity instruments, are held by the Company's private equity subsidiary, which is a small business investment company licensed by the Small Business Administration. The Company's private equity investments are carried at fair value in accordance with investment company accounting guidance (ASC 946-10-15), with changes in fair value reported in current income. In the absence of readily ascertainable market values, fair value is estimated using internally developed methods. Changes in fair value which are recognized in current income and gains and losses from sales are included in investment securities gains (losses), net, in the consolidated statements of income.

Trading account securities, which are debt securities bought and held principally for the purpose of resale in the near term, are carried at fair value. Gains and losses, both realized and unrealized, are recorded in non-interest income.

Purchases and sales of securities are recognized on a trade date basis. A receivable or payable is recognized for transaction pending settlements.

*Allowance for Credit Losses on Available for Sale Debt Securities*

For available for sale debt securities in an unrealized loss position, the entire loss in fair value is required to be recognized in current earnings if the Company intends to sell the securities or believes it more likely than not that it will be required to sell the security before the anticipated recovery. If neither condition is met, and the Company does not expect to recover the amortized cost basis, the Company determines whether the decline in fair value resulted from credit losses or other factors. If the assessment indicates that a credit loss exists, the present value of cash flows expected to be collected is compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss has occurred, and an allowance for credit losses is recorded. The allowance for credit losses is limited by the amount that the fair value is less than the amortized cost basis. Any impairment not recorded through the provision for credit losses is recognized in other comprehensive income.

Changes in the allowance for credit losses are recorded as a provision for (or reversal of) credit losses on the consolidated statements of income. Losses are charged against the allowance for credit losses on securities when management believes the uncollectibility of an available for sale security is confirmed or when either of the conditions regarding intent or requirement to sell is met.

Accrued interest receivable on available for sale debt securities is excluded from the estimate of credit losses.

*Securities Purchased under Agreements to Resell and Securities Sold under Agreements to Repurchase*

Securities purchased under agreements to resell and securities sold under agreements to repurchase are treated as collateralized financing transactions, not as purchases and sales of the underlying securities. The agreements are recorded at the amount of cash advanced or received.

The Company periodically enters into securities purchased under agreements to resell with large financial institutions. Securities pledged by the counterparties to secure these agreements are delivered to a third party custodian.

Securities sold under agreements to repurchase are a source of funding to the Company and are offered to cash management customers as an automated, collateralized investment account. From time to time, securities sold may also be used by the Bank to obtain additional borrowed funds at favorable rates. These borrowings are secured by a portion of the Company's investment security portfolio and delivered either to the dealer custody account at the Federal Reserve Bank or to the applicable counterparty.

The fair value of collateral either received from or provided to a counterparty is monitored daily, and additional collateral is obtained, returned, or provided by the Company in order to maintain full collateralization for these transactions.

As permitted by current accounting guidance, the Company offsets certain securities purchased under agreements to resell against securities sold under agreements to repurchase in its balance sheet presentation. These agreements are further discussed in Note 20, Resale and Repurchase Agreements.

*Premises and Equipment*

Land is stated at cost, and buildings and equipment are stated at cost, including capitalized interest when appropriate, less accumulated depreciation. Depreciation is computed using a straight-line method, utilizing estimated useful lives; generally 30 to 40 years for buildings, 10 years for building improvements, and 3 to 10 years for equipment. Leasehold improvements are amortized over the shorter of 10 years or the remaining lease term. Maintenance and repairs are charged to non-interest expense as incurred.

Also included in premises and equipment is construction in process, which represents facilities construction projects underway that have not yet been placed into service, as well as the Company's right-of-use leased assets, which are mainly comprised of operating leases for branches, office space, ATM locations, and certain equipment.

*Foreclosed Assets*

Foreclosed assets consist of property that has been repossessed and is comprised of commercial and residential real estate and other non-real estate property, including auto and recreational and marine vehicles. The assets are initially recorded at fair value less estimated selling costs, establishing a new cost basis. Initial valuation adjustments are charged to the allowance for

credit losses. Fair values are estimated primarily based on appraisals, third-party price opinions, or internally developed pricing models. After initial recognition, fair value estimates are updated periodically. Declines in fair value below cost are recognized through valuation allowances which may be reversed when supported by future increases in fair value. These valuation adjustments, in addition to gains and losses realized on sales and net operating expenses, are recorded in other non-interest expense. Foreclosed assets are included in other assets on the consolidated balance sheets.

*Goodwill and Intangible Assets*

Goodwill and intangible assets that have indefinite useful lives, such as property easement intangible assets, are not amortized but are assessed for impairment on an annual basis or more frequently in certain circumstances. When testing for goodwill impairment, the Company may initially perform a qualitative assessment. Based on the results of this qualitative assessment, if the Company concludes it is more likely than not that a reporting unit's fair value is less than its carrying amount, a quantitative analysis is performed. Quantitative valuation methodologies include a combination of formulas using current market multiples, based on recent sales of financial institutions within the Company's geographic marketplace. If the fair value of a reporting unit is less than the carrying amount, an impairment has occurred and is measured as the amount by which the carrying amount exceeds the reporting unit's fair value. The Company has not recorded impairment resulting from goodwill impairment tests. However, adverse changes in the economic environment, operations of the reporting unit, or other factors could result in a decline in fair value.

Intangible assets that have finite useful lives, such as core deposit intangibles and mortgage servicing rights, are amortized over their estimated useful lives. Core deposit intangibles are generally amortized over periods of 8 to 14 years, representing their estimated lives, using accelerated methods. Mortgage servicing rights are amortized in proportion to and over the period of estimated net servicing income, considering appropriate prepayment assumptions. Core deposit intangibles are reviewed for impairment whenever events or changes in circumstances indicate their carrying amount may not be recoverable. Impairment is indicated if the sum of the undiscounted estimated future net cash flows is less than the carrying value of the intangible asset. Mortgage servicing rights, while initially recorded at fair value, are subsequently amortized and carried at the lower of the initial capitalized amount (net of accumulated amortization), or estimated fair value. The Company evaluates its mortgage servicing rights for impairment on a quarterly basis, using estimated prepayment speeds of the underlying mortgage loans serviced and stratifications based on the risk characteristics of the underlying loans. A valuation allowance has been established, through a charge to earnings, to the extent the amortized cost exceeds the estimated fair value. However, the Company has not recorded other-than-temporary impairment losses on its intangible assets.

*Income Taxes*

Amounts provided for income tax expense are based on income reported for financial statement purposes and do not necessarily represent amounts currently payable under tax laws. Deferred income taxes are provided for temporary differences between the financial reporting bases and income tax bases of the Company’s assets and liabilities, net operating losses, and tax credit carryforwards. Deferred tax assets and liabilities are measured using the enacted tax rates that are expected to apply to taxable income when such assets and liabilities are anticipated to be settled or realized. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as tax expense or benefit in the period that includes the enactment date of the change. In determining the amount of deferred tax assets to recognize in the financial statements, the Company evaluates the likelihood of realizing such benefits in future periods. A valuation allowance is established if it is more likely than not that all or some portion of the deferred tax asset will not be realized. The Company recognizes interest and penalties related to income taxes within income tax expense in the consolidated statements of income.

The Company and its eligible subsidiaries file a consolidated federal income tax return. State and local income tax returns are filed on a combined, consolidated or separate return basis based upon each jurisdiction’s laws and regulations.

Additional information about current and deferred income taxes is provided in Note 9, Income Taxes.

*Non-Interest Income*

Non-interest income is mainly comprised of revenue from contracts with customers. For that revenue (excluding certain revenue associated with financial instruments, derivative and hedging instruments, guarantees, lease contracts, transferring and servicing of financial assets, and other specific revenue transactions), the Company applies the following five-step approach when recognizing revenue: (i) identify the contract with the customer, (ii) identify the performance obligations, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations, and (v) recognize revenue when (or as) the performance obligation is satisfied. The Company’s contracts with customers are generally short term in nature, with a duration of one year or less, and most contracts are cancellable by either the Company or its customer without penalty. Performance obligations for customer contracts are generally satisfied at a single point in time, typically when the transaction is

complete and the customer has received the goods or service, or over time. For performance obligations satisfied over time, the Company recognizes the value of the goods or services transferred to the customer when the performance obligations have been transferred and received by the customer. Payments for satisfied performance obligations are typically due when or as the goods or services are completed, or shortly thereafter, which usually occurs within a single financial reporting period.

In situations where payment is made before the performance obligation is satisfied, the fees are deferred until the performance obligations pertaining to those goods or services are completed. In cases where payment has not been received despite satisfaction of its performance obligations, the Company accrues an estimate of the amount due in the period that the performance obligations have been satisfied. For contracts with variable components, the Company only recognizes revenue to the extent that it is probable that the cumulative amount recognized will not be subject to a significant reversal in future periods. Generally, the Company's contracts do not include terms that require significant judgment to determine whether a variable component is included within the transaction price. The Company generally acts in a principal capacity, on its own behalf, in most of its contracts with customers. For these transactions, revenue and the related costs to provide the goods or services are presented on a gross basis in the financial statements. In some cases, the Company acts in an agent capacity, deriving revenue through assisting third parties in transactions with the Company's customers. In such transactions, revenue and the related costs to provide services is presented on a net basis in the financial statements. These transactions primarily relate to fees earned from bank card and related network and rewards costs, the sales of annuities and certain limited insurance products, and beginning in August 2023, commissions on sales of consumer brokerage transactions and products.

*Derivatives*

Most of the Company's derivative contracts are accounted for as free-standing instruments. These instruments are carried at fair value, and changes in fair value are recognized in current earnings. They include interest rate swaps and caps, which are offered to customers to assist in managing their risks of adverse changes in interest rates. Each contract between the Company and a customer is offset by a contract between the Company and an institutional counterparty, thus minimizing the Company's exposure to rate changes. The Company also enters into certain contracts, known as credit risk participation agreements, to buy or sell credit protection on specific interest rate swaps. It also purchases and sells forward foreign exchange contracts, either in connection with customer transactions, or for its own trading purposes. Additionally, the Company originates and sells certain personal real estate mortgages. Derivative instruments under this program include mortgage loan commitments, forward loan sale contracts, and forward contracts to sell certain to-be-announced (TBA) securities.

The Company's interest rate risk management policy permits the use of hedge accounting for derivatives, and the Company has entered into interest rate floor contracts as protection from the potential for declining interest rates in the commercial loan portfolio. These floors were designated and qualified as cash flow hedges. In a cash flow hedge, the changes in fair value are recorded in accumulated other comprehensive income and recognized in the income statement when the hedged cash flows affect earnings. Both at hedge inception and on an ongoing basis, the Company assesses whether the interest rate floors used in the hedging relationships are highly effective in offsetting changes in the cash flows of the hedged items. From time to time, the Company has monetized its interest rate floors that had previously been designated and qualified as cash flow hedges. In such case, the monetized cash flow hedge is derecognized and the amounts recorded in accumulated other comprehensive income (AOCI) remain in AOCI until the underlying forecasted transaction impacts earnings, unless the forecasted transaction becomes probable of not occurring.

The Company has master netting arrangements with various counterparties but does not offset derivative assets and liabilities under these arrangements in its consolidated balance sheets. However, interest rate swaps that are executed under central clearing requirements are presented net of variation margin as mandated by the statutory terms of the Company's contract with its clearing counterparty.

Additional information about derivatives held by the Company and valuation methods employed is provided in Note 17, Fair Value Measurements and Note 19, Derivative Instruments.

Cash flows associated with derivative instruments and their related gains and losses are presented in the consolidated statement of cash flows as operating activities.

*Pension Plan*

The Company's pension plan is described in Note 10, Employee Benefit Plans. In accordance with ASU 2017-07, the Company has reported the service cost component of net periodic pension cost in salaries and employee benefits in the accompanying consolidated statements of income, while the other components are reported in other non-interest expense. The funded status of the plan is recognized as an other asset or other liability in the consolidated balance sheets, and changes in that funded status are recognized in the year in which the changes occur through other comprehensive income. Plan assets and

benefit obligations are measured as of the fiscal year end of the plan. The measurement of the projected benefit obligation and pension expense involve actuarial valuation methods and the use of various actuarial and economic assumptions. The Company monitors the assumptions and updates them periodically. Due to the long-term nature of the pension plan obligation, actual results may differ significantly from estimations. Such differences are adjusted over time as the assumptions are replaced by facts and values are recalculated.

*Stock-Based Compensation*

The Company's stock-based compensation plan is described in Note 11, Stock-Based Compensation and Directors Stock Purchase Plan. In accordance with the requirements of ASC 718-10-30-3 and 35-2, the Company measures the cost of stock-based compensation based on the grant-date fair value of the award, recognizing the cost over the requisite service period, which is generally the vesting period. The fair value of stock appreciation rights is estimated using the Black-Scholes option-pricing model while the fair value of a nonvested stock award is the common stock (CBSH) market price. The expense recognized for stock-based compensation is included in salaries and benefits in the accompanying consolidated statements of income. The Company recognizes forfeitures as a reduction to expense only when they have occurred.

*Treasury Stock*

Purchases of the Company's common stock are recorded at cost. Upon re-issuance for acquisitions, exercises of stock-based awards or other corporate purposes, treasury stock is reduced based upon the average cost basis of shares held.

*Income per Share*

Basic income per share is computed using the weighted average number of common shares outstanding during each year. Diluted income per share includes the effect of all dilutive potential common shares (primarily stock appreciation rights) outstanding during each year. The Company applies the two-class method of computing income per share. The two-class method is an earnings allocation formula that determines income per share for common stock and for participating securities, according to dividends declared and participation rights in undistributed earnings. The Company's nonvested stock awards are considered to be a class of participating security. All per share data has been restated to reflect the 5% stock dividend distributed in December 2023.

## 2. Loans and Allowance for Credit Losses

Major classifications within the Company's held for investment loan portfolio at December 31, 2023 and 2022 are as follows:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| **Commercial:** | | |
| Business | **$ 6,019,036** | $ 5,661,725 |
| Real estate — construction and land | **1,446,764** | 1,361,095 |
| Real estate — business | **3,719,306** | 3,406,981 |
| **Personal Banking:** | | |
| Real estate — personal | **3,026,041** | 2,918,078 |
| Consumer | **2,077,723** | 2,059,088 |
| Revolving home equity | **319,894** | 297,207 |
| Consumer credit card | **589,913** | 584,000 |
| Overdrafts | **6,802** | 14,957 |
| **Total loans** [1] | **$ 17,205,479** | $ 16,303,131 |

*(1) Accrued interest receivable totaled $71.9 million and $55.5 million at December 31, 2023 and 2022, respectively, and was included within other assets on the consolidated balance sheets. For the year ended December 31, 2023, the Company wrote-off accrued interest by reversing interest income of $460 thousand and $4.8 million in the Commercial and Personal Banking portfolios, respectively. For the year ended December 31, 2022, the Company wrote-off accrued interest by reversing interest income of $145 thousand and $3.2 million in the Commercial and Personal Banking portfolios, respectively.*

Loans to directors and executive officers of the Parent and the Bank, and to their affiliates, are summarized as follows:

| *(In thousands)* | |
|---|---|
| Balance at January 1, 2023 | $ 41,107 |
| Additions | 2,300 |
| Amounts collected | (4,605) |
| Amounts written off | — |
| **Balance, December 31, 2023** | $ 38,802 |

Management believes all loans to directors and executive officers have been made in the ordinary course of business with normal credit terms, including interest rate and collateral considerations, and do not represent more than a normal risk of collection. The activity in the table above includes draws and repayments on several lines of credit with business entities. There were no outstanding loans at December 31, 2023 to principal holders (over 10% ownership) of the Company's common stock.

The Company's lending activity is generally centered in Missouri, Kansas, Illinois and other nearby states including Oklahoma, Colorado, Iowa, Ohio, and Texas. The Company maintains a diversified portfolio with limited industry concentrations of credit risk. Loans and loan commitments are extended under the Company's normal credit standards, controls, and monitoring procedures. Most loan commitments are short or intermediate term in nature. Commercial loan maturities generally range from one to seven years. Collateral is commonly required and would include such assets as marketable securities, cash equivalent assets, accounts receivable, inventory, equipment, other forms of personal property, and real estate. At December 31, 2023, unfunded loan commitments totaled $14.5 billion (which included $5.4 billion in unused approved lines of credit related to credit card loan agreements) which could be drawn by customers subject to certain review and terms of agreement. At December 31, 2023, loans totaling $3.5 billion were pledged at the FHLB as collateral for borrowings and letters of credit obtained to secure public deposits. Additional loans of $3.1 billion were pledged at the Federal Reserve Bank as collateral for discount window borrowings.

The Company has a net investment in direct financing and sales type leases to commercial and industrial and tax-exempt entities of $867.0 million and $779.9 million at December 31, 2023 and 2022, respectively, which is included in business loans on the Company's consolidated balance sheets. This investment includes deferred income of $98.6 million and $73.2 million at December 31, 2023 and 2022, respectively.

*Allowance for credit losses*

The allowance for credit losses is measured using an average historical loss model which incorporates relevant information about past events (including historical credit loss experience on loans with similar risk characteristics), current conditions, and reasonable and supportable forecasts that affect the collectability of the remaining cash flows over the contractual term of the loans. The allowance for credit losses is measured on a collective (pool) basis. Loans are aggregated into pools based on similar risk characteristics including borrower type, collateral type and expected credit loss patterns. Loans that do not share similar risk characteristics, primarily large loans on non-accrual status, are evaluated on an individual basis.

For loans evaluated for credit losses on a collective basis, average historical loss rates are calculated for each pool using the Company's historical net charge-offs (combined charge-offs and recoveries by observable historical reporting period) and outstanding loan balances during a lookback period. Lookback periods can be different based on the individual pool and represent management's credit expectations for the pool of loans over the remaining contractual life. In certain loan pools, if the Company's own historical loss rate is not reflective of the loss expectations, the historical loss rate is augmented by industry and peer data. The calculated average net charge-off rate is then adjusted for current conditions and reasonable and supportable forecasts. These adjustments increase or decrease the average historical loss rate to reflect expectations of future losses given a single path economic forecast of key macroeconomic variables including GDP, disposable income, unemployment rate, various interest rates, consumer price index (CPI) inflation rate, housing price index (HPI), commercial real estate price index (CREPI) and market volatility. The adjustments are based on results from various regression models projecting the impact of the macroeconomic variables to loss rates. The forecast is used for a reasonable and supportable period before reverting back to historical averages using a straight-line method. The forecast-adjusted loss rate is applied to the amortized cost of loans over the remaining contractual lives, adjusted for expected prepayments. The contractual term excludes expected extensions (except for contractual extensions at the option of the customer), renewals and modifications. Credit cards and certain similar consumer lines of credit do not have stated maturities and therefore, for these loan classes, remaining contractual lives are determined by estimating future cash flows expected to be received from customers until payments have been fully allocated to outstanding balances. Additionally, the allowance for credit losses considers other qualitative factors not included in historical loss rates or macroeconomic forecast such as changes in portfolio composition, underwriting practices, or significant unique events or conditions.

Key assumptions in the Company's allowance for credit loss model include the economic forecast, the reasonable and supportable period, forecasted macro-economic variables, prepayment assumptions and qualitative factors applied for portfolio composition changes, underwriting practices, or significant unique events or conditions. The assumptions utilized in estimating the Company's allowance for credit losses at December 31, 2023 and 2022 are discussed below.

| Key Assumption | December 31, 2023 | December 31, 2022 |
|---|---|---|
| Overall economic forecast | • The US economy is projected to slow at the start of 2024, but not enter a recession<br>• Impacts of tighter monetary and fiscal policy creates uncertainty<br>• Consumer spending is expected to decrease | • Continued high inflation and higher cost of borrowing create a mild recession in 2023 with stalled job growth and possible job losses<br>• Assumes interest rate hikes will taper |
| Reasonable and supportable period and related reversion period | • Reasonable and supportable period of one year<br>• Reversion to historical average loss rates within two quarters using a straight-line method | • Reasonable and supportable period of one year<br>• Reversion to historical average loss rates within two quarters using straight-line method |
| Forecasted macro-economic variables | • Unemployment rate ranges from 4.1% to 4.5% during the reasonable and supportable forecast period<br>• Real GDP growth ranges from .46% to 2.1%<br>• BBB corporate yield from 5.3% to 5.9%<br>• Housing Price Index from 305.4 to 307.4 | • Unemployment rate ranges from 3.8% to 4.7% during the reasonable and supportable forecast period<br>• Real GDP growth ranges from (.9)% to 1.3%<br>• BBB corporate yield from 5.1% to 5.8%<br>• Prime rate from 7.6% to 7.7% |
| Prepayment assumptions | Commercial loans<br>• 5% for most loan pools<br>Personal banking loans<br>• Ranging from 6.5% to 23.5% for most loan pools<br>• Consumer credit cards 66.9% | Commercial loans<br>• 5% for most loan pools<br>Personal banking loans<br>• Ranging from 8.3% to 24.8% for most loan pools<br>• Consumer credit cards 67.9% |
| Qualitative factors | Added qualitative factors related to:<br>• Changes in the composition of the loan portfolios<br>• Certain stressed industries within the portfolio<br>• Certain portfolios sensitive to unusually high rate of inflation and supply chain issues<br>• Loans downgraded to special mention, substandard, or non-accrual status | Added qualitative factors related to:<br>• Changes in the composition of the loan portfolios<br>• Certain portfolios sensitive to pandemic economic uncertainties<br>• Uncertainty related to unusually high rate of inflation and supply chain issues<br>• Loans downgraded to special mention, substandard, or non-accrual status |

The liability for unfunded lending commitments utilizes the same model as the allowance for credit losses on loans, however, the liability for unfunded lending commitments incorporates an assumption for the portion of unfunded commitments that are expected to be funded.

*Sensitivity in the Allowance for Credit Loss model*

The allowance for credit losses is an estimate that requires significant judgment including projections of the macro-economic environment. The forecasted macro-economic environment continuously changes which can cause fluctuations in estimated expected credit losses.

The current forecast projects the economy will slow at the start of 2024. It is expected that fiscal policy will tighten in 2024 and consumer spending will decrease. The labor market is expected to soften slowly, creating lower household income growth at a time when excess savings have decreased.

The impacts of tighter fiscal policy and decreased consumer spending creates significant uncertainty in the forecast. The impacts of the market's response to unusual events or trends including high inflation, supply chain stresses, trends in health conditions, and changes in the geopolitical environment could significantly modify economic projections used in the estimation of the allowance for credit losses.

A summary of the activity in the allowance for credit losses on loans and the liability for unfunded lending commitments during the years ended December 31, 2023 and 2022 follows:

| | For the Year Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | Commercial | Personal Banking | Total |
| **ALLOWANCE FOR CREDIT LOSSES ON LOANS** | | | |
| **Balance December 31, 2022** | **$ 103,293** | **$ 46,843** | **$ 150,136** |
| Provision for credit losses on loans | **8,001** | **35,324** | **43,325** |
| Deductions: | | | |
| Loans charged off | **3,885** | **36,283** | **40,168** |
| Less recoveries on loans | **792** | **8,310** | **9,102** |
| Net loan charge-offs (recoveries) | **3,093** | **27,973** | **31,066** |
| **Balance December 31, 2023** | **$ 108,201** | **$ 54,194** | **$ 162,395** |
| **LIABILITY FOR UNFUNDED LENDING COMMITMENTS** | | | |
| **Balance December 31, 2022** | **$ 31,743** | **$ 1,377** | **$ 33,120** |
| Provision for credit losses on unfunded lending commitments | **(7,834)** | **(40)** | **(7,874)** |
| **Balance December 31, 2023** | **$ 23,909** | **$ 1,337** | **$ 25,246** |
| **ALLOWANCE FOR CREDIT LOSSES ON LOANS AND LIABILITY FOR UNFUNDED LENDING COMMITMENTS** | **$ 132,110** | **$ 55,531** | **$ 187,641** |
| | | | |
| **ALLOWANCE FOR CREDIT LOSSES ON LOANS** | | | |
| **Balance at December 31, 2021** | 97,776 | 52,268 | 150,044 |
| Provision for credit losses on loans | 6,550 | 12,605 | 19,155 |
| Deductions: | | | |
| Loans charged off | 1,480 | 27,762 | 29,242 |
| Less recoveries on loans | 447 | 9,732 | 10,179 |
| Net loan charge-offs (recoveries) | 1,033 | 18,030 | 19,063 |
| **Balance December 31, 2022** | $ 103,293 | $ 46,843 | $ 150,136 |
| **LIABILITY FOR UNFUNDED LENDING COMMITMENTS** | | | |
| **Balance at December 31, 2020** | 23,271 | 933 | 24,204 |
| Provision for credit losses on unfunded lending commitments | 8,472 | 444 | 8,916 |
| **Balance December 31, 2022** | $ 31,743 | $ 1,377 | $ 33,120 |
| **ALLOWANCE FOR CREDIT LOSSES ON LOANS AND LIABILITY FOR UNFUNDED LENDING COMMITMENTS** | $ 135,036 | $ 48,220 | $ 183,256 |

*Delinquent and non-accrual loans*

The Company considers loans past due on the day following the contractual repayment date, if the contractual repayment was not received by the Company as of the end of the business day. The following table provides aging information on the Company's past due and accruing loans, in addition to the balances of loans on non-accrual status, at December 31, 2023 and 2022.

| *(In thousands)* | Current or Less Than 30 Days Past Due | 30 – 89 Days Past Due | 90 Days Past Due and Still Accruing | Non-accrual | Total |
|---|---|---|---|---|---|
| **December 31, 2023** | | | | | |
| **Commercial:** | | | | | |
| Business | **$ 5,985,713** | **$ 29,087** | **$ 614** | **$ 3,622** | **$ 6,019,036** |
| Real estate – construction and land | **1,446,764** | **—** | **—** | **—** | **1,446,764** |
| Real estate – business | **3,714,579** | **4,582** | **85** | **60** | **3,719,306** |
| **Personal Banking:** | | | | | |
| Real estate – personal | **2,999,988** | **14,841** | **9,559** | **1,653** | **3,026,041** |
| Consumer | **2,036,353** | **38,217** | **3,153** | **—** | **2,077,723** |
| Revolving home equity | **315,483** | **1,564** | **870** | **1,977** | **319,894** |
| Consumer credit card | **574,805** | **7,525** | **7,583** | **—** | **589,913** |
| Overdrafts | **6,553** | **249** | **—** | **—** | **6,802** |
| **Total** | **$ 17,080,238** | **$ 96,065** | **$ 21,864** | **$ 7,312** | **$ 17,205,479** |
| **December 31, 2022** | | | | | |
| **Commercial:** | | | | | |
| Business | $ 5,652,710 | $ 1,759 | $ 505 | $ 6,751 | $ 5,661,725 |
| Real estate – construction and land | 1,361,095 | — | — | — | 1,361,095 |
| Real estate – business | 3,406,207 | 585 | — | 189 | 3,406,981 |
| **Personal Banking:** | | | | | |
| Real estate – personal | 2,895,742 | 14,289 | 6,681 | 1,366 | 2,918,078 |
| Consumer | 2,031,827 | 25,089 | 2,172 | — | 2,059,088 |
| Revolving home equity | 295,303 | 1,201 | 703 | — | 297,207 |
| Consumer credit card | 572,213 | 6,238 | 5,549 | — | 584,000 |
| Overdrafts | 14,090 | 647 | 220 | — | 14,957 |
| **Total** | $ 16,229,187 | $ 49,808 | $ 15,830 | $ 8,306 | $ 16,303,131 |

At December 31, 2023 and 2022, the Company had $4.3 million and $3.8 million, respectively, of non-accrual loans that had no allowance for credit loss. The Company did not record any interest income on non-accrual loans during the years ended December 31, 2023 and 2022.

*Credit quality indicators*

The following table provides information about the credit quality of the Commercial loan portfolio. The Company utilizes an internal risk rating system comprised of a series of grades to categorize loans according to perceived risk associated with the expectation of debt repayment based on borrower specific information, including but not limited to, current financial information, historical payment experience, industry information, collateral levels and collateral types. The "pass" category consists of a range of loan grades that reflect increasing, though still acceptable, risk. A loan is assigned the risk rating at origination and then monitored throughout the contractual term for possible risk rating changes. Movement of risk through the various grade levels in the "pass" category is monitored for early identification of credit deterioration. The "special mention" rating is applied to loans where the borrower exhibits negative financial trends due to borrower specific or systemic conditions that, if left uncorrected, threaten its capacity to meet its debt obligations. The borrower is believed to have sufficient financial flexibility to react to and resolve its negative financial situation. It is a transitional grade that is closely monitored for improvement or deterioration. The "substandard" rating is applied to loans where the borrower exhibits well-defined weaknesses that jeopardize its continued performance and are of a severity that the distinct possibility of default exists. Loans are placed on "non-accrual" when management does not expect to collect payments consistent with acceptable and agreed upon terms of repayment.

All loans are analyzed for risk rating updates annually. For larger loans, rating assessments may be more frequent if relevant information is obtained earlier through debt covenant monitoring or overall relationship management. Smaller loans are monitored as identified by the loan officer based on the risk profile of the individual borrower or if the loan becomes past due related to credit issues. Loans rated Special Mention, Substandard or Non-accrual are subject to quarterly review and monitoring processes. In addition to the regular monitoring performed by the lending personnel and credit committees, loans are subject to review by a credit review department which verifies the appropriateness of the risk ratings for the loans chosen as part of its risk-based review plan.

The risk category of loans in the Commercial portfolio as of December 31, 2023 and 2022 are as follows:

| | Term Loans Amortized Cost Basis by Origination Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *(In thousands)* | 2023 | 2022 | 2021 | 2020 | 2019 | Prior | Revolving Loans Amortized Cost Basis | Total |
| **December 31, 2023** | | | | | | | | |
| Business | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 1,609,685 | $ 839,511 | $ 555,991 | $ 273,138 | $ 215,988 | $ 257,177 | $ 2,096,108 | $ 5,847,598 |
| Special mention | 19,639 | 3,412 | 19,489 | 643 | 412 | 2,485 | 43,054 | 89,134 |
| Substandard | 5,256 | 8,666 | 6,891 | 20,854 | 1,422 | 10,235 | 25,358 | 78,682 |
| Non-accrual | — | 130 | 1,184 | — | — | 2,308 | — | 3,622 |
| Total Business: | $ 1,634,580 | $ 851,719 | $ 583,555 | $ 294,635 | $ 217,822 | $ 272,205 | $ 2,164,520 | $ 6,019,036 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ 2,260 | $ 57 | $ 41 | $ — | $ — | $ 1,393 | $ 3,751 |
| Real estate-construction | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 476,489 | $ 579,933 | $ 295,841 | $ 41,418 | $ 498 | $ 2,834 | $ 31,670 | $ 1,428,683 |
| Special mention | 3,068 | 15,013 | — | — | — | — | — | 18,081 |
| Substandard | — | — | — | — | — | — | — | — |
| Total Real estate-construction: | $ 479,557 | $ 594,946 | $ 295,841 | $ 41,418 | $ 498 | $ 2,834 | $ 31,670 | $ 1,446,764 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ — |
| Real estate- business | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 807,631 | $ 1,063,189 | $ 510,397 | $ 433,030 | $ 311,457 | $ 325,738 | $ 94,432 | $ 3,545,874 |
| Special mention | 16,650 | 8,619 | 451 | 884 | 9,253 | 733 | — | 36,590 |
| Substandard | 2,952 | 18,463 | 27,914 | 17,430 | 11,636 | 58,387 | — | 136,782 |
| Non-accrual | — | — | — | — | — | 60 | — | 60 |
| Total Real-estate business: | $ 827,233 | $ 1,090,271 | $ 538,762 | $ 451,344 | $ 332,346 | $ 384,918 | $ 94,432 | $ 3,719,306 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ — | $ — | $ — | $ — | $ 134 | $ — | $ 134 |
| Commercial loans | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 2,893,805 | $ 2,482,633 | $ 1,362,229 | $ 747,586 | $ 527,943 | $ 585,749 | $ 2,222,210 | $10,822,155 |
| Special mention | 39,357 | 27,044 | 19,940 | 1,527 | 9,665 | 3,218 | 43,054 | 143,805 |
| Substandard | 8,208 | 27,129 | 34,805 | 38,284 | 13,058 | 68,622 | 25,358 | 215,464 |
| Non-accrual | — | 130 | 1,184 | — | — | 2,368 | — | 3,682 |
| Total Commercial loans: | $ 2,941,370 | $ 2,536,936 | $ 1,418,158 | $ 787,397 | $ 550,666 | $ 659,957 | $ 2,290,622 | $11,185,106 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ 2,260 | $ 57 | $ 41 | $ — | $ 134 | $ 1,393 | $ 3,885 |

| (In thousands) | Term Loans Amortized Cost Basis by Origination Year 2022 | 2021 | 2020 | 2019 | 2018 | Prior | Revolving Loans Amortized Cost Basis | Total |
|---|---|---|---|---|---|---|---|---|
| **December 31, 2022** | | | | | | | | |
| Business | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 1,456,476 | $ 782,409 | $ 464,201 | $ 360,844 | $ 180,375 | $ 219,053 | $ 2,146,380 | $ 5,609,738 |
| Special mention | 3,113 | 2,548 | 7,757 | 1,063 | 67 | — | 1,319 | 15,867 |
| Substandard | 5,752 | 10,004 | 685 | 37 | 810 | 10,342 | 1,739 | 29,369 |
| Non-accrual | 195 | 1,987 | — | 1 | 792 | 3,776 | — | 6,751 |
| Total Business: | $ 1,465,536 | $ 796,948 | $ 472,643 | $ 361,945 | $ 182,044 | $ 233,171 | $ 2,149,438 | $ 5,661,725 |
| Real estate-construction | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 538,022 | $ 596,465 | $ 129,632 | $ 27,331 | $ 1,305 | $ 2,029 | $ 18,559 | $ 1,313,343 |
| Special mention | 352 | — | — | — | — | — | — | 352 |
| Substandard | — | 19,494 | — | — | 14,766 | 13,140 | — | 47,400 |
| Total Real estate-construction: | $ 538,374 | $ 615,959 | $ 129,632 | $ 27,331 | $ 16,071 | $ 15,169 | $ 18,559 | $ 1,361,095 |
| Real estate- business | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 1,085,379 | $ 616,516 | $ 555,648 | $ 424,641 | $ 163,628 | $ 271,579 | $ 90,799 | $ 3,208,190 |
| Special mention | 4,608 | — | 618 | 9,737 | 976 | 279 | — | 16,218 |
| Substandard | 2,795 | 30,944 | 61,141 | 10,490 | 30,782 | 46,232 | — | 182,384 |
| Non-accrual | 14 | 45 | — | — | 124 | 6 | — | 189 |
| Total Real-estate business: | $ 1,092,796 | $ 647,505 | $ 617,407 | $ 444,868 | $ 195,510 | $ 318,096 | $ 90,799 | $ 3,406,981 |
| Commercial loans | | | | | | | | |
| Risk Rating: | | | | | | | | |
| Pass | $ 3,079,877 | $ 1,995,390 | $ 1,149,481 | $ 812,816 | $ 345,308 | $ 492,661 | $ 2,255,738 | $10,131,271 |
| Special mention | 8,073 | 2,548 | 8,375 | 10,800 | 1,043 | 279 | 1,319 | 32,437 |
| Substandard | 8,547 | 60,442 | 61,826 | 10,527 | 46,358 | 69,714 | 1,739 | 259,153 |
| Non-accrual | 209 | 2,032 | — | 1 | 916 | 3,782 | — | 6,940 |
| Total Commercial loans: | $ 3,096,706 | $ 2,060,412 | $ 1,219,682 | $ 834,144 | $ 393,625 | $ 566,436 | $ 2,258,796 | $10,429,801 |

The credit quality of Personal Banking loans is monitored primarily on the basis of aging/delinquency, and this information is provided as of December 31, 2023 and 2022 below:

| | Term Loans Amortized Cost Basis by Origination Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *(In thousands)* | 2023 | 2022 | 2021 | 2020 | 2019 | Prior | Revolving Loans Amortized Cost Basis | Total |
| **December 31, 2023** | | | | | | | | |
| Real estate-personal | | | | | | | | |
| Current to 90 days past due | $ 455,703 | $ 452,153 | $ 533,313 | $ 711,442 | $ 257,159 | $ 596,439 | $ 8,620 | $ 3,014,829 |
| Over 90 days past due | 3,319 | 1,650 | 2,222 | 834 | 44 | 1,490 | — | 9,559 |
| Non-accrual | — | 261 | 167 | — | 157 | 1,068 | — | 1,653 |
| Total Real estate-personal: | $ 459,022 | $ 454,064 | $ 535,702 | $ 712,276 | $ 257,360 | $ 598,997 | $ 8,620 | $ 3,026,041 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ 18 | $ — | $ — | $ — | $ 23 | $ — | $ 41 |
| Consumer | | | | | | | | |
| Current to 90 days past due | $ 518,619 | $ 340,104 | $ 258,348 | $ 127,208 | $ 56,394 | $ 51,302 | $ 722,595 | $ 2,074,570 |
| Over 90 days past due | 391 | 210 | 194 | 24 | 54 | 421 | 1,859 | 3,153 |
| Total Consumer: | $ 519,010 | $ 340,314 | $ 258,542 | $ 127,232 | $ 56,448 | $ 51,723 | $ 724,454 | $ 2,077,723 |
| Gross write-offs for the year ended December 31, 2023 | $ 926 | $ 2,891 | $ 1,939 | $ 770 | $ 376 | $ 370 | $ 1,051 | $ 8,323 |
| Revolving home equity | | | | | | | | |
| Current to 90 days past due | $ — | $ — | $ — | $ — | $ — | $ — | $ 317,047 | $ 317,047 |
| Over 90 days past due | — | — | — | — | — | — | 870 | 870 |
| Non-accrual | — | — | — | — | — | — | 1,977 | $ 1,977 |
| Total Revolving home equity: | $ — | $ — | $ — | $ — | $ — | $ — | $ 319,894 | $ 319,894 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ — | $ — | $ — | $ — | $ — | $ 11 | $ 11 |
| Consumer credit card | | | | | | | | |
| Current to 90 days past due | $ — | $ — | $ — | $ — | $ — | $ — | $ 582,330 | $ 582,330 |
| Over 90 days past due | — | — | — | — | — | — | 7,583 | 7,583 |
| Total Consumer credit card: | $ — | $ — | $ — | $ — | $ — | $ — | $ 589,913 | $ 589,913 |
| Gross write-offs for the year ended December 31, 2023 | $ — | $ — | $ — | $ — | $ — | $ — | $ 24,105 | $ 24,105 |
| Overdrafts | | | | | | | | |
| Current to 90 days past due | $ 6,802 | $ — | $ — | $ — | $ — | $ — | $ — | $ 6,802 |
| Total Overdrafts: | $ 6,802 | $ — | $ — | $ — | $ — | $ — | $ — | $ 6,802 |
| Gross write-offs for the year ended December 31, 2023 | $ 3,803 | $ — | $ — | $ — | $ — | $ — | $ — | $ 3,803 |
| Personal banking loans | | | | | | | | |
| Current to 90 days past due | $ 981,124 | $ 792,257 | $ 791,661 | $ 838,650 | $ 313,553 | $ 647,741 | $ 1,630,592 | $ 5,995,578 |
| Over 90 days past due | 3,710 | 1,860 | 2,416 | 858 | 98 | 1,911 | 10,312 | 21,165 |
| Non-accrual | — | 261 | 167 | — | 157 | 1,068 | 1,977 | 3,630 |
| Total Personal banking loans: | $ 984,834 | $ 794,378 | $ 794,244 | $ 839,508 | $ 313,808 | $ 650,720 | $ 1,642,881 | $ 6,020,373 |
| Gross write-offs for the year ended December 31, 2023 | $ 4,729 | $ 2,909 | $ 1,939 | $ 770 | $ 376 | $ 393 | $ 25,167 | $ 36,283 |

| (In thousands) | Term Loans Amortized Cost Basis by Origination Year 2022 | 2021 | 2020 | 2019 | 2018 | Prior | Revolving Loans Amortized Cost Basis | Total |
|---|---|---|---|---|---|---|---|---|
| **December 31, 2022** | | | | | | | | |
| Real estate-personal | | | | | | | | |
| Current to 90 days past due | $ 535,283 | $ 589,658 | $ 783,651 | $ 290,580 | $ 132,305 | $ 568,380 | $ 10,174 | $ 2,910,031 |
| Over 90 days past due | 514 | 967 | 1,338 | 81 | 1,388 | 2,393 | — | 6,681 |
| Non-accrual | — | — | 52 | 169 | 102 | 1,043 | — | 1,366 |
| Total Real estate-personal: | $ 535,797 | $ 590,625 | $ 785,041 | $ 290,830 | $ 133,795 | $ 571,816 | $ 10,174 | $ 2,918,078 |
| Consumer | | | | | | | | |
| Current to 90 days past due | $ 536,429 | $ 378,118 | $ 205,849 | $ 106,733 | $ 36,096 | $ 62,255 | $ 731,436 | $ 2,056,916 |
| Over 90 days past due | 326 | 251 | 203 | 58 | 267 | 228 | 839 | 2,172 |
| Total Consumer: | $ 536,755 | $ 378,369 | $ 206,052 | $ 106,791 | $ 36,363 | $ 62,483 | $ 732,275 | $ 2,059,088 |
| Revolving home equity | | | | | | | | |
| Current to 90 days past due | $ — | $ — | $ — | $ — | $ — | $ — | $ 296,504 | $ 296,504 |
| Over 90 days past due | — | — | — | — | — | — | 703 | 703 |
| Total Revolving home equity: | $ — | $ — | $ — | $ — | $ — | $ — | $ 297,207 | $ 297,207 |
| Consumer credit card | | | | | | | | |
| Current to 90 days past due | $ — | $ — | $ — | $ — | $ — | $ — | $ 578,451 | $ 578,451 |
| Over 90 days past due | — | — | — | — | — | — | 5,549 | 5,549 |
| Total Consumer credit card: | $ — | $ — | $ — | $ — | $ — | $ — | $ 584,000 | $ 584,000 |
| Overdrafts | | | | | | | | |
| Current to 90 days past due | $ 14,737 | $ — | $ — | $ — | $ — | $ — | $ — | $ 14,737 |
| Over 90 days past due | 220 | — | — | — | — | — | — | 220 |
| Total Overdrafts: | $ 14,957 | $ — | $ — | $ — | $ — | $ — | $ — | $ 14,957 |
| Personal banking loans | | | | | | | | |
| Current to 90 days past due | $1,086,449 | $ 967,776 | $ 989,500 | $ 397,313 | $ 168,401 | $ 630,635 | $ 1,616,565 | $ 5,856,639 |
| Over 90 days past due | 1,060 | 1,218 | 1,541 | 139 | 1,655 | 2,621 | 7,091 | 15,325 |
| Non-accrual | — | — | 52 | 169 | 102 | 1,043 | — | 1,366 |
| Total Personal banking loans: | $1,087,509 | $ 968,994 | $ 991,093 | $ 397,621 | $ 170,158 | $ 634,299 | $ 1,623,656 | $ 5,873,330 |

*Collateral-dependent loans*

The Company's collateral-dependent loans are comprised of large loans on non-accrual status. The Company requires that collateral-dependent loans are either over-collateralized or carry collateral equal to the amortized cost of the loan. The following table presents the amortized cost basis of collateral-dependent loans as of December 31, 2023 and 2022.

| (In thousands) | **December 31, 2023** Business Assets | Real Estate | Oil & Gas Assets | Total | **December 31, 2022** Business Assets | Oil & Gas Assets | Total |
|---|---|---|---|---|---|---|---|
| **Commercial:** | | | | | | | |
| Business | $ 1,183 | $ — | $ 1,238 | $ 2,421 | $ 2,778 | $ 1,824 | $ 4,602 |
| Revolving home equity | — | 1,977 | — | 1,977 | — | $ — | — |
| **Total** | **$ 1,183** | **$ 1,977** | **$ 1,238** | **$ 4,398** | **$ 2,778** | **$ 1,824** | **$ 4,602** |

*Other Personal Banking loan information*

As noted above, the credit quality of Personal Banking loans is monitored primarily on the basis of aging/delinquency, and this information is provided in the table in the above section on *"Credit quality indicators."* In addition, FICO scores are obtained and updated on a quarterly basis for most of the loans in the Personal Banking portfolio. This is a published credit score designed to measure the risk of default by taking into account various factors from a borrower's financial history and is considered supplementary information utilized by the Company, as management does not consider this information in evaluating the allowance for credit losses on loans. The Bank normally obtains a FICO score at the loan's origination and renewal dates, and updates are obtained on a quarterly basis. Excluded from the table below are certain personal real estate loans for which FICO scores are not obtained because the loans generally pertain to commercial customer activities and are often underwritten with other collateral considerations. These loans totaled $168.9 million at December 31, 2023 and $179.2 million at December 31, 2022. The table also excludes consumer loans related to the Company's patient healthcare loan

program, which totaled $211.3 million at December 31, 2023 and $197.5 million at December 31, 2022. As the healthcare loans are guaranteed by the hospital, customer FICO scores are not obtained for these loans. The personal real estate loans and consumer loans excluded below totaled less than 7% of the Personal Banking portfolio. For the remainder of loans in the Personal Banking portfolio, the table below shows the percentage of balances outstanding at December 31, 2023 and 2022 by FICO score.

| | Personal Banking Loans | | | |
|---|---|---|---|---|
| | % of Loan Category | | | |
| | Real Estate - Personal | Consumer | Revolving Home Equity | Consumer Credit Card |
| **December 31, 2023** | | | | |
| FICO score: | | | | |
| Under 600 | **2.0 %** | **2.5 %** | **1.9 %** | **4.7 %** |
| 600 – 659 | **2.3** | **4.3** | **3.3** | **12.1** |
| 660 – 719 | **8.5** | **12.9** | **10.9** | **29.2** |
| 720 – 779 | **21.9** | **28.2** | **22.4** | **27.0** |
| 780 and over | **65.3** | **52.1** | **61.5** | **27.0** |
| **Total** | **100.0 %** | **100.0 %** | **100.0 %** | **100.0 %** |
| **December 31, 2022** | | | | |
| FICO score: | | | | |
| Under 600 | 1.4 % | 2.2 % | 1.5 % | 3.4 % |
| 600 – 659 | 2.2 | 4.2 | 2.8 | 11.4 |
| 660 – 719 | 8.1 | 14.5 | 9.7 | 30.8 |
| 720 – 779 | 23.7 | 26.7 | 21.4 | 27.1 |
| 780 and over | 64.6 | 52.4 | 64.6 | 27.3 |
| **Total** | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

*Modifications for borrowers experiencing financial difficulty*

When borrowers are experiencing financial difficulty, the Company may agree to modify the contractual terms of a loan to a borrower in order to assist the borrower in repaying principal and interest owed to the Company.

The Company's modifications of loans to borrowers experiencing financial difficulty are generally in the form of term extensions, repayment plans, payment deferrals, forbearance agreements, interest rate reductions, forgiveness of interest and/or fees, or any combination thereof. Commercial loans modified to borrowers experiencing financial difficulty are primarily loans that are substandard or non-accrual, where the maturity date was extended. Modifications on personal real estate loans are primarily those placed on forbearance plans, repayment plans, or deferral plans where monthly payments are suspended for a period of time or past due amounts are paid off over a certain period of time in the future or set up as a balloon payment at maturity. Modifications to certain credit card and other small consumer loans are often modified under debt counseling programs that can reduce the contractual rate or, in certain instances, forgive certain fees and interest charges. Other consumer loans modified to borrowers experiencing financial difficulty consist of various other workout arrangements with consumer customers.

The following tables present the amortized cost at December 31, 2023 of loans that were modified during the year ended December 31, 2023.

| | For the Year Ended December 31, 2023 | | | | | | |
|---|---|---|---|---|---|---|---|
| *(Dollars in thousands)* | Term Extension | Payment Delay | Interest Rate Reduction | Interest/Fees Forgiven | Other | Total | % of Total Loan Category |
| **December 31, 2023** | | | | | | | |
| **Commercial:** | | | | | | | |
| Business | **$ 28,179** | **$ —** | **$ —** | **$ —** | **$ —** | **$ 28,179** | **0.5 %** |
| Real estate – business | **105,549** | **—** | **—** | **—** | **—** | **105,549** | **2.8** |
| **Personal Banking:** | | | | | | | |
| Real estate – personal | **383** | **4,203** | **—** | **—** | **—** | **4,586** | **0.2** |
| Consumer | **30** | **68** | **92** | **—** | **85** | **275** | **—** |
| Consumer credit card | **—** | **—** | **2,535** | **346** | **—** | **2,881** | **0.5** |
| **Total** | **$ 134,141** | **$ 4,271** | **$ 2,627** | **$ 346** | **$ 85** | **$ 141,470** | **0.8 %** |

The estimate of lifetime expected losses utilized in the allowance for credit losses model is developed using average historical experience on loans with similar risk characteristics, which includes losses from modifications of loans to borrowers experiencing financial difficulty. As a result, a change to the allowance for credit losses is generally not recorded upon modification. For modifications to loans made to borrowers experiencing financial difficulty that are placed on non-accrual status, the Company determines the allowance for credit losses on an individual evaluation, using the same process that it utilizes for other loans on non-accrual status. Modifications made to commercial loans which are not on non-accrual status for borrowers experiencing financial difficulty are collectively evaluated based on internal risk rating, loan type, delinquency, historical experience, and current economic factors. Modifications made to borrowers experiencing financial difficulty for personal banking loans which are not on non-accrual status are collectively evaluated based on loan type, delinquency, historical experience, and current economic factors.

If a loan to a borrower experiencing financial difficulty is modified and subsequently deemed uncollectible, the allowance for credit losses continues to be based on individual evaluation, if that loan is already on non-accrual status. For those loans, the allowance for credit losses is estimated using discounted expected cash flows or the fair value of collateral. If an accruing loan made to a borrower experiencing financial difficulty is modified and subsequently deemed uncollectible, the loan's risk rating is downgraded to non-accrual status and the loan's related allowance for credit losses is determined based on individual evaluation, or if necessary, the loan is charged off and collection efforts begin.

The following tables summarize the financial impact of loan modifications and payment deferrals during the year ended December 31, 2023.

| | Term Extension |
|---|---|
| | For the Year Ended December 31, 2023 |
| **Commercial:** | |
| Business | Extended maturity by a weighted average of 7 months. |
| Real estate – business | Extended maturity by a weighted average of 13 months. |
| **Personal Banking:** | |
| Real estate – personal | Extended maturity by a weighted average of 7 months. |
| Consumer | Extended maturity by 10 years. |

| | Payment Delay |
|---|---|
| | For the Year Ended December 31, 2023 |
| **Personal Banking:** | |
| Real estate – personal | Deferred certain payments by a weighted average of 20 years. |
| Consumer | Deferred certain payments by a weighted average of 71 months. |

| | Interest Rate Reduction |
|---|---|
| | For the Year Ended December 31, 2023 |
| **Personal Banking:** | |
| Consumer | Reduced weighted-average contractual interest rate from average 22% to 6%. |
| Consumer credit card | Reduced weighted-average contractual interest rate from average 22% to 6%. |

| | Forgiveness of Interest/Fees |
|---|---|
| | For the Year Ended December 31, 2023 |
| **Personal Banking:** | |
| Consumer credit card | Approximately $33 thousand of interest and fees forgiven. |

The Company had commitments of $28.4 million at December 31, 2023 to lend additional funds to borrowers experiencing financial difficulty and for whom the Company has modified the terms of loans in the form of principal forgiveness, an interest rate reduction, an other-than-insignificant payment delay, or a term extension during the current reporting period.

The following table provides the amortized cost basis of loans to borrowers experiencing financial difficulty that had a payment default during the year ended December 31, 2023 and were modified on or after January 1, 2023 (the date we adopted ASU 2022-02) through December 31, 2023. For purposes of this disclosure, the Company considers "default" to mean 90 days or more past due as to interest or principal. In addition to the loans below, the Company charged off $2.2 million and $729 thousand of business and consumer loans, respectively, during the year ended December 31, 2023 that were modified during the period.

| | For the Year Ended December 31, 2023 | | | |
|---|---|---|---|---|
| *(Dollars in thousands)* | Payment Delay | Interest Rate Reduction | Interest/Fees Forgiven | Total |
| **December 31, 2023** | | | | |
| **Personal Banking:** | | | | |
| Real estate – personal | $ **1,357** | $ **—** | $ **—** | $ **1,357** |
| Consumer | **—** | **24** | **—** | **24** |
| Consumer credit card | **—** | **332** | **154** | **486** |
| **Total** | $ **1,357** | $ **356** | $ **154** | $ **1,867** |

The following table presents the amortized cost basis at December 31, 2023 of loans that have been modified on or after January 1, 2023 (the date we adopted ASU 2022-02) through December 31, 2023.

| *(In thousands)* | Current | 30-89 Days Past Due | 90 Days Past Due | Total |
|---|---|---|---|---|
| **December 31, 2023** | | | | |
| **Commercial:** | | | | |
| Business | $ **26,941** | $ **1,238** | $ **—** | $ **28,179** |
| Real estate – business | **102,388** | **3,161** | **—** | **105,549** |
| **Personal Banking:** | | | | |
| Real estate – personal | **3,303** | **751** | **532** | **4,586** |
| Consumer | **233** | **28** | **14** | **275** |
| Consumer credit card | **2,071** | **456** | **354** | **2,881** |
| **Total** | $ **134,936** | $ **5,634** | $ **900** | $ **141,470** |

*Troubled debt restructuring disclosures prior to the Company's adoption of ASU 2022-02*

Restructured loans are those extended to borrowers who are experiencing financial difficulty and who have been granted a concession. Restructured loans are placed on non-accrual status if the Company does not believe it probable that amounts due under the contractual terms will be collected. Commercial performing restructured loans are primarily comprised of certain business, construction and business real estate loans classified as substandard but renewed at rates judged to be non-market. These loans are performing in accordance with their modified terms, and because the Company believes it probable that all amounts due under the modified terms of the agreements will be collected, interest on these loans is being recognized on an accrual basis. Troubled debt restructurings also include certain credit card and other small consumer loans under various debt management and assistance programs. Modifications to these loans generally involve removing the available line of credit, placing loans on amortizing status, and lowering the contractual interest rate. Certain personal real estate, revolving home equity, and consumer loans were classified as consumer bankruptcy troubled debt restructurings because they were not reaffirmed by the borrower in bankruptcy proceedings. Interest on these loans is being recognized on an accrual basis, as the borrowers are continuing to make payments. Other consumer loans classified as troubled debt restructurings consist of various other workout arrangements with consumer customers.

| *(In thousands)* | December 31, 2022 |
|---|---|
| Accruing loans: | |
| Commercial | $ 184,388 |
| Assistance programs | 5,156 |
| Other consumer | 4,049 |
| Non-accrual loans | 5,078 |
| **Total troubled debt restructurings** | $ 198,671 |

The table below shows the balance of troubled debt restructurings by loan classification at December 31, 2022, in addition to the outstanding balances of these restructured loans which the Company considers to have been in default at any time during the 12 months prior to December 31, 2022. For purposes of this disclosure, the Company considers "default" to mean 90 days or more past due as to interest or principal.

| *(In thousands)* | December 31, 2022 | Balance 90 days past due at any time during previous 12 months |
|---|---|---|
| **Commercial:** | | |
| Business | $ 12,311 | $ — |
| Real estate – construction and land | 57,547 | — |
| Real estate – business | 118,654 | — |
| **Personal Banking:** | | |
| Real estate – personal | 2,809 | 419 |
| Consumer | 2,250 | 268 |
| Revolving home equity | 17 | — |
| Consumer credit card | 5,083 | 452 |
| **Total troubled debt restructurings** | $ 198,671 | $ 1,139 |

For those loans on non-accrual status also classified as restructured, the modification did not create any further financial effect on the Company as those loans were already recorded at net realizable value. For those performing commercial loans classified as restructured, there were no concessions involving forgiveness of principal or interest and, therefore, there was no financial impact to the Company as a result of modification to these loans. However, the effects of modifications to loans under various debt management and assistance programs were estimated at December 31, 2022 to decrease interest income by approximately $661 thousand on an annual, pre-tax basis, compared to amounts contractually owed. Performing consumer loans where the debt was not reaffirmed in bankruptcy did not result in a concession, as no changes to loan terms occurred in that process. Other modifications to consumer loans mainly involve extensions and other small modifications that did not include the forgiveness of principal or interest.

The allowance for credit losses related to troubled debt restructurings on non-accrual status is determined by individual evaluation, including collateral adequacy, using the same process as loans on non-accrual status which are not classified as troubled debt restructurings. Those performing loans classified as troubled debt restructurings are accruing loans which management expects to collect under contractual terms. Performing commercial loans having no other concessions granted other than being renewed at non-market interest rates are judged to have similar risk characteristics as non-troubled debt

commercial loans and are collectively evaluated based on internal risk rating, loan type, delinquency, historical experience and current economic factors. Performing personal banking loans classified as troubled debt restructurings resulted from the borrower not reaffirming the debt during bankruptcy and have had no other concession granted, other than the Bank's future limitations on collecting payment deficiencies or in pursuing foreclosure actions. As such, they have similar risk characteristics as non-troubled debt personal banking loans and are evaluated collectively based on loan type, delinquency, historical experience and current economic factors.

If a troubled debt restructuring defaults and is already on non-accrual status, the allowance for credit losses continues to be based on individual evaluation, using discounted expected cash flows or the fair value of collateral. If an accruing, troubled debt restructuring defaults, the loan's risk rating is downgraded to non-accrual status and the loan's related allowance for credit losses is determined based on individual evaluation, or if necessary, the loan is charged off and collection efforts begin.

The Company had $12.6 million commitments at December 31, 2022 to lend additional funds to borrowers with restructured loans.

*Loans held for sale*

The Company designates certain long-term fixed rate personal real estate loans as held for sale, and the Company has elected the fair value option for these loans. The election of the fair value option aligns the accounting for these loans with the related economic hedges discussed in Note 19. The loans are primarily sold to FNMA and FHLMC. At December 31, 2023, the fair value of these loans was $1.6 million, and the unpaid principal balance was $1.5 million.

The Company also designates certain student loan originations as held for sale. The borrowers are credit-worthy students who are attending colleges and universities. The loans are intended to be sold in the secondary market, and the Company maintains contracts with Sallie Mae to sell the loans within 210 days after the last disbursement to the student. These loans are carried at lower of cost or fair value, which at December 31, 2023 totaled $2.2 million.

At December 31, 2023, none of the loans held for sale were on non-accrual status or 90 days past due and still accruing.

*Foreclosed real estate/repossessed assets*

The Company’s holdings of foreclosed real estate totaled $270 thousand and $96 thousand at December 31, 2023 and 2022, respectively, and included in those amounts were $270 thousand and $96 thousand of foreclosed residential real estate properties held as a result of obtaining physical possession at December 31, 2023 and December 31, 2022, respectively. Personal property acquired in repossession, generally autos, marine and recreational vehicles (RV), totaled $1.8 million and $1.6 million at December 31, 2023 and 2022, respectively. Upon acquisition, these assets are recorded at fair value less estimated selling costs at the date of foreclosure, establishing a new cost basis. They are subsequently carried at the lower of this cost basis or fair value less estimated selling costs.

## 3. Investment Securities

Investment securities consisted of the following at December 31, 2023 and 2022:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Available for sale debt securities | **$ 9,684,760** | $ 12,238,316 |
| Trading debt securities | **28,830** | 43,523 |
| Equity securities: | | |
| Readily determinable fair value | **5,723** | 6,210 |
| No readily determinable fair value | **6,978** | 6,094 |
| Other: | | |
| Federal Reserve Bank stock | **35,166** | 34,795 |
| Federal Home Loan Bank stock | **10,640** | 10,678 |
| Equity method investments | **—** | 1,434 |
| Private equity investments | **176,667** | 178,127 |
| **Total investment securities (1)** | **$ 9,948,764** | $ 12,519,177 |

*(1) Accrued interest receivable totaled $28.9 million and $38.8 million at December 31, 2023 and December 31, 2022, respectively, and was included within other assets on the consolidated balance sheet.*

The Company has elected to measure equity securities with no readily determinable fair value at cost minus impairment, if any, plus or minus changes resulting from observable price changes for the identical or similar investment of the same issuer. This portfolio includes the Company's 823,447 shares of Visa Class B common stock, which are held by Commerce Bancshares, Inc. (the Company's parent company). These shares have a carrying value of zero, as there have not been observable price changes in orderly transactions for identical or similar investments of the same issuer. During the year-ended December 31, 2023, the Company did not record any impairment or significant other adjustments to the carrying amount of its portfolio of equity securities with no readily determinable fair value.

At Visa, Inc.'s ("Visa") annual meeting of shareholders on January 23, 2024, shareholders approved Proposal 4 – Approval and Adoption of the Class B Exchange Offer Program Certificate Amendments as described in Visa's 2024 Proxy Statement. This proposal authorizes Visa to enable the release and public sale of portions of Visa's Class B common stock in a measured and programmatic fashion through a series of exchange offers.

On January 24, 2024, the Company's holdings of 823,447 shares of Visa Class B common stock were redenominated as Visa Class B-1 common stock pursuant to Visa's Eighth Restated Certificate of Incorporation. On January 29, 2024, Visa filed Form S-4 Registration Statement with the Securities and Exchange Commission, which proposes an offer to exchange any and all issued and outstanding shares of Class B-1 common stock for a combination of shares of Class B-2 common stock and shares of Class C common stock. As of February 22, 2024, the Form S-4 Registration Statement was not yet effective. The Company is currently evaluating the proposed exchange offer.

Other investment securities include Federal Reserve Bank (FRB) stock, Federal Home Loan Bank (FHLB) stock, equity method investments, and investments in portfolio concerns held by the Company's private equity subsidiary. FRB stock and FHLB stock are held for debt and regulatory purposes. Investment in FRB stock is based on the capital structure of the investing bank, and investment in FHLB stock is based on total assets of the Company (subject to a cap) and the level of borrowings from the FHLB. These holdings are carried at cost. These adjustments are included in non-interest income on the Company's consolidated statements of income. The private equity investments are carried at estimated fair value.

The majority of the Company's investment portfolio is comprised of available for sale debt securities, which are carried at fair value with changes in fair value reported in other comprehensive income (OCI). A summary of the available for sale debt securities by maturity groupings as of December 31, 2023 is shown in the following table. The weighted average yield for each range of maturities was calculated using the yield on each security within that range weighted by the amortized cost of each security at December 31, 2023. Yields on tax exempt securities have not been adjusted for tax exempt status. The investment portfolio includes agency mortgage-backed securities, which are guaranteed by agencies such as FHLMC, FNMA, and GNMA, in addition to non-agency mortgage-backed securities, which have no guarantee but are collateralized by commercial and residential mortgages. Also included are certain other asset-backed securities, which are primarily collateralized by credit cards, automobiles, student loans, and commercial loans. These securities differ from traditional debt securities primarily in that they may have uncertain maturity dates and are priced based on estimated prepayment rates on the underlying collateral.

| (Dollars in thousands) | Amortized Cost | Fair Value | Weighted Average Yield |
|---|---|---|---|
| U.S. government and federal agency obligations: | | | |
| Within 1 year | $ 399,926 | $ 394,466 | 1.44 *% |
| After 1 but within 5 years | 263,138 | 255,368 | 1.26 * |
| After 5 but within 10 years | 178,203 | 166,680 | .54 * |
| **Total U.S. government and federal agency obligations** | 841,267 | 816,514 | 1.19 * |
| Government-sponsored enterprise obligations: | | | |
| After 5 but within 10 years | 4,948 | 4,505 | 2.94 |
| After 10 years | 50,710 | 39,457 | 2.32 |
| **Total government-sponsored enterprise obligations** | 55,658 | 43,962 | 2.38 |
| State and municipal obligations: | | | |
| Within 1 year | 62,701 | 61,763 | 1.31 |
| After 1 but within 5 years | 403,542 | 376,194 | 1.67 |
| After 5 but within 10 years | 750,535 | 649,221 | 1.82 |
| After 10 years | 129,855 | 110,241 | 2.13 |
| **Total state and municipal obligations** | 1,346,633 | 1,197,419 | 1.78 |
| Mortgage and asset-backed securities: | | | |
| Agency mortgage-backed securities | 4,621,821 | 3,901,346 | 2.10 |
| Non-agency mortgage-backed securities | 1,331,288 | 1,157,898 | 2.37 |
| Asset-backed securities | 2,200,712 | 2,107,485 | 2.33 |
| **Total mortgage and asset-backed securities** | 8,153,821 | 7,166,729 | 2.20 |
| Other debt securities: | | | |
| Within 1 year | 48,102 | 47,374 | 1.87 |
| After 1 but within 5 years | 206,942 | 195,385 | 2.02 |
| After 5 but within 10 years | 239,082 | 205,950 | 1.83 |
| After 10 years | 13,260 | 11,427 | 1.82 |
| **Total other debt securities** | 507,386 | 460,136 | 1.91 % |
| **Total available for sale debt securities** | $ 10,904,765 | $ 9,684,760 | |

** Rate does not reflect inflation adjustment on inflation-protected securities*

Investments in U.S. government and federal agency obligations include U.S. Treasury inflation-protected securities, which totaled $404.4 million, at fair value, at December 31, 2023. Interest paid on these securities increases with inflation and decreases with deflation, as measured by the non-seasonally adjusted Consumer Price Index (CPI-U). At maturity, the principal paid is the greater of an inflation-adjusted principal or the original principal.

*Allowance for credit losses on available for sale debt securities*

Securities for which fair value is less than amortized cost are reviewed for impairment. Special emphasis is placed on securities whose credit rating has fallen below Baa3 (Moody's) or BBB- (Standard & Poor's), whose fair values have fallen more than 20% below purchase price, or those which have been identified based on management’s judgment. These securities are placed on a watch list and cash flow analyses are prepared on an individual security basis. Certain securities are analyzed using a projected cash flow model, discounted to present value, and compared to the current amortized cost bases of the securities. The model uses input factors such as cash flow projections, contractual payments required, expected delinquency rates, credit support from other tranches, prepayment speeds, collateral loss severity rates (including loan to values), and various other information related to the underlying collateral. Securities not analyzed using the cash flow model are analyzed by reviewing credit ratings, credit support agreements, and industry knowledge to project future cash flows and any possible credit impairment.

At December 31, 2023, the fair value of securities on this watch list was $1.2 billion compared to $1.3 billion at December 31, 2022. Almost all of the securities included on the Company's watch list were experiencing unrealized loss positions due to the significant increase in interest rates and were analyzed outside of the cash flow model. At December 31,

2023, the securities on the Company's watch list that were not deemed to be solely related to increasing interest rates were securities backed by government-guaranteed student loans and are expected to perform as contractually required. As of December 31, 2023, the Company did not identify any securities for which a credit loss exists, and for the years ended December 31, 2023 and 2022, the Company did not recognize a credit loss expense on any available for sale debt securities.

The table below summarizes debt securities available for sale in an unrealized loss position, aggregated by length of loss period, for which an allowance for credit losses has not been recorded at December 31, 2023 and 2022. Unrealized losses on these available for sale securities have not been recognized into income because after review, the securities were deemed not to be impaired. The unrealized losses on these securities are primarily attributable to changes in interest rates and current market conditions. At December 31, 2023, the Company does not intend to sell the securities, nor is it anticipated that it would be required to sell any of these securities at a loss.

| | Less than 12 months | | 12 months or longer | | Total | |
|---|---|---|---|---|---|---|
| *(In thousands)* | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses | Fair Value | Unrealized Losses |
| **December 31, 2023** | | | | | | |
| U.S. government and federal agency obligations | **$ 51,585** | **$ 809** | **$ 714,400** | **$ 24,025** | **$ 765,985** | **$ 24,834** |
| Government-sponsored enterprise obligations | **—** | **—** | **43,962** | **11,696** | **43,962** | **11,696** |
| State and municipal obligations | **24,022** | **760** | **1,167,607** | **148,478** | **1,191,629** | **149,238** |
| Mortgage and asset-backed securities: | | | | | | |
| Agency mortgage-backed securities | **4,382** | **59** | **3,875,432** | **720,649** | **3,879,814** | **720,708** |
| Non-agency mortgage-backed securities | **—** | **—** | **1,152,045** | **173,526** | **1,152,045** | **173,526** |
| Asset-backed securities | **19,086** | **156** | **2,081,293** | **93,076** | **2,100,379** | **93,232** |
| Total mortgage and asset-backed securities | **23,468** | **215** | **7,108,770** | **987,251** | **7,132,238** | **987,466** |
| Other debt securities | **—** | **—** | **460,136** | **47,250** | **460,136** | **47,250** |
| **Total** | **$ 99,075** | **$ 1,784** | **$ 9,494,875** | **$ 1,218,700** | **$ 9,593,950** | **$ 1,220,484** |
| **December 31, 2022** | | | | | | |
| U.S. government and federal agency obligations | $ 605,840 | $ 17,490 | $ 380,573 | $ 25,940 | $ 986,413 | $ 43,430 |
| Government-sponsored enterprise obligations | 25,068 | 4,650 | 18,040 | 7,971 | 43,108 | 12,621 |
| State and municipal obligations | 814,799 | 26,708 | 875,329 | 171,385 | 1,690,128 | 198,093 |
| Mortgage and asset-backed securities: | | | | | | |
| Agency mortgage-backed securities | 1,323,938 | 125,330 | 2,966,851 | 654,327 | 4,290,789 | 779,657 |
| Non-agency mortgage-backed securities | 135,984 | 16,736 | 1,069,222 | 195,218 | 1,205,206 | 211,954 |
| Asset-backed securities | 1,331,055 | 50,056 | 2,006,188 | 140,424 | 3,337,243 | 190,480 |
| Total mortgage and asset-backed securities | 2,790,977 | 192,122 | 6,042,261 | 989,969 | 8,833,238 | 1,182,091 |
| Other debt securities | 166,040 | 9,690 | 308,818 | 54,707 | 474,858 | 64,397 |
| **Total** | $ 4,402,724 | $ 250,660 | $ 7,625,021 | $ 1,249,972 | $12,027,745 | $ 1,500,632 |

The entire available for sale debt securities portfolio included $9.6 billion of securities that were in a loss position at December 31, 2023, compared to $12.0 billion at December 31, 2022. The total amount of unrealized loss on these securities was $1.2 billion at December 31, 2023, a decrease of $280.1 million compared to the unrealized loss at December 31, 2022. Securities with significant unrealized losses are discussed in the "*Allowance for credit losses on available for sale debt securities*" section above.

For debt securities classified as available for sale, the following table shows the amortized cost, fair value, and allowance for credit losses of securities available for sale at December 31, 2023 and 2022 and the corresponding amounts of gross unrealized gains and losses (pre-tax) in AOCI, by security type.

| *(In thousands)* | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Allowance for Credit Losses | Fair Value |
|---|---|---|---|---|---|
| **December 31, 2023** | | | | | |
| U.S. government and federal agency obligations | **$ 841,267** | **$ 81** | **$ (24,834)** | **$ —** | **$ 816,514** |
| Government-sponsored enterprise obligations | **55,658** | **—** | **(11,696)** | **—** | **43,962** |
| State and municipal obligations | **1,346,633** | **24** | **(149,238)** | **—** | **1,197,419** |
| Mortgage and asset-backed securities: | | | | | |
| Agency mortgage-backed securities | **4,621,821** | **233** | **(720,708)** | **—** | **3,901,346** |
| Non-agency mortgage-backed securities | **1,331,288** | **136** | **(173,526)** | **—** | **1,157,898** |
| Asset-backed securities | **2,200,712** | **5** | **(93,232)** | **—** | **2,107,485** |
| Total mortgage and asset-backed securities | **8,153,821** | **374** | **(987,466)** | **—** | **7,166,729** |
| Other debt securities | **507,386** | **—** | **(47,250)** | **—** | **460,136** |
| **Total** | **$ 10,904,765** | **$ 479** | **$ (1,220,484)** | **$ —** | **$ 9,684,760** |
| December 31, 2022 | | | | | |
| U.S. government and federal agency obligations | $ 1,078,807 | $ 29 | $ (43,430) | $ — | $ 1,035,406 |
| Government-sponsored enterprise obligations | 55,729 | — | (12,621) | — | 43,108 |
| State and municipal obligations | 1,965,028 | 174 | (198,093) | — | 1,767,109 |
| Mortgage and asset-backed securities: | | | | | |
| Agency mortgage-backed securities | 5,087,893 | 191 | (779,657) | — | 4,308,427 |
| Non-agency mortgage-backed securities | 1,423,469 | 92 | (211,954) | — | 1,211,607 |
| Asset-backed securities | 3,588,025 | 256 | (190,480) | — | 3,397,801 |
| Total mortgage and asset-backed securities | 10,099,387 | 539 | (1,182,091) | — | 8,917,835 |
| Other debt securities | 539,255 | — | (64,397) | — | 474,858 |
| Total | $ 13,738,206 | $ 742 | $ (1,500,632) | $ — | $ 12,238,316 |

The following table presents proceeds from sales of securities and the components of investment securities gains and losses which have been recognized in earnings.

| | For the Year Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| **Proceeds from sales of securities:** | | | |
| Available for sale debt securities | **$ 1,101,782** | $ 86,240 | $ 69,809 |
| Equity securities | **—** | 17 | — |
| Other | **40,167** | 20,714 | 11,002 |
| **Total proceeds** | **$ 1,141,949** | $ 106,971 | $ 80,811 |
| | | | |
| **Investment securities gains (losses), net:** | | | |
| **Available for sale debt securities:** | | | |
| Gains realized on sales | **$ 143** | $ — | $ — |
| Losses realized on sales | **(8,587)** | (20,273) | (3,284) |
| **Equity securities:** | | | |
| Gains realized on sales | **—** | 17 | — |
| Fair value adjustments, net | **(487)** | (943) | 187 |
| **Other:** | | | |
| Gains realized on sales | **976** | 1,670 | 1,611 |
| Losses realized on sales | **(1,076)** | (3,798) | (159) |
| Fair value adjustments, net | **24,016** | 43,833 | 31,704 |
| **Total investment securities gains (losses), net** | **$ 14,985** | $ 20,506 | $ 30,059 |

At December 31, 2023, securities totaling $7.5 billion in fair value were pledged to secure public fund deposits, securities sold under agreements to repurchase, trust funds, and borrowings at the FRB and FHLB, compared to $4.7 billion at December 31, 2022. Securities pledged under agreements pursuant to which the collateral may be sold or re-pledged by the secured parties approximated $208 thousand, while the remaining securities were pledged under agreements pursuant to which the secured parties may not sell or re-pledge the collateral.

Except for obligations of various government-sponsored enterprises such as FNMA, FHLB and FHLMC, no investment in a single issuer exceeds 10% of stockholders' equity.

## 4. Premises and Equipment

Premises and equipment consist of the following at December 31, 2023 and 2022:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Land | **$ 88,564** | $ 89,342 |
| Buildings and improvements | **730,445** | 673,802 |
| Equipment | **244,636** | 237,867 |
| Right of use leased assets | **26,962** | 26,030 |
| Total | **1,090,607** | 1,027,041 |
| Less accumulated depreciation | **621,548** | 608,132 |
| **Net premises and equipment** | **$ 469,059** | $ 418,909 |

Depreciation expense of $36.1 million in 2023, $32.3 million in 2022, and $31.9 million in 2021, was included in occupancy expense and equipment expense in the consolidated statements of income. Repairs and maintenance expense of $18.5 million, $17.7 million, and $16.0 million for 2023, 2022 and 2021, respectively, was included in occupancy expense and equipment expense. Interest expense capitalized on constructions projects totaled $903 thousand, $1.4 million, and $29 thousand in 2023, 2022 and 2021, respectively.

Right of use leased assets are comprised mainly of operating leases for branches, office space, ATM locations, and certain equipment, as described in Note 6.

## 5. Goodwill and Other Intangible Assets

The following table presents information about the Company's intangible assets which have estimable useful lives.

| | **December 31, 2023** | | | | December 31, 2022 | | | |
|---|---|---|---|---|---|---|---|---|
| *(In thousands)* | **Gross Carrying Amount** | **Accumulated Amortization** | **Valuation Allowance** | **Net Amount** | Gross Carrying Amount | Accumulated Amortization | Valuation Allowance | Net Amount |
| Amortizable intangible assets: | | | | | | | | |
| Core deposit premium | **$ 5,550** | **$ (5,092)** | **$ —** | **$ 458** | $ 31,270 | $ (30,565) | $ — | $ 705 |
| Mortgage servicing rights | **13,723** | **(3,602)** | **—** | **10,121** | 22,187 | (11,258) | — | 10,929 |
| **Total** | **$ 19,273** | **$ (8,694)** | **$ —** | **$10,579** | $ 53,457 | $ (41,823) | $ — | $11,634 |

The carrying amount of goodwill and its allocation among segments at December 31, 2023 and 2022 is shown in the table below. As a result of ongoing assessments, no impairment of goodwill was recorded in 2023, 2022 or 2021. Further, the annual assessment of qualitative factors on January 1, 2024 revealed no likelihood of impairment as of that date.

| *(In thousands)* | **December 31, 2023** | December 31, 2022 |
|---|---|---|
| Consumer segment | **$ 70,721** | $ 70,721 |
| Commercial segment | **75,072** | 67,454 |
| Wealth segment | **746** | 746 |
| **Total goodwill** | **$ 146,539** | $ 138,921 |

In addition to its intangible assets with estimable useful lives included in the table above, the Company also has a $3.6 million intangible asset for an easement in connection with a commercial office complex in Clayton, Missouri. The easement, which grants the Company access to all portions of the parking facility and terrace garden, is perpetual and will be assessed for impairment at least annually, or whenever events or circumstances indicate an impairment may have occurred. No impairment was identified at December 31, 2023.

Changes in the net carrying amount of goodwill and other net intangible assets for the years ended December 31, 2023 and 2022 are shown in the following table.

| *(In thousands)* | Goodwill | Easement | Core Deposit Premium | Mortgage Servicing Rights |
|---|---|---|---|---|
| Balance at December 31, 2021 | $ 138,921 | $ 3,600 | $ 1,004 | $ 10,966 |
| Originations, net of disposals | — | — | — | 1,317 |
| Amortization | — | — | (299) | (1,658) |
| Impairment recovery | — | — | — | 304 |
| Balance at December 31, 2022 | 138,921 | 3,600 | 705 | 10,929 |
| Acquisition | **7,618** | **—** | **—** | **—** |
| Originations, net of disposals | **—** | **—** | **—** | **340** |
| Amortization | **—** | **—** | **(247)** | **(1,148)** |
| **Balance at December 31, 2023** | **$ 146,539** | **$ 3,600** | **$ 458** | **$ 10,121** |

During 2023, the Company wrote off $25.7 million of core deposit intangible assets that were fully amortized. Also during 2023, the Company acquired L.J. Hart & Company, a municipal bond underwriter and advisor, and the acquisition resulted in goodwill of $7.6 million.

Mortgage servicing rights (MSRs) are initially recorded at fair value and subsequently amortized over the period of estimated servicing income. They are periodically reviewed for impairment at a tranche level, and if impairment is indicated, recorded at fair value. Temporary impairment, including impairment recovery, is effected through a change in a valuation allowance. During 2023, no impairment or impairment recovery was recognized. The fair value of the MSRs is based on the present value of expected future cash flows, as further discussed in Note 17 on Fair Value Measurements.

Aggregate amortization expense on intangible assets for the years ended December 31, 2023, 2022 and 2021 was $1.4 million, $2.0 million and $3.1 million, respectively. The following table shows the estimated future amortization expense based on existing asset balances and the interest rate environment as of December 31, 2023. The Company's actual amortization expense in any given period may be different from the estimated amounts depending upon the acquisition of intangible assets, changes in mortgage interest rates, prepayment rates and other market conditions.

| *(In thousands)* | |
|---|---|
| 2024 | $ 1,315 |
| 2025 | 1,153 |
| 2026 | 1,007 |
| 2027 | 867 |
| 2028 | 752 |

## 6. Leases

The Company's leasing activities include leasing certain real estate and equipment, providing lease financing to commercial customers, and leasing office space to third parties. The Company uses the FHLB fixed-advance rate at lease commencement or at any subsequent remeasurement event date based on the remaining lease term to calculate the liability for each lease.

*Lessee*

The Company's operating leases are primarily for branches, office space, ATM locations, and certain equipment. As of December 31, 2023, the right-of-use asset for operating leases, reported within premises and equipment, net, and lease liability, reported within other liabilities, recognized on the Company's consolidated balance sheets totaled $26.5 million and $26.9

million, respectively, compared to right-of-use assets of $24.9 million and lease liability of $25.2 million at December 31, 2022. Total lease cost for the year ended December 31, 2023 was $8.3 million, compared to $7.9 million for the year ended December 31, 2022. For leases with a term of 12 months or less, an election was made not to recognize lease assets and lease liabilities for all asset classes, and to recognize lease expense for these leases on a straight-line basis over the lease term. The Company's leases have remaining terms of 1 month to 28 years, most of which contain renewal options. However, the renewal options are generally not included in the leased asset or liability because the option exercises are uncertain.

The maturities of operating leases are included in the table below.

| *(in thousands)* | | **Operating Leases**[(1)] |
|---|---|---|
| 2024 | **$** | **6,290** |
| 2025 | | **4,434** |
| 2026 | | **3,833** |
| 2027 | | **3,609** |
| 2028 | | **3,303** |
| After 2028 | | **12,624** |
| **Total lease payments** | **$** | **34,093** |
| Less: Interest | | **7,199** |
| **Present value of lease liabilities** | **$** | **26,894** |

*(1) Excludes $743 thousand of legally binding minimum lease payments for operating leases signed but not yet commenced.*

The following table presents the average lease term and discount rate of operating leases.

| | **December 31, 2023** | December 31, 2022 |
|---|---|---|
| Weighted-average remaining lease term | **9.9 years** | 10.6 years |
| Weighted-average discount rate | **4.11 %** | 3.73 % |

Supplemental cash flow information related to operating leases is included in the table below.

| | **For the Year Ended December 31** | | |
|---|---|---|---|
| *(in thousands)* | | **2023** | 2022 |
| Operating cash paid toward lease liabilities | **$** | **6,486** | 6,529 |
| Leased assets obtained in exchange for new lease liabilities | **$** | **7,085** | 5,161 |

*Lessor*

The Company has net investments in direct financing and sales-type leases to commercial, industrial, and tax-exempt entities. These leases are included within business loans on the Company's consolidated balance sheets. The Company primarily leases various types of equipment, trucks and trailers, and office furniture and fixtures. Lease agreements may include options for the lessee to renew or purchase the leased equipment at the end of the lease term. The Company has elected to adopt the lease component expedient in which the lease and nonlease components are combined into the total lease receivable. The Company also leases office space to third parties, and these leases are classified as operating leases. The leases may include options to renew or to expand the leased space, and currently the leases have remaining terms of 1 month to 15 years.

The following table provides the components of lease income.

| | **For the Year Ended December 31** | | | |
|---|---|---|---|---|
| *(in thousands)* | | **2023** | | 2022 |
| Direct financing and sales-type leases | | **31,127** | | 22,144 |
| Operating leases[(1)] | | **13,036** | | 8,948 |
| **Total lease income** | **$** | **44,163** | $ | 31,092 |

*(1) Includes rent from Tower Properties, a related party, of $76 thousand for the years ended both December 31, 2023 and 2022.*

The following table presents the components of the net investments in direct financing and sales-type leases.

| *(in thousands)* | **December 31, 2023** | December 31, 2022 |
|---|---|---|
| Lease payment receivable | **$ 729,891** | $ 704,509 |
| Unguaranteed residual assets | **134,105** | 72,157 |
| **Total net investments in direct financing and sales-type leases** | **$ 863,996** | $ 776,666 |
| Deferred origination cost | **3,024** | 3,222 |
| **Total net investment included within business loans** | **$ 867,020** | $ 779,888 |

The maturities of lease receivables are included in the table below.

| *(in thousands)* | Direct Financing and Sale-Type Leases | Operating Leases | Total |
|---|---|---|---|
| 2024 | $ 218,641 | $ 11,976 | $ 230,617 |
| 2025 | 182,103 | 10,725 | 192,828 |
| 2026 | 146,430 | 10,080 | 156,510 |
| 2027 | 110,328 | 9,034 | 119,362 |
| 2028 | 67,850 | 8,352 | 76,202 |
| After 2028 | 80,861 | 46,783 | 127,644 |
| **Total lease receipts** | **806,213** | **$ 96,950** | **$ 903,163** |
| Less: Net present value adjustment | 76,322 | | |
| **Present value of lease receipts** | **$ 729,891** | | |

## 7. Deposits

At December 31, 2023, the scheduled maturities of certificates of deposit were as follows:

| *(In thousands)* | |
|---|---|
| Due in 2024 | $ 2,647,310 |
| Due in 2025 | 185,368 |
| Due in 2026 | 29,435 |
| Due in 2027 | 7,906 |
| Due in 2028 | 5,671 |
| **Total** | **$ 2,875,690** |

The aggregate amount of certificates of deposit that exceeded the $250,000 FDIC insurance limit totaled $1.3 million at December 31, 2023.

## 8. Borrowings

At December 31, 2023, the Company's borrowings primarily consisted of federal funds purchased and securities sold under agreements to repurchase (repurchase agreements). The following table sets forth selected information for federal funds purchased and repurchase agreements.

| *(Dollars in thousands)* | Year End Weighted Rate | Average Weighted Rate | Average Balance Outstanding | Maximum Outstanding at any Month End | Balance at December 31 |
|---|---|---|---|---|---|
| Federal funds purchased and repurchase agreements: | | | | | |
| **2023** | **2.78 %** | **3.47 %** | **$ 2,839,633** | **$ 3,133,020** | **$ 2,908,815** |
| 2022 | 2.01 | 1.06 | 2,439,279 | 2,841,734 | 2,841,734 |
| 2021 | .06 | .07 | 2,334,837 | 3,022,967 | 3,022,967 |

Federal funds purchased and repurchase agreements comprised the majority of the Company's short-term borrowings (borrowings with an original maturity of less than one year at December 31, 2023), and $2.6 billion of these borrowings were repurchase agreements, which generally have one day maturities and are mainly comprised of non-insured customer funds secured by a portion of the Company's investment portfolio. Additional information about the securities pledged for repurchase agreements and repurchase agreement maturity is provided in Note 20 on Resale and Repurchase Agreements. Accrued interest for repurchase agreements was $695 thousand, $275 thousand and $9 thousand at December 31, 2023, 2022 and 2021, respectively.

The Bank is a member of the Des Moines FHLB and has access to term financing from the FHLB. These borrowings are secured under a blanket collateral agreement including primarily residential mortgages as well as all unencumbered assets and stock of the borrowing bank. At December 31, 2023, the Bank had no outstanding advances from the FHLB. The FHLB also issues letters of credit to secure the Bank's obligations to certain depositors of public funds, which totaled $639.5 million at December 31, 2023.

## 9. Income Taxes

The components of income tax expense from operations for the years ended December 31, 2023, 2022 and 2021 were as follows:

| *(In thousands)* | Current | Deferred | Total |
|---|---|---|---|
| **Year ended December 31, 2023:** | | | |
| U.S. federal | **$ 124,787** | **$ (6,228)** | **$ 118,559** |
| State and local | **17,161** | **(1,171)** | **15,990** |
| **Total** | **$ 141,948** | **$ (7,399)** | **$ 134,549** |
| **Year ended December 31, 2022:** | | | |
| U.S. federal | $ 96,849 | $ 19,990 | $ 116,839 |
| State and local | 13,793 | 1,726 | 15,519 |
| **Total** | $ 110,642 | $ 21,716 | $ 132,358 |
| **Year ended December 31, 2021:** | | | |
| U.S. federal | $ 104,924 | $ 22,184 | $ 127,108 |
| State and local | 15,174 | 3,429 | 18,603 |
| **Total** | $ 120,098 | $ 25,613 | $ 145,711 |

The components of income tax (benefit) expense recorded directly to stockholders' equity for the years ended 2023, 2022 and 2021 were as follows:

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Unrealized gain (loss) on available for sale debt securities | **$ 69,972** | $ (382,697) | $ (80,211) |
| Change in fair value on cash flow hedges | **(6,017)** | (6,446) | (6,040) |
| Accumulated pension (benefit) loss | **1,197** | 1,161 | 1,484 |
| **Income tax (benefit) expense allocated to stockholders' equity** | **$ 65,152** | $ (387,982) | $ (84,767) |

Significant components of the Company's deferred tax assets and liabilities at December 31, 2023 and 2022 were as follows:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Deferred tax assets: | | |
| Unrealized loss on available for sale debt securities | **$ 305,001** | $ 374,973 |
| Loans, principally due to allowance for credit losses | **44,702** | 43,553 |
| Unearned fee income | **10,810** | 5,534 |
| Accrued expenses | **10,531** | 6,748 |
| Equity-based compensation | **8,082** | 7,491 |
| Deferred compensation | **7,894** | 7,864 |
| Other | **812** | 1,737 |
| **Total deferred tax assets** | **387,832** | 447,900 |
| Deferred tax liabilities: | | |
| Equipment lease financing | **99,453** | 91,913 |
| Land, buildings, and equipment | **21,016** | 17,210 |
| Cash flow hedges | **9,468** | 19,747 |
| Intangible assets | **7,545** | 7,519 |
| Private equity investments | **6,888** | 9,393 |
| Other | **7,235** | 8,138 |
| **Total deferred tax liabilities** | **151,605** | 153,920 |
| **Net deferred tax assets (liabilities)** | **$ 236,227** | $ 293,980 |

Management believes it is more likely than not that the results of future operations will generate sufficient taxable income to realize the total deferred tax assets, therefore, no valuation allowance is needed for the deferred tax assets at year end.

A reconciliation between the expected federal income tax expense using the federal statutory tax rate of 21%, and the Company's actual income tax expense for 2023, 2022, and 2021 is provided below. The effective tax rate is calculated by dividing income taxes by income before income taxes less the non-controlling interest expense.

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Computed "expected" tax expense | **$ 128,438** | $ 130,359 | $ 142,060 |
| Increase (decrease) in income taxes resulting from: | | | |
| State and local income taxes, net of federal tax benefit | **12,633** | 12,260 | 14,697 |
| Tax-exempt interest, net of cost to carry | **(7,002)** | (8,473) | (9,002) |
| Non-deductible FDIC insurance premiums | **2,101** | 1,376 | 1,090 |
| Share-based award payments | **(1,176)** | (1,669) | (2,941) |
| Other | **(445)** | (1,495) | (193) |
| **Total income tax expense** | **$ 134,549** | $ 132,358 | $ 145,711 |

The gross amount of unrecognized tax benefits was $1.3 million and $1.2 million at December 31, 2023 and 2022, respectively, and the total amount of unrecognized tax benefits that would impact the effective tax rate, if recognized, was $1.0 million at both December 31, 2023 and 2022. The activity in the accrued liability for unrecognized tax benefits for the years ended December 31, 2023 and 2022 was as follows:

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| Unrecognized tax benefits at beginning of year | **$ 1,205** | $ 1,276 |
| Gross increases – tax positions in prior period | **25** | 21 |
| Gross increases – current-period tax positions | **336** | 235 |
| Lapse of statute of limitations | **(296)** | (327) |
| **Unrecognized tax benefits at end of year** | **$ 1,270** | $ 1,205 |

The Company and its subsidiaries are subject to income tax by federal, state and local government taxing authorities. Tax years 2020 through 2023 remain open to examination for U.S. federal income tax and for major state taxing jurisdictions.

## 10. Employee Benefit Plans

Employee benefits charged to operating expenses are summarized in the table below. Substantially all of the Company's employees are covered by a defined contribution (401(k)) plan, under which the Company makes matching contributions.

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Payroll taxes | **$ 31,507** | $ 29,580 | $ 28,084 |
| Medical plans | **36,277** | 31,004 | 31,131 |
| 401(k) plan | **19,216** | 18,590 | 17,237 |
| Pension plans | **499** | 516 | 388 |
| Other | **3,587** | 3,097 | 1,170 |
| **Total employee benefits** | **$ 91,086** | $ 82,787 | $ 78,010 |

A portion of the Company's employees are covered by a noncontributory defined benefit pension plan, however, participation in the pension plan is not available to employees hired after June 30, 2003. All participants are fully vested in their benefit payable upon normal retirement date, which is based on years of participation and compensation. Since January 2011, all benefits accrued under the pension plan have been frozen. However, the accounts continue to accrue interest at a stated annual rate. Certain key executives also participate in a supplemental executive retirement plan (the CERP) that the Company funds only as retirement benefits are disbursed. The CERP carries no segregated assets. The CERP continues to provide credits based on hypothetical contributions in excess of those permitted under the 401(k) plan. In the tables presented below, the pension plan and the CERP are presented on a combined basis.

Under the Company's funding policy for the defined benefit pension plan, contributions are made to a trust as necessary to satisfy the statutory minimum required contribution as defined by the Pension Protection Act, which is intended to provide for current service accruals and for any unfunded accrued actuarial liabilities over a reasonable period. To the extent that these requirements are fully covered by assets in the trust, a contribution might not be made in a particular year. No contributions to the defined benefit plan were made in 2023, 2022 or 2021. The minimum required contribution for 2024 is expected to be zero. The Company does not expect to make any further contributions in 2024 other than the necessary funding contributions to the CERP. Distributions under the CERP were $806 thousand, $14 thousand and $14 thousand during 2023, 2022 and 2021, respectively.

The following items are components of the net pension cost for the years ended December 31, 2023, 2022 and 2021.

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Service cost | **$ 499** | $ 516 | $ 388 |
| Interest cost on projected benefit obligation | **4,615** | 2,725 | 2,169 |
| Expected return on plan assets | **(4,051)** | (4,515) | (4,532) |
| Amortization of prior service cost | **(271)** | (271) | (271) |
| Amortization of unrecognized net (gain) loss | **1,464** | 1,717 | 2,578 |
| **Net periodic pension cost** | **$ 2,256** | $ 172 | $ 332 |

The following table sets forth the pension plans' funded status, using valuation dates of December 31, 2023 and 2022.

| *(In thousands)* | **2023** | 2022 |
|---|---|---|
| **Change in projected benefit obligation** | | |
| Projected benefit obligation at prior valuation date | **$ 95,842** | $ 121,738 |
| Service cost | **499** | 516 |
| Interest cost | **4,615** | 2,725 |
| Benefits paid | **(7,667)** | (6,933) |
| Actuarial (gain) loss | **660** | (22,204) |
| Projected benefit obligation at valuation date | **93,949** | 95,842 |
| **Change in plan assets** | | |
| Fair value of plan assets at prior valuation date | **88,396** | 109,807 |
| Actual return on plan assets | **8,307** | (14,492) |
| Employer contributions | **806** | 14 |
| Benefits paid | **(7,667)** | (6,933) |
| Fair value of plan assets at valuation date | **89,842** | 88,396 |
| **Funded status and net amount recognized at valuation date** | **$ (4,107)** | $ (7,446) |

The unfunded pension benefit obligation decreased $3.3 million from the prior year primarily due to the plan assets earning $4.3 million more than expected. This decrease was slightly offset by a decrease in the discount rate from 5.19% to 4.98%.

The accumulated benefit obligation, which represents the liability of a plan using only benefits as of the measurement date, was $93.9 million and $95.8 million for the combined plans on December 31, 2023 and 2022, respectively.

Amounts not yet reflected in net periodic benefit cost and included in accumulated other comprehensive income (loss) at December 31, 2023 and 2022 are shown below, including amounts recognized in other comprehensive income during the periods. All amounts are shown on a pre-tax basis.

| *(In thousands)* | | **2023** | | 2022 |
|---|---|---|---|---|
| Prior service credit (cost) | **$** | **181** | $ | 452 |
| Accumulated gain (loss) | | **(18,304)** | | (23,363) |
| **Accumulated other comprehensive income (loss)** | | **(18,123)** | | (22,911) |
| Cumulative employer contributions in excess of net periodic benefit cost | | **14,016** | | 15,465 |
| **Net amount recognized as an accrued benefit liability on the December 31 balance sheet** | **$** | **(4,107)** | $ | (7,446) |
| Net gain (loss) arising during period | | **3,594** | | 3,197 |
| Amortization of net (gain) loss | | **1,464** | | 1,717 |
| Amortization of prior service cost | | **(271)** | | (271) |
| **Total recognized in other comprehensive income (loss)** | **$** | **4,787** | $ | 4,643 |
| **Total income (expense) recognized in net periodic pension cost and other comprehensive income** | **$** | **2,531** | $ | 4,471 |

The following assumptions, on a weighted average basis, were used in accounting for the plans.

| | **2023** | 2022 | 2021 |
|---|---|---|---|
| Determination of benefit obligation at year end: | | | |
| Effective discount rate on benefit obligations | **4.98%** | 5.19% | 2.58% |
| Assumed cash balance interest crediting rate | **5.00%** | 5.00% | 5.00% |
| Determination of net periodic benefit cost for year ended: | | | |
| Effective discount rate on benefit obligations | **5.19%** | 2.64% | 2.25% |
| Effective rate for interest cost on benefit obligations | **5.09%** | 2.15% | 1.63% |
| Long-term rate of return on assets | **4.75%** | 4.25% | 4.25% |
| Assumed cash balance interest crediting rate | **5.00%** | 5.00% | 5.00% |

The following table shows the fair values of the Company's pension plan assets by asset category at December 31, 2023 and 2022. Information about the valuation techniques and inputs used to measure fair value are provided in Note 17 on Fair Value Measurements.

| | | Fair Value Measurements | | |
|---|---|---|---|---|
| *(In thousands)* | Total Fair Value | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| **December 31, 2023** | | | | |
| **Assets:** | | | | |
| U.S. government obligations | **$ 14,041** | **$ 14,041** | **$ —** | **$ —** |
| Government-sponsored enterprise obligations [(a)] | **1,039** | **—** | **1,039** | **—** |
| State and municipal obligations | **3,740** | **—** | **3,740** | **—** |
| Agency mortgage-backed securities [(b)] | **2,230** | **—** | **2,230** | **—** |
| Non-agency mortgage-backed securities | **2,271** | **—** | **2,271** | **—** |
| Asset-backed securities | **5,687** | **—** | **5,687** | **—** |
| Corporate bonds [(c)] | **48,534** | **—** | **48,534** | **—** |
| Equity securities and mutual funds: [(d)] | | | | |
| Mutual funds | **4,443** | **4,443** | **—** | **—** |
| Common stocks | **5,809** | **5,809** | **—** | **—** |
| International developed markets funds | **1,809** | **1,809** | **—** | **—** |
| Emerging markets funds | **239** | **239** | **—** | **—** |
| **Total** | **$ 89,842** | **$ 26,341** | **$ 63,501** | **$ —** |
| **December 31, 2022** | | | | |
| **Assets:** | | | | |
| U.S. government obligations | $ 9,960 | $ 9,960 | $ — | $ — |
| Government-sponsored enterprise obligations [(a)] | 1,022 | — | 1,022 | — |
| State and municipal obligations | 6,840 | — | 6,840 | — |
| Agency mortgage-backed securities [(b)] | 2,871 | — | 2,871 | — |
| Non-agency mortgage-backed securities | 2,527 | — | 2,527 | — |
| Asset-backed securities | 6,768 | — | 6,768 | — |
| Corporate bonds [(c)] | 35,234 | — | 35,234 | — |
| Equity securities and mutual funds: [(d)] | | | | |
| Mutual funds | 4,395 | 4,395 | — | — |
| Common stocks | 15,868 | 15,868 | — | — |
| International developed markets funds | 2,604 | 2,604 | — | — |
| Emerging markets funds | 307 | 307 | — | — |
| **Total** | $ 88,396 | $ 33,134 | $ 55,262 | $ — |

*(a) This category represents bonds (excluding mortgage-backed securities) issued by agencies such as the Government National Mortgage Association, the Federal Home Loan Mortgage Corp and the Federal National Mortgage Association.*

*(b) This category represents mortgage-backed securities issued by the agencies mentioned in (a).*

*(c) This category represents investment grade bonds issued in the U.S., primarily by domestic issuers, representing diverse industries.*

*(d) This category represents investments in individual common stocks and equity funds. These holdings are diversified, largely across the technology services, financial services, electronic technology, healthcare technology, and retail trade industries.*

The investment policy of the pension plan is designed for growth in principal, within limits designed to safeguard against significant losses within the portfolio. The policy sets guidelines, which may change from time to time, regarding the types and percentages of investments held. Currently, the policy includes guidelines such as holding bonds rated investment grade or better and prohibiting investment in Company stock. The plan does not utilize derivatives. Management believes there are no significant concentrations of risk within the plan asset portfolio at December 31, 2023. Under the current policy, the long-term investment target mix for the plan is 10% equity securities and 90% fixed income securities. The Company regularly reviews its policies on investment mix and may make changes depending on economic conditions and perceived investment risk.

The assumed overall expected long-term rate of return on pension plan assets used in calculating 2023 pension plan expense was 4.75%. Determination of the plan's expected rate of return is based upon historical and anticipated returns of the asset classes invested in by the pension plan and the allocation strategy currently in place among those classes. The rate used in plan calculations may be adjusted by management for current trends in the economic environment. The 10-year annualized return for the Company's pension plan was 4.9%. During 2023, the plan's assets gained 10.3% of their value, compared to a loss of 12.0% in 2022. Returns for any plan year may be affected by changes in the stock market and interest rates. The Company expects to incur pension expense of $1.7 million in 2024, compared to $2.3 million in 2023.

The following future benefit payments are expected to be paid:

| *(In thousands)* | | |
|---|---|---|
| 2024 | $ | 7,883 |
| 2025 | | 7,859 |
| 2026 | | 7,734 |
| 2027 | | 7,618 |
| 2028 | | 7,434 |
| 2029 - 2033 | | 33,673 |

## 11. Stock-Based Compensation and Directors Stock Purchase Plan*

The Company's stock-based compensation is provided under a stockholder-approved plan that allows for issuance of various types of awards, including stock options, stock appreciation rights, restricted stock and restricted stock units, performance awards and stock-based awards. During the past three years, stock-based compensation has been issued in the form of nonvested restricted stock awards and stock appreciation rights. At December 31, 2023, 6,197,988 shares remained available for issuance under the plan. The stock-based compensation expense that was charged against income was $17.1 million, $17.0 million and $15.4 million for the years ended December 31, 2023, 2022 and 2021, respectively. The total income tax benefit recognized in the income statement for share-based compensation arrangements was $3.2 million, $3.0 million and $2.7 million for the years ended December 31, 2023, 2022 and 2021, respectively.

*Nonvested Restricted Stock Awards*

Nonvested stock is awarded to key employees by action of the Company's Compensation and Human Resources Committee and Board of Directors. These awards generally vest after 4 to 7 years of continued employment, but vesting terms may vary according to the specifics of the individual grant agreement. There are restrictions as to transferability, sale, pledging, or assigning, among others, prior to the end of the vesting period. Dividend and voting rights are conferred upon grant of restricted stock awards. A summary of the status of the Company's nonvested share awards as of December 31, 2023 and changes during the year then ended is presented below.

| | Shares | | Weighted Average Grant Date Fair Value |
|---|---|---|---|
| Nonvested at January 1, 2023 | 1,206,004 | $ | 55.43 |
| Granted | 331,889 | | 59.11 |
| Vested | (341,152) | | 48.30 |
| Forfeited | (30,406) | | 58.13 |
| **Nonvested at December 31, 2023** | **1,166,335** | **$** | **58.48** |

The total fair value (at vest date) of shares vested during 2023, 2022 and 2021 was $20.9 million, $18.8 million and $17.6 million, respectively.

*Stock Appreciation Rights*

Stock appreciation rights (SARs) are granted with exercise prices equal to the market price of the Company's stock at the date of grant. SARs generally vest ratably over 4 years of continuous service and have 10-year contractual terms. All SARs must be settled in stock under provisions of the plan. A summary of SAR activity during 2023 is presented below.

| *(Dollars in thousands, except per share data)* | Shares | Weighted Average Exercise Price | Weighted Average Remaining Contractual Term | Aggregate Intrinsic Value |
|---|---|---|---|---|
| Outstanding at January 1, 2023 | 995,591 | $ 44.59 | | |
| Granted | 94,173 | 62.52 | | |
| Forfeited | (5,250) | 60.99 | | |
| Expired | (6,114) | 49.63 | | |
| Exercised | (55,079) | 26.33 | | |
| **Outstanding at December 31, 2023** | 1,023,321 | $ 47.10 | 4.8 years | $ 9,189 |
| **Exercisable at December 31, 2023** | 786,452 | $ 42.66 | 3.9 years | $ 9,132 |

In determining compensation cost, the Black-Scholes option-pricing model is used to estimate the fair value of SARs on date of grant. The Black-Scholes model is a closed-end model that uses various assumptions as shown in the following table. Expected volatility is based on historical volatility of the Company's stock. The Company uses historical exercise behavior and other factors to estimate the expected term of the SARs, which represents the period of time that the SARs granted are expected to be outstanding. The risk-free rate for the expected term is based on the U.S. Treasury zero coupon spot rates in effect at the time of grant. The per share average fair value and the model assumptions for SARs granted during the past three years are shown in the table below.

| | **2023** | 2022 | 2021 |
|---|---|---|---|
| Weighted per share average fair value at grant date | **$17.76** | $15.80 | $14.50 |
| Assumptions: | | | |
| Dividend yield | **1.6 %** | 1.5 % | 1.4 % |
| Volatility | **27.9 %** | 28.4 % | 28.2 % |
| Risk-free interest rate | **3.9 %** | 1.6 % | .7 % |
| Expected term | **5.8 years** | 5.7 years | 5.7 years |

Additional information about SARs exercised is presented below.

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Intrinsic value of SARs exercised | **$ 1,723** | $ 2,448 | $ 7,664 |
| Tax benefit realized SARs exercised | **362** | 462 | 1,488 |

As of December 31, 2023, there was $34.0 million of unrecognized compensation cost related to unvested SARs and stock awards. This cost is expected to be recognized over a weighted average period of approximately 3.1 years.

*Directors Stock Purchase Plan*

The Company has a directors stock purchase plan whereby outside directors of the Company and its subsidiaries may elect to use their directors' fees to purchase Company stock at market value each month end. Remaining shares available for issuance under this plan were 103,307 at December 31, 2023. Shares authorized for issuance under the plan were increased to 150,000 shares in February 2022. In 2023, 32,841 shares were purchased at an average price of $52.07, and in 2022, 22,811 shares were purchased at an average price of $64.07.

** All share and per share amounts in this note have been restated for the 5% common stock dividend distributed in 2023.*

## 12. Accumulated Other Comprehensive Income

The table below shows the activity and accumulated balances for components of other comprehensive income. The largest component is the unrealized holding gains and losses on available for sale debt securities. Another component is the amortization from other comprehensive income of losses associated with pension benefits, which occurs as the losses are included in current net periodic pension cost. The remaining component is gains and losses in fair value on certain interest rate floors that have been designated as cash flow hedges, including interest rate floors terminated in prior years. For those terminated floors, the realized gains are amortized into interest income through the original maturity dates of the floors. Information about unrealized gains and losses on securities can be found in Note 3, information about unrealized gains and losses on pension plans can be found in Note 10, and information about unrealized gains and losses on cash flow hedge derivatives is located in Note 19.

| *(In thousands)* | Unrealized Gains (Losses) on Securities (1) | Pension Loss | Unrealized Gains (Losses) on Cash Flow Hedge Derivatives (2) | Total Accumulated Other Comprehensive Income (Loss) |
|---|---|---|---|---|
| **Balance January 1, 2023** | **$ (1,124,915)** | **$ (17,186)** | **$ 55,237** | **$ (1,086,864)** |
| Other comprehensive income (loss) before reclassifications to current earnings | **271,442** | **3,594** | **(8,860)** | **266,176** |
| Amounts reclassified to current earnings from accumulated other comprehensive income | **8,444** | **1,193** | **(15,209)** | **(5,572)** |
| Current period other comprehensive income (loss), before tax | **279,886** | **4,787** | **(24,069)** | **260,604** |
| Income tax (expense) benefit | **(69,972)** | **(1,197)** | **6,017** | **(65,152)** |
| Current period other comprehensive income (loss), net of tax | **209,914** | **3,590** | **(18,052)** | **195,452** |
| **Balance December 31, 2023** | **$ (915,001)** | **$ (13,596)** | **$ 37,185** | **$ (891,412)** |
| **Balance January 1, 2022** | $ 23,174 | $ (20,668) | $ 74,574 | $ 77,080 |
| Other comprehensive income (loss) before reclassifications to current earnings | (1,551,059) | 3,197 | (2,428) | (1,550,290) |
| Amounts reclassified to current earnings from accumulated other comprehensive income | 20,273 | 1,446 | (23,355) | (1,636) |
| Current period other comprehensive income (loss), before tax | (1,530,786) | 4,643 | (25,783) | (1,551,926) |
| Income tax (expense) benefit | 382,697 | (1,161) | 6,446 | 387,982 |
| Current period other comprehensive income (loss), net of tax | (1,148,089) | 3,482 | (19,337) | (1,163,944) |
| **Balance December 31, 2022** | $ (1,124,915) | $ (17,186) | $ 55,237 | $ (1,086,864) |

*(1) The pre-tax amounts reclassified from accumulated other comprehensive income to current earnings are included in "investment securities gains (losses), net" in the consolidated statements of income.*
*(2) The pre-tax amounts reclassified from accumulated other comprehensive income to current earnings are included in "interest and fees on loans" in the consolidated statements of income.*

## 13. Segments

The Company segregates financial information for use in assessing its performance and allocating resources among three operating segments: Consumer, Commercial, and Wealth. The Consumer segment consists of various consumer loan and deposit products offered through its retail branch network of approximately 140 locations. This segment also includes indirect and other consumer loan financing businesses, along with debit and credit card loan and fee businesses. In order to reflect a change in the Company's management of its portfolio of residential mortgage loans that it retains, the Company began including those loans in the Consumer segment on January 1, 2023. These loans had previously been included in the Other/Elimination column. As a result of this change, loans of approximately $1.9 billion were reclassified from the Other/Elimination column into the Consumer segment and prior periods presented below were restated to also reflect this change.

The Commercial segment provides corporate lending (including the Small Business Banking product line within the branch network), leasing, and international services, along with business and governmental deposit products and commercial cash management services. This segment also includes both merchant and commercial bank card products as well as the Capital Markets Group, which sells fixed income securities and provides securities safekeeping and accounting services to its business and correspondent bank customers. The Wealth segment provides traditional trust and estate planning, advisory and discretionary investment management, and brokerage services. This segment also provides various loan and deposit related services to its private banking customers.

The Company's business line reporting system derives segment information from the internal profitability reporting system used by management to monitor and manage the financial performance of the Company. This information is based on internal management accounting procedures and methods, which have been developed to reflect the underlying economics of the businesses. These methodologies are applied in connection with funds transfer pricing and assignment of overhead costs among segments. Funds transfer pricing was used in the determination of net interest income. A standard cost for funds used is applied to assets, and a credit for funds provided is applied to liabilities based on their maturity, prepayment and/or repricing characteristics. Income and expense that directly relate to segment operations are recorded in the segment when incurred. Expenses that indirectly support the segments are allocated based on the most appropriate method available.

The Company uses a funds transfer pricing method to value funds used (e.g., loans, fixed assets, and cash) and funds provided (e.g., deposits, borrowings, and equity) by the business segments and their components. This process assigns a specific value to each new source or use of funds with a maturity, based on current swap rates, thus determining an interest spread at the time of the transaction. Non-maturity assets and liabilities are valued using weighted average pools. The funds transfer pricing process attempts to remove interest rate risk from valuation, allowing management to compare profitability under various rate environments.

The following tables present selected financial information by segment and reconciliations of combined segment totals to consolidated totals. There were no material intersegment revenues between the three segments. Management periodically makes changes to methods of assigning costs and income to its business segments to better reflect operating results. If appropriate, these changes are reflected in prior year information presented below.

**Segment Income Statement Data**

| *(In thousands)* | Consumer | Commercial | Wealth | Segment Totals | Other/ Elimination | Consolidated Totals |
|---|---|---|---|---|---|---|
| **Year ended December 31, 2023:** | | | | | | |
| Net interest income | **$ 413,856** | **$ 482,389** | **$ 73,251** | **$ 969,496** | **$ 28,633** | **$ 998,129** |
| Provision for credit losses | **(27,459)** | **(3,513)** | **(28)** | **(31,000)** | **(4,451)** | **(35,451)** |
| Non-interest income | **99,910** | **246,183** | **218,241** | **564,334** | **8,711** | **573,045** |
| Investment securities gains, net | **—** | **—** | **—** | **—** | **14,985** | **14,985** |
| Non-interest expense | **(326,838)** | **(391,980)** | **(157,679)** | **(876,497)** | **(54,485)** | **(930,982)** |
| Income before income taxes | **$ 159,469** | **$ 333,079** | **$ 133,785** | **$ 626,333** | **$ (6,607)** | **$ 619,726** |
| **Year ended December 31, 2022:** | | | | | | |
| Net interest income | $ 366,749 | $ 452,686 | $ 74,416 | $ 893,851 | $ 48,334 | $ 942,185 |
| Provision for loan losses | (17,832) | (1,196) | (8) | (19,036) | (9,035) | (28,071) |
| Non-interest income | 106,538 | 224,890 | 213,388 | 544,816 | 1,719 | 546,535 |
| Investment securities gains, net | — | — | — | — | 20,506 | 20,506 |
| Non-interest expense | (308,899) | (365,276) | (144,914) | (819,089) | (29,688) | (848,777) |
| Income before income taxes | $ 146,556 | $ 311,104 | $ 142,882 | $ 600,542 | $ 31,836 | $ 632,378 |
| **Year ended December 31, 2021:** | | | | | | |
| Net interest income | $ 348,565 | $ 453,692 | $ 71,522 | $ 873,779 | $ (38,355) | $ 835,424 |
| Provision for loan losses | (23,224) | 4,845 | (52) | (18,431) | 84,757 | 66,326 |
| Non-interest income | 126,218 | 211,048 | 213,617 | 550,883 | 9,510 | 560,393 |
| Investment securities gains, net | — | — | — | — | 30,059 | 30,059 |
| Non-interest expense | (299,998) | (329,313) | (136,356) | (765,667) | (40,234) | (805,901) |
| Income before income taxes | $ 151,561 | $ 340,272 | $ 148,731 | $ 640,564 | $ 45,737 | $ 686,301 |

The segment activity, as shown above, includes both direct and allocated items. Amounts in the "Other/Elimination" column include activity not related to the segments, such as that relating to administrative functions, the investment securities portfolio, and the effect of certain expense allocations to the segments. The provision for credit losses in this category contains the difference between net loan charge-offs assigned directly to the segments and the recorded provision for credit loss expense. Included in this category's net interest income are earnings of the investment portfolio, which are not allocated to a segment. Additionally, in 2023, interest expense on the Company's brokered deposits, which matured in the fourth quarter of 2023, is included in this column, as the Company's brokered deposits were not allocated to a segment.

**Segment Balance Sheet Data**

| *(In thousands)* | Consumer | Commercial | Wealth | Segment Totals | Other/ Elimination | Consolidated Totals |
|---|---|---|---|---|---|---|
| **Average balances for 2023:** | | | | | | |
| Assets | **$ 3,984,071** | **$ 11,351,223** | **$ 1,892,958** | **$ 17,228,252** | **$ 14,712,363** | **$ 31,940,615** |
| Loans, including held for sale | **3,832,483** | **11,061,461** | **1,878,440** | **16,772,384** | **10,458** | **16,782,842** |
| Goodwill and other intangible assets | **81,655** | **72,066** | **746** | **154,467** | **3,600** | **158,067** |
| Deposits | **12,243,033** | **10,375,075** | **2,377,397** | **24,995,505** | **312,876** | **25,308,381** |
| **Average balances for 2022:** | | | | | | |
| Assets | $ 3,853,875 | $ 10,239,825 | $ 1,838,023 | $ 15,931,723 | $ 17,673,594 | $ 33,605,317 |
| Loans, including held for sale | 3,705,110 | 10,021,057 | 1,827,283 | 15,553,450 | 16,291 | 15,569,741 |
| Goodwill and other intangible assets | 82,566 | 67,727 | 746 | 151,039 | 3,600 | 154,639 |
| Deposits | 13,417,312 | 11,941,396 | 2,804,781 | 28,163,489 | (62,792) | 28,100,697 |

The above segment balances include only those items directly associated with the segment. The “Other/Elimination” column includes unallocated bank balances not associated with a segment (such as investment securities, federal funds sold and brokered deposits), balances relating to certain other administrative and corporate functions, and eliminations between segment and non-segment balances. This column also includes the resulting effect of allocating such items as float, deposit reserve and capital for the purpose of computing the cost or credit for funds used/provided.

The Company’s reportable segments are strategic lines of business that offer different products and services. They are managed separately because each line services a specific customer need, requiring different performance measurement analyses and marketing strategies. The performance measurement of the segments is based on the management structure of the Company and is not necessarily comparable with similar information for any other financial institution. The information is also not necessarily indicative of the segments’ financial condition and results of operations if they were independent entities.

## 14. Common Stock*

On December 19, 2023, the Company distributed a 5% stock dividend on its $5 par common stock for the 30th consecutive year. All per common share data in this report has been restated to reflect the stock dividend.

The Company applies the two-class method of computing income per share, as nonvested share-based awards that pay nonforfeitable common stock dividends are considered securities which participate in undistributed earnings with common stock. The two-class method requires the calculation of separate income per share amounts for the nonvested share-based awards and for common stock. Income per share attributable to common stock is shown in the following table. Nonvested share-based awards are further discussed in Note 11, Stock-Based Compensation.

Basic income per share is based on the weighted average number of common shares outstanding during the year. Diluted income per share gives effect to all dilutive potential common shares that were outstanding during the year. Presented below is a summary of the components used to calculate basic and diluted income per common share, which have been restated for all stock dividends.

| *(In thousands, except per share data)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| **Basic income per common share:** | | | |
| Net income attributable to Commerce Bancshares, Inc. | **$ 477,060** | $ 488,399 | $ 530,765 |
| Less income allocated to nonvested restricted stock | **4,241** | 4,450 | 4,846 |
| Net income allocated to common stock | **$ 472,819** | $ 483,949 | $ 525,919 |
| Weighted average common shares outstanding | **129,922** | 131,539 | 134,125 |
| Basic income per common share | **$ 3.64** | $ 3.68 | $ 3.92 |
| **Diluted income per common share:** | | | |
| Net income attributable to Commerce Bancshares, Inc. | **$ 477,060** | $ 488,399 | $ 530,765 |
| Less income allocated to nonvested restricted stock | **4,237** | 4,442 | 4,838 |
| Net income allocated to common stock | **$ 472,823** | $ 483,957 | $ 525,927 |
| Weighted average common shares outstanding | **129,922** | 131,539 | 134,125 |
| Net effect of the assumed exercise of stock-based awards - based on the treasury stock method using the average market price for the respective periods | **150** | 299 | 315 |
| Weighted average diluted common shares outstanding | **130,072** | 131,838 | 134,440 |
| Diluted income per common share | **$ 3.64** | $ 3.67 | $ 3.91 |

Unexercised stock appreciation rights of 363 thousand, 171 thousand and 97 thousand were excluded from the computation of diluted income per share for the years ended December 31, 2023, 2022 and 2021, respectively, because their inclusion would have been anti-dilutive.

The Company maintains a treasury stock buyback program authorized by its Board of Directors. The most recent authorization in April 2022 approved future purchases of 5,000,000 shares of the Company's common stock. At December 31, 2023, 1,757,247 shares of common stock remained available for purchase under the current authorization.

The table below shows activity in the outstanding shares of the Company’s common stock during the past three years. Shares in the table below are presented on an historical basis and have not been restated for the annual 5% stock dividends.

| | **Years Ended December 31** | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| Shares outstanding at January 1 | **124,999** | 121,436 | 117,138 |
| Issuance of stock: | | | |
| Awards and sales under employee and director plans | **348** | 306 | 328 |
| 5% stock dividend | **6,201** | 5,953 | 5,790 |
| Other purchases of treasury stock | **(1,355)** | (2,684) | (1,807) |
| Other | **(17)** | (12) | (13) |
| **Shares outstanding at December 31** | **130,176** | 124,999 | 121,436 |

** Except as noted in the above table, all share and per share amounts in this footnote have been restated for the 5% common stock dividend distributed in 2023.*

## 15. Regulatory Capital Requirements

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 additional discretionary actions by regulators that could have a direct material effect on the Company's financial statements. The regulations require the Company to meet specific capital adequacy 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 classification is also subject to qualitative judgments by the regulators about components, risk weightings and other factors.

The following tables show the capital amounts and ratios for the Company (on a consolidated basis) and the Bank, together with the minimum capital adequacy and well-capitalized capital requirements, at the last two year ends.

| | Actual | | Minimum Capital Adequacy Requirement | | Well-Capitalized Capital Requirement | |
|---|---|---|---|---|---|---|
| *(Dollars in thousands)* | Amount | Ratio | Amount | Ratio | Amount | Ratio |
| **December 31, 2023** | | | | | | |
| **Total Capital (to risk-weighted assets):** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,881,024 | 16.03% | $ 1,937,322 | 8.00% | N.A. | N.A. |
| Commerce Bank | 3,313,640 | 13.81 | 1,919,257 | 8.00 | $ 2,399,071 | 10.00% |
| **Tier I Capital (to risk-weighted assets):** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,693,089 | 15.25% | $ 1,452,992 | 6.00% | N.A. | N.A. |
| Commerce Bank | 3,125,706 | 13.03 | 1,439,443 | 6.00 | $ 1,919,257 | 8.00% |
| **Tier I Common Capital (to risk-weighted assets):** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,693,089 | 15.25% | $ 1,089,744 | 4.50% | N.A. | N.A. |
| Commerce Bank | 3,125,706 | 13.03 | 1,079,582 | 4.50 | $ 1,559,396 | 6.50% |
| **Tier I Capital (to adjusted quarterly average assets):** | | | | | | |
| **(Leverage Ratio)** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,693,089 | 11.25% | $ 1,313,377 | 4.00% | N.A. | N.A. |
| Commerce Bank | 3,125,706 | 9.56 | 1,307,174 | 4.00 | $ 1,633,968 | 5.00% |
| **December 31, 2022** | | | | | | |
| **Total Capital (to risk-weighted assets):** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,600,920 | 14.89% | $ 1,934,274 | 8.00% | N.A. | N.A. |
| Commerce Bank | 3,125,987 | 13.05 | 1,916,529 | 8.00 | $ 2,395,661 | 10.00% |
| **Tier I Capital (to risk-weighted assets):** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,417,223 | 14.13% | $ 1,450,705 | 6.00% | N.A. | N.A. |
| Commerce Bank | 2,942,291 | 12.28 | 1,437,397 | 6.00 | $ 1,916,529 | 8.00% |
| **Tier I Common Capital (to risk-weighted assets):** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,417,223 | 14.13% | $ 1,088,029 | 4.50% | N.A. | N.A. |
| Commerce Bank | 2,942,291 | 12.28 | 1,078,047 | 4.50 | $ 1,557,180 | 6.50% |
| **Tier I Capital (to adjusted quarterly average assets):** | | | | | | |
| **(Leverage Ratio)** | | | | | | |
| Commerce Bancshares, Inc. (consolidated) | $ 3,417,223 | 10.34% | $ 1,322,102 | 4.00% | N.A. | N.A. |
| Commerce Bank | 2,942,291 | 8.86 | 1,328,220 | 4.00 | $ 1,660,275 | 5.00% |

The minimum required ratios for well-capitalized banks (under prompt corrective action provisions) are 6.5% for Tier I common capital, 8.0% for Tier I capital, 10.0% for Total capital and 5.0% for the leverage ratio.

At December 31, 2023 and 2022, the Company met all capital requirements to which it is subject, and the Bank's capital position exceeded the regulatory definition of well-capitalized.

## 16. Revenue from Contracts with Customers

Revenue from contracts with customers, Accounting Standard Codification 606 ("ASC 606"), requires revenue recognition for the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. For the year ended December 31, 2023, approximately 64% of the Company's total revenue was comprised of net interest income, which is not within the scope of this guidance. Of the remaining revenue, those items that were subject to this guidance mainly included fees for bank card, trust, deposit account services and consumer brokerage services.

The following table disaggregates revenue from contracts with customers by major product line.

| | For the Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| Bank card transaction fees | **$ 191,156** | $ 176,144 | $ 167,891 |
| Trust fees | **190,954** | 184,719 | 188,227 |
| Deposit account charges and other fees | **90,992** | 94,381 | 97,217 |
| Consumer brokerage services | **17,223** | 19,117 | 18,362 |
| Other non-interest income | **38,784** | 34,742 | 27,223 |
| Total non-interest income from contracts with customers | **529,109** | 509,103 | 498,920 |
| Other non-interest income [(1)] | **43,936** | 37,432 | 61,473 |
| **Total non-interest income** | **$ 573,045** | $ 546,535 | $ 560,393 |

*(1) This revenue is not within the scope of ASC 606, and includes fees relating to bond trading activities, loan fees and sales, derivative instruments, standby letters of credit and various other transactions.*

The following table presents the opening and closing receivable balances for the years ended December 31, 2023 and 2022 for the Company's significant revenue categories from contracts with customers.

| *(In thousands)* | **December 31, 2023** | December 31, 2022 | December 31, 2021 |
|---|---|---|---|
| Bank card transaction fees | **$ 18,069** | $ 17,254 | $ 16,424 |
| Trust fees | **1,764** | 2,038 | 2,222 |
| Deposit account charges and other fees | **6,588** | 6,631 | 6,702 |
| Consumer brokerage services | **8** | 949 | 391 |

For these revenue categories, none of the transaction price has been allocated to performance obligations that are unsatisfied as of the end of a reporting period. A description of these revenue categories follows.

***Bank Card Transaction Fees***

The following table presents the components of bank card fee income.

| | For the Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| **Debit card:** | | | |
| Fee income | **$ 44,795** | $ 44,240 | $ 44,170 |
| Expense for network charges | **(914)** | (3,272) | (3,160) |
| Net debit card fees | **43,881** | 40,968 | 41,010 |
| **Credit card:** | | | |
| Fee income | **31,639** | 31,609 | 29,214 |
| Expense for network charges and rewards | **(17,191)** | (17,049) | (14,070) |
| Net credit card fees | **14,448** | 14,560 | 15,144 |
| **Corporate card:** | | | |
| Fee income | **220,229** | 217,539 | 197,483 |
| Expense for network charges and rewards | **(109,588)** | (117,527) | (105,782) |
| Net corporate card fees | **110,641** | 100,012 | 91,701 |
| **Merchant:** | | | |
| Fee income | **36,775** | 34,583 | 33,019 |
| Fees to cardholder banks | **(11,001)** | (10,425) | (9,640) |
| Expense for network charges | **(3,588)** | (3,554) | (3,343) |
| Net merchant fees | **22,186** | 20,604 | 20,036 |
| **Total bank card transaction fees** | **$ 191,156** | $ 176,144 | $ 167,891 |

The majority of debit and credit card fees are reported in the Consumer segment, while corporate card and merchant fees are reported in the Commercial segment.

*Debit and Credit Card Fees*

The Company issues debit and credit cards to its retail and commercial banking customers who use the cards to purchase goods and services from merchants through an electronic payment system. As a card issuer, the Company earns fees, including interchange income, for processing the cardholder's purchase transaction with a merchant through a settlement network. Purchases are charged directly to a customer's checking account (in the case of a debit card), or are posted to a customer's credit card account. The fees earned are established by the settlement network and are dependent on the type of transaction processed but are typically based on a per unit charge. Interchange income, the largest component of debit and credit card fees, is settled daily through the networks. The services provided to the cardholders include issuing and maintaining cards, settling purchases with merchants, and maintaining memberships in various card networks to facilitate processing. These services are considered one performance obligation, as one of the services would not be performed without the others. The performance obligation is satisfied as services are rendered for each purchase transaction, and income is immediately recognized.

In order to participate in the settlement network process, the Company must pay various transaction-related costs, established by the networks, including membership fees and a per unit charge for each transaction. These expenses are recorded net of the card fees earned.

Consumer credit card products offer cardholders rewards that can be later redeemed for cash, goods or services to encourage card usage. Reward programs must meet network requirements based on the type of card issued. The expense associated with the rewards granted are recorded net of the credit card fees earned.

Commercial card products offer cash rewards to corporate cardholders to encourage card usage in facilitating corporate payments. The Company pays cash rewards based on contractually agreed upon amounts, normally as a percent of each sales transaction. The expense associated with the cash rewards program is recorded net of the corporate card fees earned.

*Merchant Fees*

The Company offers merchant processing services to its business customers to enable them to accept credit and debit card payments. Merchant processing activities include gathering merchant sales information, authorizing sales transactions and collecting the funds from card issuers using the networks. The merchant is charged a merchant discount fee for the services based on agreed upon pricing between the merchant and the Company. Merchant fees are recorded net of outgoing interchange costs paid to the card issuing banks and net of other network costs as shown in the table above.

Merchant services provided are considered one performance obligation, as one of the services would not be performed without the others. The performance obligation is satisfied as services are rendered for each settlement transaction and income is immediately recognized. Income earned from merchant fees settles with the customer according to terms negotiated in individual customer contracts. The majority of customers settle with the Company at least monthly.

***Trust Fees***

The following table shows the components of revenue within trust fees, which are reported within the Wealth segment.

| | For the Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| Private client | **$ 153,524** | $ 147,239 | $ 147,653 |
| Institutional | **31,756** | 31,525 | 33,890 |
| Other | **5,674** | 5,955 | 6,684 |
| **Total trust fees** | **$ 190,954** | $ 184,719 | $ 188,227 |

The Company provides trust and asset management services to both private client and institutional trust customers including asset custody, investment advice, and reporting and administrative services. Other specialized services such as tax preparation, financial planning, representation and other related services are provided as needed. Trust fees are generally earned monthly and billed based on a rate multiplied by the fair value of the customer's trust assets. The majority of customer trust accounts are billed monthly. However, some accounts are billed quarterly, and a small number of accounts are billed semi-annually or annually, in accordance with agreements in place with the customer. The Company accrues trust fees monthly based on an estimate of fees due and either directly charges the customer’s account the following month or invoices the customer for fees due according to the billing schedule.

The Company maintains written product pricing information which is used to bill each trust customer based on the services provided. Providing trust services is considered to be a single performance obligation that is satisfied on a monthly basis, involving the monthly custody of customer assets, statement rendering, periodic investment advice where applicable, and other specialized services as needed. As such, performance obligations are considered to be satisfied at the conclusion of each month while trust fee income is also recognized monthly.

***Deposit Account Charges and Other Fees***

The following table shows the components of revenue within deposit account charges and other fees.

| | For the Years Ended December 31 | | |
|---|---|---|---|
| *(In thousands)* | **2023** | 2022 | 2021 |
| Corporate cash management fees | **$ 56,291** | $ 52,501 | $ 50,051 |
| Overdraft and return item fees | **11,607** | 19,938 | 24,157 |
| Other service charges on deposit accounts | **23,094** | 21,942 | 23,009 |
| **Total deposit account charges and other fees** | **$ 90,992** | $ 94,381 | $ 97,217 |

Approximately 67% of this revenue is reported in the Commercial segment, while the remainder is reported in the Consumer segment.

The Company provides corporate cash management services to its business and non-profit customers to meet their various transaction processing needs. Such services include deposit and check processing, lockbox, remote deposit, reconciliation, online banking and other similar transaction processing services. The Company maintains unit prices for each type of service, and the customer is billed based on transaction volumes processed monthly. The customer is usually billed either monthly or

quarterly, however, some customers may be billed semi-annually or annually. The customer may pay for the cash management services either by paying in cash or using the value of deposit balances (formula provided to the customer) held at the Company. The Company's performance obligation for corporate cash management services is the processing of items over a monthly term, and the obligations are satisfied at the conclusion of each month.

Overdraft fees are charged to customers when daily checks and other withdrawals to customers' accounts exceed balances on hand. Fees are based on a unit price multiplied by the number of items processed whose total amounts exceed the available account balance. The daily overdraft charge is calculated, and the fee is posted to the customer's account each day. The Company's performance obligation for overdraft transactions is based on the daily transaction processed and the obligation is satisfied as each day's transaction processing is concluded.

Other deposit fees include numerous smaller fees such as monthly statement fees, foreign ATM processing fees, identification restoration fees, and stop payment fees. Such fees are mostly billed to customers directly on their monthly deposit account statements, or in the case of foreign ATM processing fees, the fee is charged to the customer on the day that transactions are processed. Performance obligations for all of these various services are satisfied at the time that the service is rendered.

***Consumer Brokerage Services***

Consumer brokerage services revenue is comprised of commissions received upon the execution of purchases and sales of mutual fund shares and equity securities, in addition to sales of annuities and certain limited insurance products, in an agency capacity. Also, commissions are earned on professionally managed advisory programs. Revenue from these services is generally recognized as a commission at the time of the transaction's execution. Mutual fund and other distribution fees are recognized upon initial transaction execution as well as in future periods as customers continue to hold amounts in those mutual funds. Commission revenue for advisory services is recognized ratably over the contract term. Nearly all of the Company's consumer brokerage services revenue is recorded in the Wealth segment.

***Other Non-Interest Income from Contracts with Customers***

Other non-interest income from contracts with customers consists mainly of various transaction-driven revenue streams such as ATM fees, check sales and wire fees, cash sweep commissions, and gains on sales of tax credits. Performance obligations for these services consist mainly of the execution of a single transaction at a single point in time. Fees from these revenue sources are recognized when the performance obligation is completed, at which time cash is received by the Company.

## 17. Fair Value Measurements

The Company uses fair value measurements to record fair value adjustments to certain financial and nonfinancial assets and liabilities and to determine fair value disclosures. Various financial instruments such as available for sale debt securities, equity securities, trading debt securities, certain investments relating to private equity activities, and derivatives are recorded at fair value on a recurring basis. Additionally, from time to time, the Company may be required to record other assets and liabilities at fair value on a nonrecurring basis, such as mortgage servicing rights and certain other investment securities. These nonrecurring fair value adjustments typically involve lower of cost or fair value accounting, or write-downs of individual assets.

Fair value is 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. Depending on the nature of the asset or liability, the Company uses various valuation techniques and assumptions when estimating fair value. For accounting disclosure purposes, a three-level valuation hierarchy of fair value measurements has been established. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

- Level 1 – inputs to the valuation methodology are quoted prices for identical assets or liabilities in active markets.
- Level 2 – inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, and inputs that are observable for the assets or liabilities, either directly or indirectly (such as interest rates, yield curves, and prepayment speeds).
- Level 3 – inputs to the valuation methodology are unobservable and significant to the fair value. These may be internally developed, using the Company's best information and assumptions that a market participant would consider.

When determining the fair value measurements for assets and liabilities required or permitted to be recorded or disclosed at fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability. When possible, the Company looks to active and observable markets to price identical assets or liabilities. When identical assets and liabilities are not traded in active markets, the Company looks to observable market data for similar assets and liabilities. Nevertheless, certain assets and liabilities are not actively traded in observable markets, and the Company must use alternative valuation techniques to derive an estimated fair value measurement.

**Instruments Measured at Fair Value on a Recurring Basis**

The table below presents the carrying values of assets and liabilities measured at fair value on a recurring basis at December 31, 2023 and 2022. There were no transfers among levels during these years.

| | | Fair Value Measurements Using | | |
|---|---|---|---|---|
| *(In thousands)* | Total Fair Value | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| **December 31, 2023** | | | | |
| **Assets:** | | | | |
| Residential mortgage loans held for sale | **$ 1,585** | **$ —** | **$ 1,585** | **$ —** |
| Available for sale debt securities: | | | | |
| U.S. government and federal agency obligations | **816,514** | **816,514** | **—** | **—** |
| Government-sponsored enterprise obligations | **43,962** | **—** | **43,962** | **—** |
| State and municipal obligations | **1,197,419** | **—** | **1,196,472** | **947** |
| Agency mortgage-backed securities | **3,901,346** | **—** | **3,901,346** | **—** |
| Non-agency mortgage-backed securities | **1,157,898** | **—** | **1,157,898** | **—** |
| Asset-backed securities | **2,107,485** | **—** | **2,107,485** | **—** |
| Other debt securities | **460,136** | **—** | **460,136** | **—** |
| Trading debt securities | **28,830** | **—** | **28,830** | **—** |
| Equity securities | **5,723** | **5,723** | **—** | **—** |
| Private equity investments | **176,667** | **—** | **—** | **176,667** |
| Derivatives * | **116,876** | **—** | **116,710** | **166** |
| Assets held in trust for deferred compensation plan | **20,538** | **20,538** | **—** | **—** |
| **Total assets** | **10,034,979** | **842,775** | **9,014,424** | **177,780** |
| **Liabilities:** | | | | |
| Derivatives * | **37,899** | **—** | **37,704** | **195** |
| Liabilities held in trust for deferred compensation plan | **20,538** | **20,538** | **—** | **—** |
| **Total liabilities** | **$ 58,437** | **$ 20,538** | **$ 37,704** | **$ 195** |
| **December 31, 2022** | | | | |
| **Assets:** | | | | |
| Residential mortgage loans held for sale | $ — | $ — | $ — | $ — |
| Available for sale debt securities: | | | | |
| U.S. government and federal agency obligations | 1,035,406 | 1,035,406 | — | — |
| Government-sponsored enterprise obligations | 43,108 | — | 43,108 | — |
| State and municipal obligations | 1,767,109 | — | 1,765,268 | 1,841 |
| Agency mortgage-backed securities | 4,308,427 | — | 4,308,427 | — |
| Non-agency mortgage-backed securities | 1,211,607 | — | 1,211,607 | — |
| Asset-backed securities | 3,397,801 | — | 3,397,801 | — |
| Other debt securities | 474,858 | — | 474,858 | — |
| Trading debt securities | 43,523 | — | 43,523 | — |
| Equity securities | 6,210 | 6,210 | — | — |
| Private equity investments | 178,127 | — | — | 178,127 |
| Derivatives * | 60,492 | — | 60,458 | 34 |
| Assets held in trust for deferred compensation plan | 17,856 | 17,856 | — | — |
| **Total assets** | 12,544,524 | 1,059,472 | 11,305,050 | 180,002 |
| **Liabilities:** | | | | |
| Derivatives * | 54,984 | — | 54,865 | 119 |
| Liabilities held in trust for deferred compensation plan | 17,856 | 17,856 | — | — |
| **Total liabilities** | $ 72,840 | $ 17,856 | $ 54,865 | $ 119 |

**The fair value of each class of derivative is shown in Note 19.*

***Valuation methods for instruments measured at fair value on a recurring basis***

Following is a description of the Company's valuation methodologies used for instruments measured at fair value on a recurring basis:

*Residential mortgage loans held for sale*

The Company originates fixed rate, first lien residential mortgage loans that are intended for sale in the secondary market. Fair value is based on quoted secondary market prices for loans with similar characteristics, which are adjusted to include the embedded servicing value in the loans. This adjustment represents an unobservable input to the valuation but is not considered significant given the relative insensitivity of the valuation to changes in this input. Accordingly, these loan measurements are classified as Level 2.

*Available for sale debt securities*

For available for sale securities, changes in fair value are recorded in other comprehensive income. This portfolio comprises the majority of the assets which the Company records at fair value. Most of the portfolio, which includes government-sponsored enterprise, mortgage-backed and asset-backed securities, are priced utilizing industry-standard models that consider various assumptions, including time value, yield curves, volatility factors, prepayment speeds, default rates, loss severity, current market and contractual prices for the underlying financial instruments, as well as other relevant economic measures. Substantially all of these assumptions are observable in the marketplace, can be derived from observable data, or are supported by observable levels at which transactions are executed in the marketplace. These measurements are classified as Level 2 in the fair value hierarchy. Where quoted prices are available in an active market, the measurements are classified as Level 1. Most of the Level 1 measurements apply to U.S. Treasury obligations.

The fair values of Level 1 and 2 securities in the available for sale portfolio are prices provided by a third-party pricing service. The prices provided by the third-party pricing service are based on observable market inputs, as described in the sections below. On a quarterly basis, the Company compares these prices to other independent sources for the same and similar securities. Variances are analyzed, and, if appropriate, additional research is conducted with the third-party pricing service. Based on this research, the pricing service may affirm or revise its quoted price. No significant adjustments have been made to the prices provided by the pricing service. The pricing service also provides documentation on an ongoing basis that includes reference data, inputs and methodology by asset class, which is reviewed by the Company to ensure that security placement within the fair value hierarchy is appropriate.

Valuation methods and inputs, by class of security:

- *U.S. government and federal agency obligations*

  U.S. treasury bills, bonds and notes, including inflation-protected securities, are valued using quoted prices from active markets. Valuations for stripped coupon and principal issues are derived from yield curves generated from various dealer contacts and live data sources.

- *Government-sponsored enterprise obligations*

  Government-sponsored enterprise obligations are evaluated using cash flow valuation models. Inputs used are live market data, cash settlements, Treasury market yields, and floating rate indices such as SOFR, CMT, and Prime.

- *State and municipal obligations, excluding auction rate securities*

  A yield curve is generated and applied to bond sectors, and individual bond valuations are extrapolated. Inputs used to generate the yield curve are bellwether issue levels, established trading spreads between similar issuers or credits, historical trading spreads over widely accepted market benchmarks, new issue scales, and verified bid information. Bid information is verified by corroborating the data against external sources such as broker-dealers, trustees/paying agents, issuers, or non-affiliated bondholders.

- *Mortgage and asset-backed securities*

  Collateralized mortgage obligations and other asset-backed securities are valued at the tranche level. For each tranche valuation, the process generates predicted cash flows for the tranche, applies a market based (or benchmark) yield/spread for each tranche, and incorporates deal collateral performance and tranche level attributes to determine tranche-specific spreads to adjust the benchmark yield. Tranche cash flows are generated from new deal files and prepayment/default assumptions. Tranche spreads are based on tranche characteristics such as average life, type, volatility, ratings, underlying collateral and performance, and prevailing market conditions. The appropriate tranche spread is applied to the corresponding benchmark, and the resulting value is used to discount the cash flows to generate an evaluated price.

Valuation of agency pass-through securities, typically issued under GNMA, FNMA, FHLMC, and SBA programs, are primarily derived from information from the to-be-announced (TBA) market. This market consists of generic mortgage pools which have not been received for settlement. Snapshots of the TBA market, using live data feeds distributed by multiple electronic platforms, are used in conjunction with other indices to compute a price based on discounted cash flow models.

- *Other debt securities*

  Other debt securities are valued using active markets and inter-dealer brokers as well as option adjusted spreads. The spreads and models use yield curves, terms and conditions of the bonds, and any special features (e.g., call or put options and redemption features).

- *Auction rate securities*

  The available for sale portfolio includes certain auction rate securities. Due to the illiquidity in the auction rate securities market in recent years, the fair value of these securities cannot be based on observable market prices. The fair values of these securities are estimated using a discounted cash flows analysis which is discussed more fully in the Level 3 Inputs section of this note. Because many of the inputs significant to the measurement are not observable, these measurements are classified as Level 3 measurements.

*Trading debt securities*

The securities in the Company's trading portfolio are priced by averaging several broker quotes for similar instruments and are classified as Level 2 measurements.

*Equity securities with readily determinable fair values*

Equity securities are priced using the market prices for each security from the major stock exchanges or other electronic quotation systems. These are generally classified as Level 1 measurements. Stocks which trade infrequently are classified as Level 2.

*Private equity investments*

These securities are held by the Company's private equity subsidiary and are included in other investment securities in the consolidated balance sheets. Due to the absence of quoted market prices, valuation of these nonpublic investments requires significant management judgment. These fair value measurements, which are discussed in the Level 3 Inputs section of this note, are classified as Level 3.

*Derivatives*

The Company's derivative instruments include interest rate swaps and floors, foreign exchange forward contracts, and certain credit risk guarantee agreements. When appropriate, the impact of credit standing as well as any potential credit enhancements, such as collateral, has been considered in the fair value measurement.

- Valuations for interest rate swaps are derived from a proprietary model whose significant inputs are readily observable market parameters, primarily yield curves used to calculate current exposure. Counterparty credit risk is incorporated into the model and calculated by applying a net credit spread over SOFR to the swap's total expected exposure over time. The net credit spread is comprised of spreads for both the Company and its counterparty, derived from probability of default and other loss estimate information obtained from a third party credit data provider or from the Company's Credit department when not otherwise available. The credit risk component is not significant compared to the overall fair value of the swaps. The results of the model are constantly validated through comparison to active trading in the marketplace.

  Parties to swaps requiring central clearing are required to post collateral (generally in the form of cash or marketable securities) to an authorized clearing agency that holds and monitors the collateral. The Company's clearing counterparty characterizes a component of this collateral, known as variation margin, as a legal settlement of the derivative contract exposure, and as a result, the variation margin is considered in determining the fair value of the derivative.

  Valuations for interest rate floors are also derived from a proprietary model whose significant inputs are readily observable market parameters, primarily yield curves and volatility surfaces. The model uses market standard methodology of discounting the future expected cash receipts that would occur if variable interest rates fall below the strike rates of the floors. The model also incorporates credit valuation adjustments of both the Company's and the

counterparties' non-performance risk. The credit valuation adjustment component is not significant compared to the overall fair value of the floors.

The fair value measurements of interest rate swaps and floors are classified as Level 2 due to the observable nature of the significant inputs utilized.

- Fair value measurements for foreign exchange contracts are derived from a model whose primary inputs are quotations from global market makers and are classified as Level 2.
- The Company's contracts related to credit risk guarantees are valued under a proprietary model which uses unobservable inputs and assumptions about the creditworthiness of the counterparty (generally a Bank customer). Customer credit spreads, which are based on probability of default and other loss estimates, are calculated internally by the Company's Credit department, as mentioned above, and are based on the Company's internal risk rating for each customer. Because these inputs are significant to the measurements, they are classified as Level 3.
- Derivatives relating to residential mortgage loan sale activity include commitments to originate mortgage loans held for sale, forward loan sale contracts, and forward commitments to sell TBA securities. The fair values of loan commitments and sale contracts are estimated using quoted market prices for loans similar to the underlying loans in these instruments. The valuations of loan commitments are further adjusted to include embedded servicing value and the probability of funding. These assumptions are considered Level 3 inputs and are significant to the loan commitment valuation; accordingly, the measurement of loan commitments is classified as Level 3. The fair value measurement of TBA contracts is based on security prices published on trading platforms and is classified as Level 2.

*Assets held in trust for deferred compensation plan*

Assets held in an outside trust for the Company's deferred compensation plan consist of investments in mutual funds. The fair value measurements are based on quoted prices in active markets and classified as Level 1. The Company has recorded an asset representing the total investment amount. The Company has also recorded a corresponding liability, representing the Company's liability to the plan participants.

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis are summarized as follows:

| | Fair Value Measurements Using Significant Unobservable Inputs (Level 3) | | |
|---|---|---|---|
| *(In thousands)* | State and Municipal Obligations | Private Equity Investments | Total |
| **Year ended December 31, 2023:** | | | |
| Balance at January 1, 2023 | **$ 1,841** | **$ 178,127** | **$ 179,968** |
| Total gains or losses (realized/unrealized): | | | |
| Included in earnings | **—** | **24,299** | **24,299** |
| Included in other comprehensive income * | **57** | **—** | **57** |
| Investment securities called | **(1,000)** | **—** | **(1,000)** |
| Discount accretion | **49** | **—** | **49** |
| Purchases of private equity securities | **—** | **15,220** | **15,220** |
| Sale / pay down of private equity securities | **—** | **(41,341)** | **(41,341)** |
| Capitalized interest/dividends | **—** | **362** | **362** |
| Balance at December 31, 2023 | **$ 947** | **$ 176,667** | **$ 177,614** |
| Total gains or losses for the year included in earnings attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2023 | **$ —** | **$ 24,799** | **$ 24,799** |
| Total gains or losses for the year included in other comprehensive income attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2023 | **$ 35** | **$ —** | **$ 35** |
| **Year ended December 31, 2022:** | | | |
| Balance at January 1, 2022 | $ 1,984 | $ 147,406 | $ 149,390 |
| Total gains or losses (realized/unrealized): | | | |
| Included in earnings | — | 43,833 | 43,833 |
| Included in other comprehensive income * | (148) | — | (148) |
| Discount accretion | 5 | — | 5 |
| Purchases of private equity securities | — | 12,281 | 12,281 |
| Sale / pay down of private equity securities | — | (25,437) | (25,437) |
| Capitalized interest/dividends | — | 44 | 44 |
| Balance at December 31, 2022 | $ 1,841 | $ 178,127 | $ 179,968 |
| Total gains or losses for the year included in earnings attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2022 | $ — | $ 35,333 | 35,333 |
| Total gains or losses for the year included in other comprehensive income attributable to the change in unrealized gains or losses relating to assets still held at December 31, 2022 | $ (148) | $ — | (148) |

** Included in "net unrealized gains (losses) on securities" in the consolidated statements of comprehensive income.*

Gains and losses on the Level 3 assets and liabilities in the table above are reported in the following income categories:

| *(In thousands)* | Investment Securities Gains (Losses), Net |
|---|---|
| **Year ended December 31, 2023:** | |
| Total gains or losses included in earnings | **$ 24,299** |
| Change in unrealized gains or losses relating to assets still held at December 31, 2023 | **$ 24,799** |
| **Year ended December 31, 2022:** | |
| Total gains or losses included in earnings | $ 43,833 |
| Change in unrealized gains or losses relating to assets still held at December 31, 2022 | $ 35,333 |

*Level 3 Inputs*

The Company's significant Level 3 measurements, which employ unobservable inputs that are readily quantifiable, pertain to investments in portfolio concerns held by the Company's private equity subsidiaries. Information about these inputs as of December 31, 2023 is presented in the table below.

| | Quantitative Information about Level 3 Fair Value Measurements | | | Weighted |
|---|---|---|---|---|
| | Valuation Technique | Unobservable Input | Range | Average* |
| Private equity investments | Market comparable companies | EBITDA multiple | 4.0 - 6.0 | 5.2 |

** Unobservable inputs were weighted by the relative fair value of the instruments.*

The fair values of the Company's private equity investments are based on a determination of fair value of the investee company less preference payments assuming the sale of the investee company. Investee companies are normally non-public entities. The fair value of the investee company is determined by reference to the investee's total earnings before interest, depreciation/amortization, and income taxes (EBITDA) multiplied by an EBITDA factor. EBITDA is normally determined based on a trailing prior period adjusted for specific factors including current economic outlook, investee management, and specific unique circumstances such as sales order information, major customer status, regulatory changes, etc. The EBITDA multiple is based on management's review of published trading multiples for recent private equity transactions and other judgments and is derived for each individual investee. The fair value of the Company's investment is then calculated based on its ownership percentage in the investee company. On a quarterly basis, these fair value analyses are reviewed by a valuation committee consisting of investment managers and senior Company management.

**Instruments Measured at Fair Value on a Nonrecurring Basis**

For assets measured at fair value on a nonrecurring basis during 2023 and 2022, and still held as of December 31, 2023 and 2022, the following table provides the adjustments to fair value recognized during the respective periods, the level of valuation assumptions used to determine each adjustment, and the carrying value of the related individual assets or portfolios at December 31, 2023 and 2022.

| | | Fair Value Measurements Using | | | |
|---|---|---|---|---|---|
| *(In thousands)* | Fair Value | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | Total Gains (Losses) |
| **Balance at December 31, 2023** | | | | | |
| Collateral dependent loans | **$ 1,517** | **$ —** | **$ —** | **$ 1,517** | **$ (1,662)** |
| Long-lived assets | **2,662** | **—** | **—** | **2,662** | **(193)** |
| **Balance at December 31, 2022** | | | | | |
| Collateral dependent loans | $ 1,988 | $ — | $ — | $ 1,988 | $ (2,090) |
| Mortgage servicing rights | 10,929 | — | — | 10,929 | 304 |
| Long-lived assets | 480 | — | — | 480 | (965) |

***Valuation methods for instruments measured at fair value on a nonrecurring basis***

Following is a description of the Company’s valuation methodologies used for other financial and nonfinancial instruments measured at fair value on a nonrecurring basis.

*Collateral dependent loans*

While the overall loan portfolio is not carried at fair value, the Company periodically records nonrecurring adjustments to the carrying value of loans based on fair value measurements for partial charge-offs of the uncollectible portions of those loans. Nonrecurring adjustments also include certain impairment amounts for collateral dependent loans when establishing the allowance for credit losses on loans. Such amounts are generally based on the fair value of the underlying collateral supporting the loan. In determining the value of real estate collateral, the Company relies on external and internal appraisals of property values depending on the size and complexity of the real estate collateral. The Company maintains a staff of qualified appraisers who also review third party appraisal reports for reasonableness. In the case of non-real estate collateral, reliance is placed on a variety of sources, including external estimates of value and judgments based on the experience and expertise of internal specialists. Values of all loan collateral are regularly reviewed by credit administration. Unobservable inputs to these measurements, which include estimates and judgments often used in conjunction with appraisals, are not readily quantifiable.

These measurements are classified as Level 3. Nonrecurring adjustments to the carrying value of loans based on fair value measurements at December 31, 2023 and 2022 are shown in the table above.

*Mortgage servicing rights*

The Company initially measures its mortgage servicing rights at fair value and amortizes them over the period of estimated net servicing income. They are periodically assessed for impairment based on fair value at the reporting date. Mortgage servicing rights do not trade in an active market with readily observable prices. Accordingly, the fair value is estimated based on a valuation model which calculates the present value of estimated future net servicing income. The model incorporates assumptions that market participants use in estimating future net servicing income, including estimates of prepayment speeds, market discount rates, cost to service, float earnings rates, and other ancillary income, including late fees. The fair value measurements are classified as Level 3.

*Long-lived assets*

When investments in branch facilities and various office buildings are determined to be impaired, their carrying values are written down to estimated fair value, or estimated fair value less cost to sell if the property is held for sale. Fair value is estimated in a process which considers current local commercial real estate market conditions and the judgment of the sales agent and often involves obtaining third party appraisals from certified real estate appraisers. The carrying amounts of these real estate holdings are regularly monitored by real estate professionals employed by the Company. These fair value measurements are classified as Level 3. Unobservable inputs to these measurements, which include estimates and judgments often used in conjunction with appraisals, are not readily quantifiable.

## 18. Fair Value of Financial Instruments

The carrying amounts and estimated fair values of financial instruments held by the Company are set forth below. Fair value estimates are made at a specific point in time based on relevant market information. They do not reflect any premium or discount that could result from offering for sale at one time the Company's entire holdings of a particular financial instrument. Because no market exists for many of the Company's financial instruments, fair value estimates are based on judgments regarding future expected loss experience, risk characteristics and economic conditions. These estimates are subjective, involve uncertainties, and cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

The estimated fair values of the Company's financial instruments and the classification of their fair value measurement within the valuation hierarchy are as follows at December 31, 2023 and 2022:

| | | Estimated Fair Value at December 31, 2023 | | | |
|---|---|---|---|---|---|
| *(In thousands)* | Carrying Amount | Level 1 | Level 2 | Level 3 | Total |
| **Financial Assets** | | | | | |
| Loans: | | | | | |
| Business | **$ 6,019,036** | **$ —** | **$ —** | **$ 5,873,549** | **$ 5,873,549** |
| Real estate - construction and land | **1,446,764** | **—** | **—** | **1,420,522** | **1,420,522** |
| Real estate - business | **3,719,306** | **—** | **—** | **3,594,834** | **3,594,834** |
| Real estate - personal | **3,026,041** | **—** | **—** | **2,568,026** | **2,568,026** |
| Consumer | **2,077,723** | **—** | **—** | **2,016,334** | **2,016,334** |
| Revolving home equity | **319,894** | **—** | **—** | **317,013** | **317,013** |
| Consumer credit card | **589,913** | **—** | **—** | **550,464** | **550,464** |
| Overdrafts | **6,802** | **—** | **—** | **6,649** | **6,649** |
| Total loans | **17,205,479** | **—** | **—** | **16,347,391** | **16,347,391** |
| Loans held for sale | **4,177** | **—** | **4,177** | **—** | **4,177** |
| Investment securities | **9,941,786** | **822,237** | **8,896,129** | **223,420** | **9,941,786** |
| Federal funds sold | **5,025** | **5,025** | **—** | **—** | **5,025** |
| Securities purchased under agreements to resell | **450,000** | **—** | **—** | **444,448** | **444,448** |
| Interest earning deposits with banks | **2,239,010** | **2,239,010** | **—** | **—** | **2,239,010** |
| Cash and due from banks | **443,147** | **443,147** | **—** | **—** | **443,147** |
| Derivative instruments | **116,876** | **—** | **116,710** | **166** | **116,876** |
| Assets held in trust for deferred compensation plan | **20,538** | **20,538** | **—** | **—** | **20,538** |
| **Total** | **$ 30,426,038** | **$ 3,529,957** | **$ 9,017,016** | **$ 17,015,425** | **$ 29,562,398** |
| **Financial Liabilities** | | | | | |
| Non-interest bearing deposits | **$ 7,975,935** | **$ 7,975,935** | **$ —** | **$ —** | **$ 7,975,935** |
| Savings, interest checking and money market deposits | **14,512,273** | **14,512,273** | **—** | **—** | **14,512,273** |
| Certificates of deposit | **2,875,690** | **—** | **—** | **2,916,627** | **2,916,627** |
| Federal funds purchased | **261,305** | **261,305** | **—** | **—** | **261,305** |
| Securities sold under agreements to repurchase | **2,647,510** | **—** | **—** | **2,650,951** | **2,650,951** |
| Other borrowings | **1,366** | **—** | **1,366** | **—** | **1,366** |
| Derivative instruments | **37,899** | **—** | **37,704** | **195** | **37,899** |
| Liabilities held in trust for deferred compensation plan | **20,538** | **20,538** | **—** | **—** | **20,538** |
| **Total** | **$ 28,332,516** | **$ 22,770,051** | **$ 39,070** | **$ 5,567,773** | **$ 28,376,894** |

| (In thousands) | Carrying Amount | Estimated Fair Value at December 31, 2022 | | | |
|---|---|---|---|---|---|
| | | Level 1 | Level 2 | Level 3 | Total |
| **Financial Assets** | | | | | |
| Loans: | | | | | |
| Business | $ 5,661,725 | $ — | $ — | $ 5,506,128 | $ 5,506,128 |
| Real estate - construction and land | 1,361,095 | — | — | 1,347,328 | 1,347,328 |
| Real estate - business | 3,406,981 | — | — | 3,289,655 | 3,289,655 |
| Real estate - personal | 2,918,078 | — | — | 2,654,423 | 2,654,423 |
| Consumer | 2,059,088 | — | — | 1,999,788 | 1,999,788 |
| Revolving home equity | 297,207 | — | — | 295,005 | 295,005 |
| Consumer credit card | 584,000 | — | — | 538,268 | 538,268 |
| Overdrafts | 14,957 | — | — | 14,666 | 14,666 |
| Total loans | 16,303,131 | — | — | 15,645,261 | 15,645,261 |
| Loans held for sale | 4,964 | — | 4,964 | — | 4,964 |
| Investment securities | 12,511,649 | 1,041,616 | 11,244,592 | 225,441 | 12,511,649 |
| Federal funds sold | 49,505 | 49,505 | — | — | 49,505 |
| Securities purchased under agreements to resell | 825,000 | — | — | 795,574 | 795,574 |
| Interest earning deposits with banks | 389,140 | 389,140 | — | — | 389,140 |
| Cash and due from banks | 452,496 | 452,496 | — | — | 452,496 |
| Derivative instruments | 60,492 | — | 60,458 | 34 | 60,492 |
| Assets held in trust for deferred compensation plan | 17,856 | 17,856 | — | — | 17,856 |
| **Total** | $ 30,614,233 | $ 1,950,613 | $ 11,310,014 | $ 16,666,310 | $ 29,926,937 |
| **Financial Liabilities** | | | | | |
| Non-interest bearing deposits | $ 10,066,356 | $ 10,066,356 | $ — | $ — | $ 10,066,356 |
| Savings, interest checking and money market deposits | 15,126,981 | 15,126,981 | — | — | 15,126,981 |
| Certificates of deposit | 994,103 | — | — | 982,613 | 982,613 |
| Federal funds purchased | 159,860 | 159,860 | — | — | 159,860 |
| Securities sold under agreements to repurchase | 2,681,874 | — | — | 2,684,471 | 2,684,471 |
| Other borrowings | 8,831 | — | 8,831 | — | 8,831 |
| Derivative instruments | 54,984 | — | 54,865 | 119 | 54,984 |
| Liabilities held in trust for deferred compensation plan | 17,856 | 17,856 | — | — | 17,856 |
| **Total** | $ 29,110,845 | $ 25,371,053 | $ 63,696 | $ 3,667,203 | $ 29,101,952 |

## 19. Derivative Instruments

The notional amounts of the Company's derivative instruments are shown in the table below. These contractual amounts, along with other terms of the derivative, are used to determine amounts to be exchanged between counterparties and are not a measure of loss exposure. The Company's derivatives are not accounted for as accounting hedges except for the interest rate floors, as discussed below.

| | December 31 | |
|---|---|---|
| *(In thousands)* | **2023** | 2022 |
| Interest rate swaps | **$ 2,166,393** | $ 1,981,821 |
| Interest rate floors | **2,000,000** | 1,000,000 |
| Interest rate caps | **336,682** | 152,784 |
| Credit risk participation agreements | **653,887** | 579,925 |
| Foreign exchange contracts | **30,401** | 27,991 |
| Mortgage loan commitments | **3,004** | — |
| Mortgage loan forward sale contracts | **1,349** | — |
| Forward TBA contracts | **3,000** | — |
| **Total notional amount** | **$ 5,194,716** | $ 3,742,521 |

The largest group of notional amounts relate to interest rate swap contracts sold to commercial customers who wish to modify their interest rate sensitivity. Those customers are engaged in a variety of businesses, including real estate, manufacturing, retail product distribution, education, and retirement communities. These interest rate swap contracts with customers are offset by matching interest rate swap contracts purchased by the Company from other financial institutions (dealers). Contracts with dealers that require central clearing are novated to a clearing agency who becomes the Company's counterparty. Because of the matching terms of the offsetting contracts, in addition to collateral provisions which mitigate the impact of non-performance risk, changes in fair value subsequent to initial recognition have a minimal effect on earnings.

Many of the Company's interest rate swap contracts with large financial institutions contain contingent features relating to debt ratings or capitalization levels. Under these provisions, if the Company's debt rating falls below investment grade or if the Company ceases to be "well-capitalized" under risk-based capital guidelines, certain counterparties can require immediate and ongoing collateralization on interest rate swaps in net liability positions or instant settlement of the contracts. The Company maintains debt ratings and capital well above those minimum requirements.

As of December 31, 2023, the Company held four interest rate floors indexed to 1-month SOFR to hedge the risk of declining interest rates on certain floating rate commercial loans. The floors have a combined notional value of $2.0 billion and are forward-starting. Each of the four interest rate floors has a six-year term and a notional amount of $500 million. In the event that the index rate falls below zero, the maximum rate that the Company can earn on the notional amount of each floor is limited to the strike rate. Information about the floors is provided in the table below.

| Strike Rate | Effective Date | Maturity Date |
|---|---|---|
| 3.50 % | July 1, 2024 | July 1, 2030 |
| 3.25 % | November 1, 2024 | November 1, 2030 |
| 3.00 % | March 1, 2025 | March 1, 2031 |
| 2.75 % | July 1, 2025 | July 1, 2031 |

The premium paid for the floors totaled $90.2 million, which includes $54.4 million paid during 2023. At December 31, 2023, the maximum length of time over which the Company is hedging its exposure to lower rates is approximately 7 years. These interest rate floors qualified and were designated as cash flow hedges and were assessed for effectiveness using regression analysis. The change in the fair value of these interest rate floors is recorded in AOCI, net of the amortization of the premiums paid, which is recorded against interest and fees on loans in the consolidated statements of income. As of December 31, 2023, net deferred losses on the interest rate floors totaled $1.7 million (pre-tax) and were recorded in AOCI in the consolidated balance sheet. As of December 31, 2023, it is expected that $10.8 million (pre-tax) interest rate floor premium amortization will be reclassified from AOCI into earnings over the next 12 months for the outstanding interest rate floors.

During the year ended December 31, 2020, the Company monetized three interest rate floors that were previously classified as cash flow hedges with a combined notional balance of $1.5 billion and an asset fair value of $163.2 million. As of December 31, 2023, the total realized gains on the monetized cash flow hedges remaining in AOCI was $51.3 million (pre-tax), which will be reclassified into interest income over the next 3.0 years. The estimated amount of net gains remaining in AOCI related to the monetized cash flow hedges at December 31, 2023 that is expected to be reclassified into income within the next 12 months is $22.2 million.

The Company also contracts with other financial institutions, as a guarantor or beneficiary, to share credit risk associated with certain interest rate swaps through risk participation agreements. The Company's risks and responsibilities as guarantor are further discussed in Note 21 on Commitments, Contingencies and Guarantees. In addition, the Company enters into foreign exchange contracts, which are mainly comprised of contracts with customers to purchase or deliver specific foreign currencies at specific future dates.

Under its program to sell residential mortgage loans in the secondary market, the Company designates certain newly-originated residential mortgage loans as held for sale. Derivative instruments arising from this activity include mortgage loan commitments and forward loan sale contracts. Changes in the fair values of the loan commitments and funded loans prior to sale that are due to changes in interest rates are economically hedged with forward contracts to sell residential mortgage-backed securities in the to-be-announced (TBA) market. These forward TBA contracts are also considered to be derivatives and are settled in cash at the security settlement date. In late 2022, the Company temporarily paused sales of these loans and halted entering into the forward contracts, as lower demand for mortgage loans coupled with volatility in the TBA market made it difficult to effectively hedge the Company's mortgage loan production. The Company resumed sales during the first quarter of 2023.

The fair values of the Company's derivative instruments, whose notional amounts are listed above, are shown in the table below. Information about the valuation methods used to determine fair value is provided in Note 17 on Fair Value Measurements. As stated in the summary of significant accounting policies, derivative instruments and their related gains and losses are presented as operating cash flows in the consolidated statement of cash flows.

The Company's policy is to present its derivative assets and derivative liabilities on a gross basis in its consolidated balance sheets, and these are reported in other assets and other liabilities. Certain collateral posted to and from the Company's clearing counterparty has been applied to the fair values of the cleared swaps, such that in the table below, the positive fair values of cleared swaps were reduced by $27.8 million at December 31, 2022. There was no reduction to negative fair values of cleared swaps at December 31, 2022. There was no reduction to positive or negative fair values of cleared swaps at December 31, 2023.

| | Asset Derivatives | | Liability Derivatives | |
|---|---|---|---|---|
| | **December 31** | | **December 31** | |
| | **2023** | 2022 | **2023** | 2022 |
| *(In thousands)* | Fair Value | | Fair Value | |
| Derivatives designated as hedging instruments: | | | | |
| Interest rate floors | **$ 78,960** | **$ 33,371** | **$ —** | $ — |
| **Total derivatives designated as hedging instruments** | **$ 78,960** | $ 33,371 | **$ —** | $ — |
| Derivatives not designated as hedging instruments: | | | | |
| Interest rate swaps | **$ 35,816** | $ 23,894 | **$ (35,816)** | $ (51,742) |
| Interest rate caps | **1,391** | 2,705 | **(1,391)** | (2,705) |
| Credit risk participation agreements | **77** | 34 | **(194)** | (119) |
| Foreign exchange contracts | **534** | 488 | **(479)** | (418) |
| Mortgage loan commitments | **89** | — | **(1)** | — |
| Mortgage loan forward sale contracts | **8** | — | **—** | — |
| Forward TBA contracts | **1** | — | **(18)** | — |
| **Total derivatives not designated as hedging instruments** | **$ 37,916** | $ 27,121 | **$ (37,899)** | $ (54,984) |
| **Total** | **$ 116,876** | $ 60,492 | **$ (37,899)** | $ (54,984) |

The Company made an election to exclude the initial premiums paid on the interest rate floors from the hedge effectiveness measurement. Those initial premiums are amortized over the periods between the premium payment month and the contract maturity month. The pre-tax effects of the gains and losses (both the included and excluded amounts for hedge effectiveness assessment) recognized in the other comprehensive income from the cash flow hedging instruments and the amounts reclassified from accumulated other comprehensive income into income (both included and excluded amounts for hedge effectiveness measurement) are shown in the table below.

| | Amount of Gain or (Loss) Recognized in OCI | | | Location of Gain (Loss) Reclassified from AOCI into Income | Amount of Gain (Loss) Reclassified from AOCI into Income | | |
|---|---|---|---|---|---|---|---|
| *(In thousands)* | Total | Included Component | Excluded Component | *(In thousands)* | Total | Included Component | Excluded Component |
| **For the Year Ended December 31, 2023** | | | | | | | |
| Derivatives in cash flow hedging relationships: | | | | | | | |
| Interest rate floors | **$ (8,860)** | **$ 3,122** | **$ (11,982)** | Interest and fees on loans | **$ 15,209** | **$ 29,731** | **$ (14,522)** |
| **Total** | **$ (8,860)** | **$ 3,122** | **$ (11,982)** | **Total** | **$ 15,209** | **$ 29,731** | **$ (14,522)** |
| **For the Year Ended December 31, 2022** | | | | | | | |
| Derivatives in cash flow hedging relationships: | | | | | | | |
| Interest rate floors | $ (2,428) | $ — | $ (2,428) | Interest and fees on loans | $ 23,355 | $ 30,679 | $ (7,324) |
| Total | $ (2,428) | $ — | $ (2,428) | Total | $ 23,355 | $ 30,679 | $ (7,324) |
| **For the Year Ended December 31, 2021** | | | | | | | |
| Derivatives in cash flow hedging relationships: | | | | | | | |
| Interest rate floors | $ — | $ — | $ — | Interest and fees on loans | $ 24,160 | $ 30,310 | $ (6,150) |
| Total | $ — | $ — | $ — | Total | $ 24,160 | $ 30,310 | $ (6,150) |

The gain and loss recognized through various derivative instruments on the consolidated statements of income are shown in the table below.

| | Location of Gain/(Loss) Recognized in the Consolidated Statements of Income | Amount of Gain/(Loss) Recognized in Income on Derivative | | |
|---|---|---|---|---|
| | | **For the Years Ended December 31** | | |
| *(In thousands)* | | **2023** | 2022 | 2021 |
| Derivative instruments: | | | | |
| Interest rate swaps | Other non-interest income | **$ 3,642** | $ 2,472 | $ 3,170 |
| Interest rate caps | Other non-interest income | **86** | 16 | 15 |
| Credit risk participation agreements | Other non-interest income | **60** | 172 | (187) |
| Foreign exchange contracts | Other non-interest income | **(14)** | 38 | 78 |
| Mortgage loan commitments | Loan fees and sales | **87** | (763) | (2,463) |
| Mortgage loan forward sale contracts | Loan fees and sales | **8** | (4) | 4 |
| Forward TBA contracts | Loan fees and sales | **53** | 1,773 | 1,777 |
| **Total** | | **$ 3,922** | $ 3,704 | $ 2,394 |

The following table shows the extent to which assets and liabilities relating to derivative instruments have been offset in the consolidated balance sheets. It also provides information about these instruments which are subject to an enforceable master netting arrangement, irrespective of whether they are offset, and the extent to which the instruments could potentially be offset. Also shown is collateral received or pledged in the form of other financial instruments, which is generally cash or marketable securities. The collateral amounts in this table are limited to the outstanding balances of the related asset or liability (after netting is applied); thus amounts of excess collateral are not shown. Most of the derivatives in the following table were transacted under master netting arrangements that contain a conditional right of offset, such as close-out netting, upon default.

While the Company is party to master netting arrangements with most of its swap counterparties, the Company does not offset derivative assets and liabilities under these arrangements on its consolidated balance sheets. Collateral exchanged between the Company and dealer bank counterparties is generally subject to thresholds and transfer minimums, and usually consist of marketable securities. By contract, this collateral may be sold or re-pledged by the secured party until recalled at a subsequent valuation date by the pledging party. For those swap transactions requiring central clearing, the Company posts cash or securities to its clearing agent. Collateral positions are valued daily, and adjustments to amounts received and pledged by the Company are made as appropriate to maintain proper collateralization for these transactions. Swap derivative transactions with customers are generally secured by rights to non-financial collateral, such as real and personal property, which is not shown in the table below.

| | | | | Gross Amounts Not Offset in the Balance Sheet | | |
|---|---|---|---|---|---|---|
| *(In thousands)* | Gross Amount Recognized | Gross Amounts Offset in the Balance Sheet | Net Amounts Presented in the Balance Sheet | Financial Instruments Available for Offset | Collateral Received/ Pledged | Net Amount |
| **December 31, 2023** | | | | | | |
| **Assets:** | | | | | | |
| Derivatives subject to master netting agreements | **$ 116,702** | **$ —** | **$ 116,702** | **$ (3,930)** | **$ (107,492)** | **$ 5,280** |
| Derivatives not subject to master netting agreements | **174** | **—** | **174** | | | |
| Total derivatives | **$ 116,876** | **$ —** | **$ 116,876** | | | |
| **Liabilities:** | | | | | | |
| Derivatives subject to master netting agreements | **$ 37,300** | **$ —** | **$ 37,300** | **$ (3,930)** | **$ —** | **$ 33,370** |
| Derivatives not subject to master netting agreements | **599** | **—** | **599** | | | |
| Total derivatives | **$ 37,899** | **$ —** | **$ 37,899** | | | |
| **December 31, 2022** | | | | | | |
| **Assets:** | | | | | | |
| Derivatives subject to master netting agreements | $ 60,270 | $ — | $ 60,270 | $ (1,007) | $ (56,816) | $ 2,447 |
| Derivatives not subject to master netting agreements | 222 | — | 222 | | | |
| Total derivatives | $ 60,492 | $ — | $ 60,492 | | | |
| **Liabilities:** | | | | | | |
| Derivatives subject to master netting agreements | $ 54,609 | $ — | $ 54,609 | $ (1,007) | $ — | $ 53,602 |
| Derivatives not subject to master netting agreements | 375 | — | 375 | | | |
| Total derivatives | $ 54,984 | $ — | $ 54,984 | | | |

## 20. Resale and Repurchase Agreements

The Company regularly enters into resale and repurchase agreement transactions with other financial institutions and with its own customers. Resale and repurchase agreements are agreements to purchase/sell securities subject to an obligation to resell/repurchase the same or similar securities. They are accounted for as secured lending and collateralized borrowing (e.g. financing transactions), not as true sales and purchases of the underlying collateral securities. Some of the resale and repurchase agreements were transacted under master netting arrangements that contain a conditional right of offset, such as close-out netting, upon default. The security collateral accepted or pledged in resale and repurchase agreements with other financial institutions may be sold or re-pledged by the secured party, but is usually delivered to and held by third party trustees. The Company generally retains custody of securities pledged for repurchase agreements with its customers. Additional information about the Company's repurchase agreements is included in Note 8.

The Company is party to agreements commonly known as collateral swaps. These agreements involve the exchange of collateral under simultaneous repurchase and resale agreements with the same financial institution counterparty. These repurchase and resale agreements have the same principal amounts, inception dates, and maturity dates and have been offset against each other in the consolidated balance sheets, as permitted under the netting provisions of ASC 210-20-45. The collateral swaps totaled $200.0 million at December 31, 2022. There were no collateral swaps outstanding at December 31, 2023.

The following table shows the extent to which resale agreement assets and repurchase agreement liabilities with the same counterparty have been offset on the consolidated balance sheets, in addition to the extent to which they could potentially be offset. Also shown is collateral received or pledged, which consists of marketable securities. The collateral amounts in the table are limited to the outstanding balances of the related asset or liability (after offsetting is applied); thus amounts of excess collateral are not shown.

| | | | | Gross Amounts Not Offset in the Balance Sheet | | |
|---|---|---|---|---|---|---|
| *(In thousands)* | Gross Amount Recognized | Gross Amounts Offset on the Balance Sheet | Net Amounts Presented on the Balance Sheet | Financial Instruments Available for Offset | Securities Collateral Received/ Pledged | Unsecured amount |
| **December 31, 2023** | | | | | | |
| Total resale agreements, subject to master netting arrangements | **$ 450,000** | **$ —** | **$ 450,000** | **$ —** | **$ (450,000)** | **$ —** |
| Total repurchase agreements, subject to master netting arrangements | **2,647,510** | **—** | **2,647,510** | **—** | **(2,647,510)** | **—** |
| **December 31, 2022** | | | | | | |
| Total resale agreements, subject to master netting arrangements | $ 1,025,000 | $ (200,000) | $ 825,000 | $ — | $ (825,000) | $ — |
| Total repurchase agreements, subject to master netting arrangements | 2,881,874 | (200,000) | 2,681,874 | — | (2,681,874) | — |

The table below shows the remaining contractual maturities of repurchase agreements outstanding at December 31, 2023 and 2022, in addition to the various types of marketable securities that have been pledged by the Company as collateral for these borrowings.

| | Remaining Contractual Maturity of the Agreements | | | |
|---|---|---|---|---|
| *(In thousands)* | Overnight and continuous | Up to 90 days | Greater than 90 days | Total |
| **December 31, 2023** | | | | |
| Repurchase agreements, secured by: | | | | |
| U.S. government and federal agency obligations | **$ 170,293** | **$ —** | **$ —** | **$ 170,293** |
| Government-sponsored enterprise obligations | **8,749** | **—** | **—** | **8,749** |
| Agency mortgage-backed securities | **1,833,840** | **27,264** | **17,200** | **1,878,304** |
| Non-agency mortgage-backed securities | **10,566** | **—** | **—** | **10,566** |
| Asset-backed securities | **516,726** | **9,606** | **20,000** | **546,332** |
| Other debt securities | **33,265** | **—** | **—** | **33,265** |
| **Total repurchase agreements, gross amount recognized** | **$ 2,573,439** | **$ 36,870** | **$ 37,200** | **$ 2,647,509** |
| **December 31, 2022** | | | | |
| Repurchase agreements, secured by: | | | | |
| U.S. government and federal agency obligations | $ 488,053 | $ 26,928 | $ 12,460 | $ 527,441 |
| Agency mortgage-backed securities | 1,792,314 | 21,744 | 204,500 | 2,018,558 |
| Non-agency mortgage-backed securities | 40,950 | — | — | 40,950 |
| Asset-backed securities | 293,001 | — | — | 293,001 |
| Other debt securities | 1,924 | — | — | 1,924 |
| **Total repurchase agreements, gross amount recognized** | $ 2,616,242 | $ 48,672 | $ 216,960 | $ 2,881,874 |

## 21. Commitments, Contingencies and Guarantees

The Company engages in various transactions and commitments with off-balance sheet risk in the normal course of business to meet customer financing needs. The Company uses the same credit policies in making the commitments and conditional obligations described below as it does for on-balance sheet instruments. The following table summarizes these commitments at December 31:

| *(In thousands)* | | **2023** | | 2022 |
|---|---|---|---|---|
| Commitments to extend credit: | | | | |
| Credit card | **$** | **5,367,102** | $ | 5,190,942 |
| Other unfunded loan commitments | | **9,144,971** | | 9,102,525 |
| Standby letters of credit, net of conveyance to other financial institutions | | **590,551** | | 555,858 |
| Commercial letters of credit | | **2,571** | | 4,393 |

Commitments to extend credit are legally binding agreements to lend to a borrower providing there are no violations of any conditions established in the contract. As many of the commitments are expected to expire without being drawn upon, the total commitment does not necessarily represent future cash requirements. Refer to Note 2 on Loans and Allowance for Credit Losses for further discussion.

The Company, as a provider of financial services, routinely issues financial guarantees in the form of financial and performance standby letters of credit. Standby letters of credit are contingent commitments issued by the Company generally to guarantee the payment or performance obligation of a customer to a third party. While these represent a potential cash outflow by the Company, a significant amount of the commitments may expire without being drawn upon. To mitigate the potential loss exposure, the Company involves other financial institutions to participate in certain standby letters of credit. Even with such participation, the Company remains liable for the full amount of the standby letters of credit to the third party. The Company has recourse against the customer for any amount it is required to pay to a third party under a standby letter of credit. The standby letters of credit are subject to the same credit policies, underwriting standards and approval process as loans made by the Company. Most of the standby letters of credit are secured, and in the event of nonperformance by the customer, the Company has rights to the underlying collateral, which could include commercial real estate, physical plant and property, inventory, receivables, cash and marketable securities.

At December 31, 2023, the Company had recorded a liability of $3.0 million, representing the carrying value of the guarantee obligations associated with the standby letters of credit. This amount will be accreted into income over the remaining life of the respective commitments. Excluding amounts conveyed to others, commitments outstanding under these letters of credit were $601.8 million, which represents the maximum potential future payments guaranteed by the Company at December 31, 2023.

Commercial letters of credit act as a means of ensuring payment to a seller upon shipment of goods to a buyer. The majority of commercial letters of credit issued are used to settle payments in international trade. Typically, letters of credit require presentation of documents which describe the commercial transaction, evidence shipment, and transfer title.

The Company regularly purchases various state tax credits arising from third-party property redevelopment. These tax credits are either resold to third parties for a profit or retained for use by the Company. During 2023, the Company purchased and sold state tax credits amounting to $112.1 million and $54.0 million, respectively. At December 31, 2023, the Company had outstanding purchase commitments totaling $187.1 million that it expects to fund in 2024. The remaining purchase commitments amount to $388.2 million and are expected to be funded from 2025 through 2029.

The Company periodically enters into credit risk participation agreements (RPAs) as a guarantor to other financial institutions, in order to mitigate those institutions' credit risk associated with interest rate swaps with third parties. The RPA stipulates that, in the event of default by the third party on the interest rate swap, the Company will reimburse a portion of the loss borne by the financial institution. These interest rate swaps are normally collateralized (generally with real property, inventories and equipment) by the third party, which limits the credit risk associated with the Company's RPAs. The third parties usually have other borrowing relationships with the Company. The Company monitors overall borrower collateral, and at December 31, 2023, believes sufficient collateral is available to cover potential swap losses. The RPAs are carried at fair value throughout their term, with all changes in fair value, including those due to a change in the third party's creditworthiness, recorded in current earnings. The terms of the RPAs, which correspond to the terms of the underlying swaps, range from 1 to 15 years. At December 31, 2023, the fair value of the Company's guarantee liability RPAs was $194 thousand, and the notional

amount of the underlying swaps was $475.5 million. The maximum potential future payment guaranteed by the Company cannot be readily estimated and is dependent upon the fair value of the interest rate swaps at the time of default.

The Company has various legal proceedings pending at December 31, 2023, arising in the normal course of business. While some matters pending against the Company specify damages claimed by plaintiffs, others do not seek a specified amount of damages or are at very early stages of the legal process. The Company records a loss accrual for all legal and regulatory matters for which it deems a loss is probable and can be reasonably estimated. Some matters, which are in the early stages, have not yet progressed to the point where a loss amount can be determined to be probable and estimable.

## 22. Related Parties

The Company's Chief Executive Officer, its Executive Chairman, and its former Vice Chairman are directors of Tower Properties Company (Tower) and, together with members of their immediate families, beneficially own approximately 66% of the outstanding stock of Tower. At December 31, 2023, Tower owned 257,680 shares of Company stock. Tower is primarily engaged in the business of owning, developing, leasing and managing real property.

Payments from the Company and its affiliates to Tower are summarized below. These payments, with the exception of dividend payments, relate to property management services, including construction oversight, on three Company-owned office buildings and related parking garages in downtown Kansas City.

| *(In thousands)* | **2023** | 2022 | 2021 |
|---|---|---|---|
| Leasing agent fees | **$ 434** | $ 125 | $ 31 |
| Operation of parking garages | **111** | 100 | 71 |
| Building management fees | **2,202** | 2,118 | 2,046 |
| Property construction management fees | **360** | 184 | 143 |
| Project consulting fees | **419** | — | 84 |
| Dividends paid on Company stock held by Tower | **265** | 248 | 234 |
| **Total** | **$ 3,791** | $ 2,775 | $ 2,609 |

Tower has a $13.5 million line of credit with the Bank which is subject to normal credit terms and has a variable interest rate. The line of credit is collateralized by Company stock and based on collateral value had a maximum borrowing amount of approximately $11.0 million at December 31, 2023. There were no borrowings under this line during 2023, and no balance was outstanding at December 31, 2023. There were no borrowings during 2022 and 2021, and there was no balance outstanding at December 31, 2022 or 2021. Letters of credit may be collateralized under this line of credit; however, there were no letters of credit outstanding during 2023, 2022 or 2021, and thus, no fees were received during these periods. From time to time, the Bank extends additional credit to Tower for construction and development projects. No construction loans were outstanding during 2023, 2022 and 2021.

Tower leases office space in the Kansas City bank headquarters building owned by the Company. Rent paid to the Company totaled $82 thousand in 2023, $82 thousand in 2022, and $83 thousand in 2021, at $17.50, $17.44 and $17.25 per square foot, for years 2023, 2022, and 2021, respectively.

Directors of the Company and their beneficial interests have deposit accounts with the Bank and may be provided with cash management and other banking services, including loans, in the ordinary course of business. Such loans were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other unrelated persons and did not involve more than the normal risk of collectability. See Note 2 Loans and Allowance for Credit Losses for additional information for loans to directors and executive officers of the Company and the Bank, and to their affiliates.

## 23. Parent Company Condensed Financial Statements

Following are the condensed financial statements of Commerce Bancshares, Inc. (Parent only) for the periods indicated:

### Condensed Balance Sheets

| (In thousands) | December 31 2023 | 2022 |
|---|---|---|
| **Assets** | | |
| Investment in consolidated subsidiaries: | | |
| Bank | **$ 2,390,595** | $ 2,008,454 |
| Non-banks | **160,244** | 138,501 |
| Cash | **322,573** | 233,261 |
| Investment securities: | | |
| Available for sale debt | **5,081** | 5,207 |
| Equity | **11,396** | 11,129 |
| Note receivable due from bank subsidiary | **50,000** | 50,000 |
| Advances to subsidiaries, net of borrowings | **1,800** | 20,529 |
| Income tax receivable and deferred tax assets | **10,263** | 11,987 |
| Other assets | **30,486** | 26,539 |
| **Total assets** | **$ 2,982,438** | $ 2,505,607 |
| **Liabilities and stockholders' equity** | | |
| Pension obligation | **$ 4,107** | $ 7,446 |
| Other liabilities | **34,215** | 32,870 |
| **Total liabilities** | **38,322** | 40,316 |
| Stockholders' equity | **2,944,116** | 2,465,291 |
| **Total liabilities and stockholders' equity** | **$ 2,982,438** | $ 2,505,607 |

### Condensed Statements of Income

| (In thousands) | For the Years Ended December 31 2023 | 2022 | 2021 |
|---|---|---|---|
| **Income** | | | |
| Dividends received from consolidated bank subsidiary | **$ 280,000** | $ 300,001 | $ 340,001 |
| Earnings of consolidated subsidiaries, net of dividends | **203,570** | 203,965 | 200,461 |
| Interest and dividends on investment securities | **2,905** | 2,480 | 2,162 |
| Management fees charged to subsidiaries | **47,773** | 38,632 | 36,310 |
| Investment securities gains (losses) | **(621)** | (872) | 79 |
| Net interest income on advances and note to subsidiaries | **2,636** | 1,403 | 51 |
| Other | **2,842** | 3,709 | 2,927 |
| **Total income** | **539,105** | 549,318 | 581,991 |
| **Expense** | | | |
| Salaries and employee benefits | **41,549** | 44,352 | 37,362 |
| Professional fees | **3,580** | 2,740 | 2,006 |
| Data processing fees paid to affiliates | **3,347** | 3,173 | 2,834 |
| Other | **16,264** | 15,595 | 12,973 |
| **Total expense** | **64,740** | 65,860 | 55,175 |
| Income tax benefit | **(2,695)** | (4,941) | (3,949) |
| **Net income** | **$ 477,060** | $ 488,399 | $ 530,765 |

**Condensed Statements of Cash Flows**

| *(In thousands)* | For the Years Ended December 31 | | |
|---|---|---|---|
| | **2023** | 2022 | 2021 |
| **Operating Activities** | | | |
| Net income | $ **477,060** | $ 488,399 | $ 530,765 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | | |
| Earnings of consolidated subsidiaries, net of dividends | **(203,570)** | (203,965) | (200,461) |
| Other adjustments, net | **5,749** | 2,557 | 8,842 |
| **Net cash provided by operating activities** | **279,239** | 286,991 | 339,146 |
| **Investing Activities** | | | |
| (Increase) decrease in investment in subsidiaries, net | **4,348** | (9) | 6 |
| Proceeds from maturities/pay downs of investment securities | **15** | 38 | 22 |
| Purchases of investment securities | **(902)** | (4,534) | (4,786) |
| (Increase) decrease in advances to subsidiaries, net | **18,729** | 19,996 | (8,618) |
| Net purchases of building improvements and equipment | **(490)** | (741) | (28) |
| **Net cash provided by (used in) investing activities** | **21,700** | 14,750 | (13,404) |
| **Financing Activities** | | | |
| Purchases of treasury stock | **(76,890)** | (186,622) | (129,361) |
| Issuance of stock under equity compensation plans | **(3)** | (8) | (15) |
| Cash dividends paid on common stock | **(134,734)** | (127,466) | (122,693) |
| **Net cash used in financing activities** | **(211,627)** | (314,096) | (252,069) |
| Increase (decrease) in cash | **89,312** | (12,355) | 73,673 |
| Cash at beginning of year | **233,261** | 245,616 | 171,943 |
| **Cash at end of year** | $ **322,573** | $ 233,261 | $ 245,616 |
| Income tax receipts, net | $ **(3,254)** | $ (587) | $ (4,808) |

Dividends paid by the Parent to its shareholders were substantially provided from Bank dividends. The Bank may distribute common dividends without prior regulatory approval, provided that the dividends do not exceed the sum of net income for the current year and retained net income for the preceding two years, subject to maintenance of minimum capital requirements. The Parent charges fees to its subsidiaries for management services provided, which are allocated to the subsidiaries based primarily on total average assets. The Parent makes cash advances to its private equity subsidiary for general short-term cash flow purposes. Advances may be made to the Parent by its subsidiary bank for temporary investment of idle funds. Interest on such advances is based on market rates.

The Bank has $50.0 million of borrowings from the Parent as part of its strategy to manage FDIC insurance premiums. The note has a rolling 13 month maturity, and the interest rate is a variable rate equal to the one year treasury rate.

For the past several years, the Parent has maintained a $20.0 million line of credit for general corporate purposes with the Bank. The Parent has not borrowed under this line during the past three years.

The Parent plans to fund an additional $69.4 million relating to private equity investments over the next several years. The investments are made directly by the Parent and through non-bank subsidiaries.

At December 31, 2023, the fair value of the investment securities held by the Parent consisted of investments of $5.1 million in corporate bonds, $5.4 million in preferred and common stock with readily determinable fair values, and $6.0 million in equity securities that do not have readily determinable fair values. The Parent also holds 823,447 shares of Visa Class B-1 common stock, which are discussed in Note 3.

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

There were no changes in or disagreements with accountants on accounting and financial disclosure.

## Item 9a. CONTROLS AND PROCEDURES

### Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

### Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control — Integrated Framework (2013),* our management concluded that our internal control over financial reporting was effective as of December 31, 2023.

The Company's internal control over financial reporting as of December 31, 2023 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report which follows.

### Changes in Internal Control Over Financial Reporting

No change in the Company's internal control over financial reporting occurred that has materially affected, or is reasonably likely to materially affect, such controls during the last quarter of the period covered by this report.

## Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Commerce Bancshares, Inc.:

*Opinion on Internal Control Over Financial Reporting*

We have audited Commerce Bancshares, Inc. and subsidiaries' (the Company) 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. 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 the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements), and our report dated February 22, 2024 expressed an unqualified opinion on those consolidated financial statements.

*Basis for Opinion*

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

*Definition and Limitations of Internal Control Over Financial Reporting*

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

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

KPMG LLP

Kansas City, Missouri
February 22, 2024

## Item 9b. OTHER INFORMATION

During the three months ended December 31, 2023, none of the officers or directors of the Company adopted or terminated any contract, instruction or written plan for the purchase or sale of our securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement."

## Item 9c. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None

# PART III

## Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Items 401, 405, 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K regarding executive officers, directors, and corporate governance is included at the end of Part I of this Form 10-K under the caption “Information about the Company's Executive Officers” and under the captions “Proposal One - Election of the 2027 Class of Directors”, "Corporate Governance Guidelines and Code of Ethics", “Delinquent Section 16(a) Reports”, “Audit and Risk Committee Report”, “Committees of the Board" and "Shareholder Proposals and Nominations" in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 17, 2024, which is incorporated herein by reference.

The Company’s senior financial officer code of ethics for the chief executive officer and senior financial officers of the Company, including the chief financial officer, principal accounting officer or controller, or persons performing similar functions, is available on the Company's website at investor.commercebank.com/overview/corporate-governance. Amendments to, and waivers of, the code of ethics are posted on this website.

## Item 11. EXECUTIVE COMPENSATION

The information required by Items 402 and 407(e)(4) and (e)(5) of Regulation S-K regarding executive compensation is included under the captions “Compensation Discussion and Analysis”, “Executive Compensation”, “Director Compensation”, “Compensation and Human Resources Committee Report”, and “Compensation and Human Resources Committee Interlocks and Insider Participation” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 17, 2024, which is incorporated herein by reference.

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

The information required by Items 201(d) and 403 of Regulation S-K is included under the captions “Equity Compensation Plan Information” and “Security Ownership of Certain Beneficial Owners and Management” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 17, 2024, which is incorporated herein by reference.

## Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Items 404 and 407(a) of Regulation S-K is covered under the captions “Proposal One - Election of the 2027 Class of Directors”, “Corporate Governance - Director Independence”, and "Corporate Governance - Transactions with Related Persons" in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 17, 2024, which is incorporated herein by reference.

## Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Our independent registered public accounting firm is KPMG, LLP, Kansas City, Missouri, PCAOB Firm ID: 185

The information required by Item 9(e) of Schedule 14A is included under the captions “Pre-approval of Services by the External Independent Registered Public Accounting Firm” and “Fees Paid to KPMG LLP” in the Company's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 17, 2024, which is incorporated herein by reference.

# PART IV

## Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as a part of this report:


| | | Page |
|---|---|---|
| (1) | Financial Statements: | |
| | Consolidated Balance Sheets | 67 |
| | Consolidated Statements of Income | 68 |
| | Consolidated Statements of Comprehensive Income | 69 |
| | Consolidated Statements of Changes in Equity | 70 |
| | Consolidated Statements of Cash Flows | 71 |
| | Notes to Consolidated Financial Statements | 72 |
| | Summary of Quarterly Statements of Income | 64 |
| (2) | Financial Statement Schedules: | |
| | All schedules are omitted as such information is inapplicable or is included in the financial statements. | |


(b) The exhibits filed as part of this report and exhibits incorporated herein by reference to other documents are listed below.

3 —Articles of Incorporation and By-Laws:

(1) Restated Articles of Incorporation, as amended through April 28, 2023, were filed in quarterly report on Form 10-Q (Commission file number 1-36502) dated May 4, 2023, and the same are hereby incorporated by reference.

(2) By-Laws, as amended, were filed in annual report on Form 10-K (Commission file number 1-36502) dated February 25, 2020, and the same are hereby incorporated by reference.

(3) Termination of Certificate of Designation of 6.00% Series B Non-Cumulative Perpetual Preferred Stock of Commerce Bancshares, Inc. was filed in current report on Form 8-K (Commission file number 0-2989) dated September 1, 2020, and the same is hereby incorporated by reference.

4 — Instruments defining the rights of security holders, including indentures:

(1) Pursuant to paragraph (b)(4)(iii) of Item 601 Regulation S-K, Registrant will furnish to the Commission upon request copies of long-term debt instruments.

(2) Description of Commerce Bancshares, Inc. registered securities.

10 — Material Contracts (Except for the Development Services Agreement and associated Amendments to the Development Service Agreement listed below, each of the following is a management contract or compensatory plan arrangement):

(1) Commerce Bancshares, Inc. Executive Incentive Compensation Plan amended and restated as of December 1, 2023, was filed in quarterly report on Form 10-Q (Commission file number 1-36502) dated November 6, 2023, and the same is hereby incorporated by reference.

(2) Commerce Bancshares, Inc. Stock Purchase Plan for Non-Employee Directors amended and restated as of April 17, 2013 was filed in current report on Form 8-K (Commission file number 0-2989) dated April 23, 2013, and the same is hereby incorporated by reference.

(3) Commerce Bancshares, Inc. Stock Purchase Plan for Non-Employee Directors amended and restated as of December 21, 2021 was filed in registration statement on Form S-8 (Commission file number 333-262580) dated February 8, 2022, and the same is hereby incorporated by reference.

(4) Commerce Executive Retirement Plan amended and restated as of January 28, 2011 was filed in annual report on Form 10-K (Commission file number 0-2989) dated February 25, 2011, and the same is hereby incorporated by reference.

(5) 2009 Form of Severance Agreement between Commerce Bancshares, Inc. and the persons listed at the end of such agreement was filed in annual report on Form 10-K (Commission file number 1-36502) dated February 24, 2015, and the same is hereby incorporated by reference.

(6) 2015 Form of Severance Agreement between Commerce Bancshares, Inc. and the persons listed at the end of such agreement was filed in annual report on Form 10-K (Commission file number 1-36502) dated February 24, 2015, and the same is hereby incorporated by reference.

(7) 2009 Form of Severance Agreement between Commerce Bancshares, Inc. and the persons listed at the end of such agreement was filed in annual report on Form 10-K (Commission file number 1-36502) dated February 21, 2019, and the same is hereby incorporated by reference.

(8) Commerce Bancshares, Inc. 2024 Compensatory Arrangements with CEO and Named Executive Officers were filed in amended current report on Form 8-K (Commission file number 1-36502) dated February 6, 2024, and the same is hereby incorporated by reference.

(9) Commerce Bancshares, Inc. Amended and Restated Equity Incentive Plan, amended and restated as of April 19, 2023, was filed in current report on Form 8-K (Commission file number 1-36502) dated April 25, 2023, and the same is hereby incorporated by reference.

(10) Commerce Bancshares, Inc. Stock Appreciation Rights Agreement and Commerce Bancshares, Inc. Restricted Stock Award Agreement, pursuant to the 2005 Equity Incentive Plan, were filed in current report on Form 8-K (Commission file number 0-2989) dated February 23, 2006, and the same are hereby incorporated by reference.

(11) Commerce Bancshares, Inc. Stock Appreciation Rights Agreement, Commerce Bancshares, Inc. Restricted Stock Award Agreements for Executive Officers, and Commerce Bancshares, Inc. Restricted Stock Award Agreements for Employees other than Executive Officers, pursuant to the 2005 Equity Incentive Plan, were filed in quarterly report on Form 10-Q (Commission file number 0-2989) dated May 6, 2013, and the same are hereby incorporated by reference.

(12) Form of Notice of Grant of Award and Award Agreement for Restricted Stock for Executive Officers, pursuant to the Commerce Bancshares, Inc. 2005 Equity Incentive Plan, was filed in quarterly report on Form 10-Q (Commission file number 0-2989) dated May 7, 2014, and the same is hereby incorporated by reference.

(13) Form of Notice of Grant of Award and Award Agreement for Restricted Stock for Employees other than Executive Officers, pursuant to the Commerce Bancshares, Inc. 2005 Equity Incentive Plan, was filed in quarterly report on Form 10-Q (Commission file number 0-2989) dated May 7, 2014, and the same is hereby incorporated by reference.

(14) Form of Notice of Grant of Award and Award Agreement for Stock Appreciation Rights, pursuant to the Commerce Bancshares, Inc. 2005 Equity Incentive Plan, was filed in quarterly report on Form 10-Q (Commission file number 0-2989) dated May 7, 2014, and the same is hereby incorporated by reference.

(15) Form of Notice of Grant of Award and Award Agreement for Restricted Stock, pursuant to the Commerce Bancshares, Inc. 2005 Equity Incentive Plan, was filed in annual report on Form 10-K (Commission file number 1-36502) dated February 21, 2019, and the same is hereby incorporated by reference.

21 — Subsidiaries of the Registrant

23 — Consent of Independent Registered Public Accounting Firm

24 — Power of Attorney

31.1 — Certification of CEO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

31.2 — Certification of CFO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

32 — Certifications of CEO and CFO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

97 — Commerce Bancshares, Inc. Incentive Compensation Clawback Policy

101 — Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Changes in Equity, (v) the Consolidated Statements of Cash Flows and (vi) the Notes to Consolidated Financial Statements, tagged as blocks of text and in detail. The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.

104 — Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

## Item 16. FORM 10-K SUMMARY

None.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized this 22nd day of February 2024.

COMMERCE BANCSHARES, INC.

By: /s/ MARGARET M. ROWE
Margaret M. Rowe
*Vice President & Secretary*

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on the 22nd day of February 2024.

By: /s/ JOHN W. KEMPER
John W. Kemper
*Chief Executive Officer*

By: /s/ CHARLES G. KIM
Charles G. Kim
*Chief Financial Officer*

By: /s/ PAUL A. STEINER
Paul A. Steiner
*Controller*
*(Chief Accounting Officer)*

| Directors | |
|---|---|
| Terry D. Bassham | |
| Blackford F. Brauer | |
| W. Kyle Chapman | |
| Karen L. Daniel | |
| Earl H. Devanny, III | |
| June McAllister Fowler | |
| David W. Kemper | |
| John W. Kemper | All the Directors on the Board of Directors* |
| Jonathan M. Kemper | |
| Benjamin F. Rassieur, III | |
| Todd R. Schnuck | |
| Christine B. Taylor | |
| Kimberly G. Walker | |

* The Directors of Registrant listed executed a power of attorney authorizing Margaret M. Rowe, their attorney-in-fact, to sign this report on their behalf.

By: /s/ MARGARET M. ROWE
Margaret M. Rowe
*Attorney-in-Fact*

**Exhibit 21**

The consolidated subsidiaries of the Registrant at February 1, 2024 were as follows:

| Name | State or Other Jurisdiction of Incorporation |
|---|---|
| CBI-Kansas, Inc. | Kansas |
| Commerce Bank | Missouri |
| Commerce Brokerage Services, Inc. | Missouri |
| Clayton Holdings, LLC | Missouri |
| Clayton Financial Corp. | Missouri |
| Clayton Realty Corp. | Missouri |
| Illinois Financial, LLC | Delaware |
| Illinois Realty, LLC | Delaware |
| Commerce Insurance Services, Inc. | Missouri |
| Commerce Investment Advisors, Inc. | Missouri |
| CBI Equipment Finance, Inc. | Missouri |
| CB Acquisition, LLC | Delaware |
| LJ Hart & Company | Missouri |
| Tower Redevelopment Corporation | Missouri |
| CFB Partners, LLC | Delaware |
| CFB Venture Fund I, Inc. | Missouri |
| CFB Venture Fund, L.P. | Delaware |
| Capital for Business, Inc. | Missouri |

**Exhibit 23**

## Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements No. 33-28294, No. 33-82692, No. 33-8075, No. 33-78344, No. 333-14651, No. 333-186867, No. 333-188374, No. 333-214495, No. 333-262580, and No. 333-271679 on Form S-8 and No. 333-140221 on Form S-3ASR of our reports dated February 22, 2024, with respect to the consolidated financial statements of Commerce Bancshares, Inc. and the effectiveness of internal control over financial reporting.

KPMG LLP

Kansas City, Missouri
February 22, 2024

**Exhibit 24**

## POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that the undersigned do hereby appoint Margaret M. Rowe and Paul A. Steiner, or either of them, attorney for the undersigned to sign the Annual Report on Form 10-K of Commerce Bancshares, Inc., for the fiscal year ended December 31, 2023, together with any and all amendments which might be required from time to time with respect thereto, to be filed with the Securities and Exchange Commission under the Securities Exchange Act of 1934, with respect to Commerce Bancshares, Inc., with full power and authority in either of said attorneys to do and perform in the name of and on behalf of the undersigned every act whatsoever necessary or desirable to be done in the premises as fully and to all intents and purposes as the undersigned might or could do in person.

IN WITNESS WHEREOF, the undersigned have executed these presents as of this 2nd day of February, 2024.

/s/ TERRY D. BASSHAM

/s/ BLACKFORD F. BRAUER

/s/ W. KYLE CHAPMAN

/s/ KAREN L. DANIEL

/s/ EARL H. DEVANNY, III

/s/ JUNE MCALLISTER FOWLER

/s/ DAVID W. KEMPER

/s/ JOHN W. KEMPER

/s/ JONATHAN M. KEMPER

/s/ BENJAMIN F. RASSIEUR, III

/s/ TODD R. SCHNUCK

/s/ CHRISTINE B. TAYLOR

/s/ KIMBERLY G. WALKER

**Exhibit 31.1**

# CERTIFICATION

I, John W. Kemper, certify that:

1. I have reviewed this annual report on Form 10-K of Commerce Bancshares, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ JOHN W. KEMPER

John W. Kemper
*President and*
*Chief Executive Officer*

February 22, 2024

**Exhibit 31.2**

# CERTIFICATION

I, Charles G. Kim, certify that:

1. I have reviewed this annual report on Form 10-K of Commerce Bancshares, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ CHARLES G. KIM

Charles G. Kim
*Executive Vice President and*
*Chief Financial Officer*

February 22, 2024

**Exhibit 32**

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

In connection with the Annual Report of Commerce Bancshares, Inc. (the "Company") on Form 10-K for the year ended December 31, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, John W. Kemper and Charles G. Kim, Chief Executive Officer and Chief Financial Officer, respectively, of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of our knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOHN W. KEMPER

John W. Kemper
*Chief Executive Officer*

/s/ CHARLES G. KIM

Charles G. Kim
*Chief Financial Officer*

February 22, 2024

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**CORPORATE HEADQUARTERS**
1000 Walnut Street
P.O. Box 419248
Kansas City, MO 64141-6248
816.234.2000
www.commercebank.com

**TRANSFER AGENT, REGISTRAR AND DIVIDEND DISBURSING AGENT**
**Shareholder correspondence should be mailed to:**
Computershare
P.O. Box 43006
Providence, RI 02940-3006

**Overnight correspondence should be sent to:**
Computershare
150 Royall Street, Suite 101
Canton, MA 02021

Within USA Telephone: 800.317.4445
Outside USA Telephone: 781.575.2879
Hearing Impaired/TDD: 800.952.9245
Website: www.computershare.com/investor

**Shareholder online inquiries:**
https://www.us.computershare.com/investor/contact

**STOCK EXCHANGE LISTING**
Nasdaq
Common Stock Symbol: CBSH

**ANNUAL MEETING**
This year's annual meeting will be a virtual meeting of shareholders. The meeting will be held Wednesday, April 17, 2024, at 9:30 a.m. Central, and you may attend via webcast. Please note there is no in-person meeting to attend.

**INVESTOR INQUIRIES**
**Shareholders, analysts and others seeking information about the company should direct their inquiries to:**
Matt Burkemper
Senior Vice President, Commerce Bank
Corporate Development and Investor Relations
8001 Forsyth Boulevard
St. Louis, MO 63105
314.746.7485
CBSHInvestorRelations@commercebank.com

## SHAREHOLDERS MAY RECEIVE FUTURE ANNUAL REPORTS AND PROXY MATERIALS ONLINE

To receive materials electronically rather than by mail, **individuals who hold stock in their name** may enroll for electronic delivery at Computershare's investor website: **www.computershare.com/investor**

- If you have already created a login ID and password at the above site, log in and follow the prompts to "Enroll in Electronic Delivery."
- If you have not created a login ID and password at the above site, choose "Create Login." You will need the Social Security number or tax ID number associated with your Commerce stock account to create the login. After you have created your login, follow the prompts to "Enroll in Electronic Delivery."

Please note:

- Your consent is entirely revocable.
- You can always vote your proxy on the internet whether or not you elect to receive your materials electronically.

Shareholders who hold their Commerce stock through a bank, broker or other holder of record should refer to the information provided by that entity for instructions on how to elect to view future Annual Reports and Proxy Statements over the internet.

Employee PIP [401(k)] shareholders who have a company email address and online access will automatically be enrolled to receive the Annual Report, Proxy Statement and proxy card over the internet unless they choose to opt out by emailing the corporate secretary at Peggy.Rowe@commercebank.com.

1000 WALNUT
P.O. BOX 419248
KANSAS CITY, MO 64141-6248
Phone: 816.234.2000
800.892.7100

Email: CBSHInvestorRelations@commercebank.com
Website: www.commercebank.com

An Equal Opportunity Employer

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