

2022

Comerica Incorporated Annual Report



COMERICA INCORPORATED

Founded in 1849, Comerica Incorporated (NYSE: CMA) is a financial services company headquartered in Dallas, Texas, strategically aligned by three business segments: The Commercial Bank, The Retail Bank and Wealth Management. Comerica focuses on relationships, and helping people and businesses be successful. In addition to Texas, Comerica Bank locations can be found in Arizona, California, Florida and Michigan, with select businesses operating in several other states, as well as in Canada and Mexico. As of December 31, 2022, Comerica had:

\$85.4 billion in assets | \$53.4 billion in loans | \$71.4 billion in deposits | 409 U.S. banking centers | 7,488 employees (FTE)

OUR PROMISE

We will Raise Your Expectations® of what a bank can be.

OUR CORE VALUES

One Comerica • The Customer Comes First • The Bigger Possible • A Force For Good • Trust. Act. Own.

BOARD OF DIRECTORS

Curtis C. Farmer

Chairman, President and Chief Executive Officer
Comerica Incorporated and Comerica Bank

Michael E. Collins (1) (3) (4)

Chair and Senior Counselor, Blake Collins Group
Former Consultant, Federal Reserve Bank of Cleveland
Former Executive Vice President, Federal Reserve Bank of Philadelphia

Roger A. Cregg (1) (3) (4)

Former President and Chief Executive Officer
AV Homes, Inc.

Nancy Avila (4)

Executive Vice President, Chief Information and Technology Officer
McKesson Corporation

Jacqueline P. Kane (2)

Retired Executive Vice President of
Human Resources and Corporate Affairs
The Clorox Company

Derek Kerr (1)

Vice Chair and Strategic Advisor
American Airlines Group Inc. and President, American Eagle

Richard G. Lindner (1) (2) (3)

Retired Senior Executive Vice President and
Chief Financial Officer
AT&T, Inc.

Jennifer Sampson (4)

McDermott-Templeton President and
Chief Executive Officer
United Way of Metropolitan Dallas

Barbara R. Smith (2) (5)

Chairman, President and Chief Executive Officer
Commercial Metals Company

Robert S. Taubman (4)

Chairman and Chief Executive Officer
The Taubman Realty Group LLC
Chairman, President and Chief Executive Officer
The Taubman Company LLC

Reginald M. Turner, Jr. (1) (3)

Member Emeritus
Clark Hill PLC

Nina G. Vaca (2)

Chairman and Chief Executive Officer
Pinnacle Technical Resources, Inc. and Vaca Industries Inc.

Michael G. Van de Ven (2)

Executive Advisor
Southwest Airlines Co.

(1) Audit Committee

(2) Governance, Compensation and Nominating Committee

(3) Qualified Legal Compliance Committee

(4) Enterprise Risk Committee

(5) Independent Facilitating Director

SENIOR LEADERSHIP TEAM

Curtis C. Farmer

Chairman, President and Chief Executive Officer

James J. Herzog

Senior Executive Vice President, Chief Financial Officer

Wendy W. Bridges

Executive Vice President, Corporate Responsibility

Megan D. Burkhart

Senior Executive Vice President, Chief Administrative Officer and
Chief Human Resources Officer

J. McGregor Carr

Executive Vice President, Wealth Management

Melinda A. Chausse

Senior Executive Vice President, Chief Credit Officer

Megan D. Crespi

Senior Executive Vice President, Chief Operating Officer

Von E. Hays

Executive Vice President, Chief Legal Officer and General Counsel

Cassandra M. McKinney

Executive Vice President, Retail Bank

Christine M. Moore

Executive Vice President, Chief Auditor

Jay K. Oberg

Senior Executive Vice President, Chief Risk Officer

Peter L. Sefzik

Senior Executive Vice President, Chief Banking Officer

James H. Weber

Executive Vice President, Chief Experience Officer

2022 Company Highlights



\$2.7
BILLION

in green loans and commitments as of 12/31/22

Reached **~85%** of



\$5
BILLION

commitment to small business lending from 2021-2023



42%

of Comerica's U.S. employees are racial/ethnic minorities



53%

of Comerica's managers are female



100% OF BUSINESS UNITS ACHIEVED AN 'OUTSTANDING' RATING ON DEI PERFORMANCE GOALS



Ranked among Newsweek's listing of America's Most Responsible Companies



Expanded Southeast Market to include South Carolina and Georgia

Announced new office locations in Frisco, Texas, and Farmington Hills, Michigan.



APPROXIMATELY

79,000



individuals from low- to moderate-income communities reached by **Comerica \$ense** financial education programs

57%

GHG reduction achieved early¹

HOSTED MORE THAN

2,000

small business bootcamps



OVER

66,000 HOURS

of volunteer time equating to more than **\$1.9 million** donated to nonprofits by Comerica colleagues



Named a 2022 Best Employer for Women by Forbes

FINANCIALS

RECORD REVENUE

(in billions)



LOANS

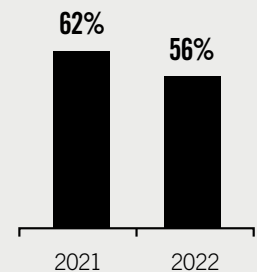
(in billions; average)



RECORD EPS²



EFFICIENCY RATIO



COMERICA'S CORE VALUES

ONE COMERICA



We believe that growth is achieved when our colleagues act with common purpose in support of shared goals.

THE CUSTOMER COMES FIRST



We put our customers at the center of every conversation and make their satisfaction our highest priority.

THE BIGGER POSSIBLE



We encourage a culture of bold and relentless curiosity, where any idea has a chance to be heard.

A FORCE FOR GOOD



We value empathy and integrity as we work to create a more diverse, inclusive and sustainable workplace, and world.

TRUST. ACT. OWN.



Everyone is empowered to do what's right, speak up, and be heard, while being accountable for their actions and commitments.

¹ Scope 1 and 2 real estate-based vs. 2012 baseline (unaudited data as of Q3 2022) ² Diluted earnings per common share

TO OUR SHAREHOLDERS



Curtis C. Farmer
Chairman, President and Chief Executive Officer

To my fellow shareholders,

Over the last two years, the global pandemic presented unprecedented challenges and, while its lingering effects remain, I am extremely proud of the work Comerica and our colleagues have put forth in continuing to support our colleagues, customers and communities. This unique time in history has taught us so much, enabling us to further strengthen the organization. Our relationship-focused approach has served as the cornerstone of Comerica's success for more than 173 years, but through this process we have learned relationships can be fostered in new and various ways. We have reignited in-person interactions that we have long missed during the pandemic, but we have also developed innovative ways of working and building relationships to engage in whichever manner most effectively meets the needs of the customer, colleague or situation.

Despite the challenges, 2022 served as an inflection point for our company. We entered the year focused on addressing important priorities centered on our colleagues, customers, community and performance. Comerica and our more than 7,400 employees, while establishing our company's vision for the future, delivered on our promise of raising expectations by helping the bank achieve a record-level performance, strengthening our local communities and enhancing customer service.

New Era of Banking

The redesign of our corporate logo serves as a representation of Comerica's commitment to both our legacy and vision for the future. We retained our signature typeface and colors, but replaced the traditional trapezoid with a new design element of three ribbons – representing our Commercial Bank, Retail Bank and Wealth Management – above the name to visually convey energy and symbolize Comerica's forward momentum.

Coupled with the logo redesign, we refreshed our core values, which reinforce our company's culture. The core values are intended to be simple, memorable, inspirational, and most importantly, actionable. They include:

- One Comerica
- The Customer Comes First
- The Bigger Possible
- A Force For Good
- Trust. Act. Own.

These core values represent the heart of our organization and will serve as our guiding principles as we build on our legacy.

We also announced transformational plans for our workplaces to become destinations of choice supporting talent retention and attraction. Two new offices, located in Farmington Hills, Michigan, and Frisco, Texas, will feature expanded technology capabilities and improved amenities that will inspire our colleagues and customers. These new spaces will energize colleagues while providing the choice of various environments to collaborate with others, interact formally and informally, and work independently, based on their needs for the day. They also represent an investment in our strategic vision and position the bank for future success.

Enhancing Digital Capabilities

We made advancements in modernizing our technology and digital capabilities, building a scalable cloud-first platform to effectively deliver services to customers and colleagues with greater speed and agility. More than 70% of our business applications are operating in a cloud or software as a service model.

With the customers' needs always top of mind, we continued modernization efforts to core platforms. These enhancements allow us to improve operational success, while better equipping colleagues with the tools to deliver an enhanced customer experience. Our investments in technology cross the entire business, including migrating our financial planning systems to an industry-leading cloud-based solution, upgrading our retail mobile application, and modernizing our enterprise data capabilities.

By leveraging a modern set of digital and digitization tools to reimagine and reengineer critical customers journeys, we are even better equipped to meet the evolving needs of our customers. Our first two transformational customer journeys are improving the onboarding experience, allowing customers to quickly access the products and services they need to support their business. Our technology investments remain critical to our future, better positioning Comerica to deliver on its customer-first approach while improving colleague efficiency.

Meeting Customers Where They Are

The way customers bank has continued to evolve, and the pandemic accelerated that pace of change. We have prioritized technology as customers further leverage digital channels to meet their banking needs. To assist both our customers and our colleagues in this digital banking transition, the Retail Bank is furthering its journey to compete and lead in a new era of hyper-competitive banking and

elevated consumer/business expectations. This long-term process allows us to identify areas where we can improve in delivering the optimal banking experience for both the customer and our colleagues.

We are adding more dedicated roles to enable colleagues to spend more time with customers and build on our relationship approach to banking. Investing in colleagues allows us to redevelop them in the areas most important to our customers. We are also enhancing technology and processes that streamline customer interactions and eliminate potential challenges. Lastly, we are redesigning the banking center model to optimize the customer experience and modernize the look, feel and functionality of our banking centers.

Expanding Comerica's Presence

One of our many strengths has been our diversified geographic footprint that spans coast to coast. We have offices in 14 of the 15 largest metropolitan areas in the United States, yielding opportunities for growth. In 2021, we identified the Southeast as an area for growth. We established our new Southeast Market originating in North Carolina with middle market and wealth management expertise, supplementing the ongoing business activity already occurring in the region.

In 2022, we opened a new office in Raleigh, North Carolina, our Southeast Market headquarters, as well as an office in Charlotte. Our third office will soon open in Winston-Salem, North Carolina, in early 2023. We also announced the next phase for our Southeast strategy, expanding into South Carolina and Georgia, with commercial banking offices in Charleston and Greenville, South Carolina, and a private banking office in Atlanta, Georgia. Additional growth initiatives in the region and across Florida have included new commercial banking roles in Tampa, Jacksonville and Boca Raton, along with wealth and private banking roles in Miami and Tampa. Exporting our business model to this important new market accelerates growth potential, creates additional brand recognition, and introduces Comerica's long history of serving its customers to a new customer base.

Along with our expansion in the Southeast, we announced additional Middle Market and Business Banking resources for our newly established Mountain West region, promoting growth across Arizona and Colorado.

Transformational Leadership

In this evolving landscape, it is more important than ever to have the right leadership and organizational structure to execute on our strategy and drive our company into the future. Throughout 2022, we successfully attracted talent, particularly in key leadership roles such as Payments, Small Business, Technology and more, to balance new, transformational thinking with proven Comerica experience. Further, we continued to realign our structure to drive more synergistic collaboration and enhance agility. Our people are our strongest asset, and I am confident in the leadership we have at all levels of our organization in guiding our colleagues to deliver an elevated customer experience.

Fulfilling Our Promise to The Communities

Comerica excels at cultivating relationships and those we foster with our local communities lead to impactful and powerful partnerships. Our bank succeeds when the communities we serve thrive and when we continue to exercise our commitment to help others as a force for good. The pandemic and its prolonged effects have impacted communities, nonprofits and small businesses, and we have stepped up to meet the challenges and aid in the ongoing recovery.

As a trusted resource for financial education, Comerica's colleagues empower our communities with important lessons and resources. Through our Comerica \$ense financial education program, our positive impact was felt, reaching more than 79,000 individuals from low- to moderate-income communities. We support small businesses and entrepreneurs as we share our expertise and knowledge while, at the same time, raise awareness of resources to ensure their long-term success. In 2022, we hosted over 2,000 small business bootcamps to help meet their needs.

Striving to be a force for good, we achieved around 85% of our three-year goal to provide \$5 billion in small business loans and deployed unique solutions such as our latest project, Comerica BusinessHQ. This initiative complements our support for small businesses and entrepreneurs by creating collaborative spaces that offer integral services and value to small businesses in the Southern sector of Dallas. Renovation of our South Dallas location will transform it into a community resource, offering coworking spaces, incubation fellowships and technical assistance. The goal is to address three essential needs of aspiring small businesses: capital, cultivation and connectivity.

Our colleagues continued to display their commitment to positively impacting our communities. Their dedication to volunteering and offering their talents allowed us to surpass our targeted 2022 goal, with volunteers recording more than 66,000 hours – translating to over \$1.9 million worth of time invested back into our local communities.

Stewards For a Brighter Future

We are proud of our longstanding commitment to protect and preserve a sustainable future. Comerica remains dedicated to identifying ways to deliver positive outcomes that support the needs of future generations. Our commitment is reflected in publishing Comerica's inaugural Taskforce for Climate-related Financial Disclosure (TCFD) report. This report highlights our long history in the sustainability and climate space and introduces Comerica's climate commitment to support our customers, integrate climate matters into our business and continue to reduce our environmental footprint.

We expanded the Environmental Services Department with the introduction of the Renewable Energy Solutions Group, which complements our renewable energy business and reinforces our commitment to sustainability. To date, the division produced \$350 million in loans, contributing to our total \$2.7 billion in green loans and commitments – up 60% over 2021.

Following a two-year absence due to the pandemic, we rejoined our partner Iron Mountain to reestablish our signature Shred Day events in Dallas/Fort Worth, Detroit, Houston and Phoenix. These events have remained a fixture in our local communities and serve as an integral part of our corporate responsibility commitment. In 2022, our communities rallied to securely shred their sensitive documents and help stock the shelves for local food pantries by shredding more than 449,000 pounds of paper and collecting more than 15,000 pounds of food. Since the event's inception in 2008, we have collected more than 6.2 million pounds of paper for recycling, while providing 1.4 million meals for local residents.

We are proud of the recognition our sustainability efforts have received, placing Comerica in the same category with some of the country's largest companies. For the fourth consecutive year, we were named to Newsweek's list of America's Most Responsible Companies. The Center for Climate and Energy Solutions and The Climate Registry inducted Comerica into its Hall of Fame, celebrating exemplary corporate, organization and individual leadership in response to climate change. And as a Texas-headquartered company, Texan by Nature recognized us as a 2022 TxN 20 honoree for leadership in conservation and sustainability.

Success Through Diversity

Diversity, Equity and Inclusion (DEI) at Comerica are woven into the essence of who we are and how we act. Our commitment to our colleagues, customers and communities supports success for all.

We continued to track the progress of our diversity initiatives. Our DEI Scorecard measures progress on our diversity initiatives, ensuring we are meeting documented short- and long-term goals. In 2022, 100% of business units met their DEI performance goals with all grading at a minimum of 'Outstanding' for the performance rating.

Advancing Comerica's culture to attract, develop and retain talent as a DEI strategic priority continued to accelerate with the "Comerica Together" program. We educated senior leaders to improve their ability to lead inclusively, facilitated sessions with Comerica leadership to advance cultural and empathy competency, conducted a leadership assessment of our organization and its values and missions, launched a corporate-wide communication campaign to build a common DEI language and finalized a go forward DEI vision.

Pursuit to continuously improve DEI initiatives and the recognition our initiatives received have us confident we are moving on the right path. Comerica was proudly named a Best Employer for Women by Forbes and one of the Best U.S. Companies for Diversity by the National Diversity Council.

Strong Financial Performance

Our strong performance resulted in another record year with 2022 earnings per share of \$8.47. Most business lines contributed to loan growth of 3%, or 8% excluding PPP activity, our highest organic growth rate in well over a decade. Following a significant increase driven by government stimulus in 2021, average deposits declined to \$75.5 billion as customers utilized excess cash, and we executed strategic pricing actions. Despite the decline, our loan to deposit ratio was 75%, well below our historical average, and we feel confident in our ability to fund loan growth.

Strong, broad-based loan growth and management of loan and deposit pricing in a rising rate environment drove revenue to an all-time high of over \$3.5 billion. Prudent expense discipline generated an efficiency ratio of 56%.

Credit remained excellent as evidenced by net charge-offs of only 3 basis points and problem assets remain well below our historical norm. In summary, we produced exceptional results with an ROE of 18.6% and an ROA of 1.32%.

It was a banner year, and I am excited about Comerica's direction as we continue to chart a new course in the bank's 173-year history. The accomplishments and milestones we continue to eclipse are a testament to the unwavering dedication of our colleagues who share in our commitment of raising expectations. As our most important asset, our colleagues power our progress, and their efforts will continue to build on Comerica's historic legacy. Further, ongoing shareholder support of our company, results and vision remains invaluable, and we remain grateful for your continued investment.

Sincerely,



Curtis C. Farmer
Chairman, President and Chief Executive Officer

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549
FORM 10-K

Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2022

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 number 1-10706

Comerica Incorporated

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

38-1998421

(IRS Employer Identification Number)

**Comerica Bank Tower
1717 Main Street, MC 6404
Dallas, Texas 75201**

(Address of Principal Executive Offices) (Zip Code)

(214) 462-6831

(Registrant's Telephone Number, Including Area Code)

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

Title of each class	Trading symbol	Name of each exchange on which registered
Common Stock, \$5 par value	CMA	New York Stock Exchange

**Securities registered pursuant to Section 12(g) of the
Exchange 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 registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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.

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

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

Indicate by check mark whether the registrant 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.

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

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 this 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 require 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).

At June 30, 2022 (the last business day of the registrant's most recently completed second fiscal quarter), the registrant's common stock, \$5 par value, held by non-affiliates had an aggregate market value of approximately \$9.5 billion based on the closing price on the New York Stock Exchange on that date of \$73.38 per share. For purposes of this Form 10-K only, it has been assumed that all common shares Comerica's Trust Department holds for Comerica's employee plans, and all common shares the registrant's directors and executive officers hold, are shares held by affiliates.

At February 10, 2023, the registrant had outstanding 131,352,922 shares of its common stock, \$5 par value.

Documents Incorporated by Reference:

Part III: Items 10-14—Proxy Statement for the Annual Meeting of Shareholders to be held April 25, 2023.

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PART I

Item 1. Business.

GENERAL

Comerica Incorporated (“Comerica”) is a financial services company, incorporated under the laws of the State of Delaware in 1973, and headquartered in Dallas, Texas. Based on total assets as reported in the most recently filed Consolidated Financial Statements for Bank Holding Companies (FR Y-9C), it was among the 25 largest commercial United States (“U.S.”) financial holding companies. As of December 31, 2022, Comerica owned directly or indirectly all the outstanding common stock of 2 active banking subsidiaries (Comerica Bank, a Texas banking association, and Comerica Bank & Trust, National Association) and 28 non-banking subsidiaries. At December 31, 2022, Comerica had total assets of approximately \$85.4 billion, total deposits of approximately \$71.4 billion, total loans of approximately \$53.4 billion and shareholders’ equity of approximately \$5.2 billion.

Comerica has strategically aligned its operations into three major business segments: the Commercial Bank, the Retail Bank, and Wealth Management. In addition to the three major business segments, Finance is also reported as a segment.

Comerica operates in three primary geographic markets - Texas, California, and Michigan, as well as in Arizona and Florida, with select businesses operating in several other states, and in Canada and Mexico.

We provide information about the net interest income and noninterest income we received from our various classes of products and services: (1) under the caption, “Analysis of Net Interest Income” starting on page F-4 of the Financial Section of this report; (2) under the caption “Rate/Volume Analysis” starting on page F-5 of the Financial Section of this report; and (3) under the caption “Noninterest Income” starting on page F-6 of the Financial Section of this report.

COMPETITION

The financial services business is highly competitive. Comerica and its subsidiaries mainly compete in their primary geographic markets covering the major metropolitan areas in Texas, California, and Michigan, as well as in Arizona and Florida. In addition, they compete throughout the continental U.S., Mexico and Canada as they pursue certain businesses on a national scale that fall outside of the primary markets, such as U.S. Banking, Mortgage Banker, Environmental Services and National Dealer Services. They have strategically placed offices in faster growing markets where there is a concentration of customers and industries they serve. Comerica has recently expanded its presence in the Southeastern U.S. by establishing commercial offices in North Carolina and South Carolina, as well as a private banking office in Georgia. Additionally, Comerica is making investments in the Mountain West region of the United States.

Comerica is subject to competition with respect to various products and services, including, without limitation, commercial products such as loans and lines of credit, deposits, cash management (including payments solutions and card services), capital markets, international trade finance, letters of credit, foreign exchange management and loan syndications; consumer products such as loans, deposits and origination of mortgage loans and credit cards; and wealth management services such as fiduciary, private banking, retirement, securities-based lending, investment management and advisory, investment banking, brokerage and the sale of annuities and life, disability and long-term care insurance products.

Comerica competes largely on the basis of industry expertise, the range of products and services offered, pricing and reputation, convenience, quality of service, responsiveness to customer needs and the overall customer relationship. Comerica's competitors include financial institutions of all sizes. Some of Comerica's larger competitors, including certain nationwide banks that have a significant presence in Comerica's markets, may have a broader array of products and structure alternatives and, due to their size, may more easily absorb credit losses. Some of Comerica's competitors (larger or smaller) may have more liberal lending policies and aggressive pricing standards for loans, deposits and services.

Increasingly, Comerica competes with other companies based on financial technology and capabilities, such as mobile banking applications and funds transfer. Further, Comerica's competitors may be subject to significantly different or lesser regulation due to their asset size or types of products offered. Some competitors may also have the ability to more efficiently utilize resources to comply with regulations or may be able to more effectively absorb the cost of regulations.

In addition to banks, Comerica and its banking subsidiaries also face competition from financial intermediaries, including savings and loan associations, consumer and commercial finance companies, leasing companies, venture capital funds, credit unions, investment banks, insurance companies and securities firms. Competition among providers of financial products and services continues to increase as technology advances have lowered the barriers to entry for financial technology companies, with customers having the opportunity to select from a growing variety of traditional and nontraditional alternatives, including crowdfunding, digital wallets and money transfer services. The ability of non-banks to provide services previously limited to traditional banks has intensified competition. Because non-banks are not subject to many of the same regulatory restrictions as banks and bank holding companies, they can often operate with greater flexibility and lower cost structures.

Finally, the industry continues to consolidate, which eliminates some regional and local institutions, while potentially strengthening acquirers. Comerica believes that the level of competition in all geographic markets will continue to increase in the future.

SUPERVISION AND REGULATION

Banks, bank holding companies, and financial institutions are highly regulated at both the state and federal level. Comerica is subject to supervision and regulation at the federal level by the Board of Governors of the Federal Reserve System through the Federal Reserve Bank of Dallas (“FRB”) under the Bank Holding Company Act of 1956, as amended. Comerica Bank is chartered by the State of Texas and at the state level is supervised and regulated by the Texas Department of Banking under the Texas Finance Code and the Texas Administrative Code. Comerica Bank has elected to be a member of the Federal Reserve System under the Federal Reserve Act and, consequently, is supervised and regulated by the FRB. Comerica Bank & Trust, National Association is chartered under federal law and is subject to supervision and regulation by the Office of the Comptroller of the Currency (“OCC”) under the National Bank Act. Comerica Bank & Trust, National Association, by virtue of being a national bank, is also a member of the Federal Reserve System. Furthermore, given that Comerica Bank is a bank with assets in excess of \$10 billion dollars, it is subject to supervision and regulation by the Consumer Financial Protection Bureau (“CFPB”) for purposes of assessing compliance with federal consumer financial laws. The deposits of Comerica Bank and Comerica Bank & Trust, National Association are insured by the Deposit Insurance Fund (“DIF”) of the Federal Deposit Insurance Corporation (“FDIC”) to the extent provided by law, and therefore Comerica Bank and Comerica Bank & Trust, National Association are each also subject to regulation and examination by the FDIC. Certain transactions executed by Comerica Bank are also subject to regulation by the U.S. Commodity Futures Trading Commission (“CFTC”). The Department of Labor (“DOL”) regulates financial institutions providing services to plans governed by the Employee Retirement Income Security Act of 1974. Comerica Bank’s Canada branch is supervised by the Office of the Superintendent of Financial Institutions and its Mexico representative office is supervised by the Banco de México. Comerica Bank is also registered in the Cayman Islands and subject to supervision by the Cayman Islands Monetary Authority.

The FRB supervises non-banking activities conducted by companies directly and indirectly owned by Comerica. In addition, Comerica’s non-banking subsidiaries are subject to supervision and regulation by various state, federal and self-regulatory agencies, including, but not limited to, the Financial Industry Regulatory Authority, Inc. (“FINRA”), the Department of Licensing and Regulatory Affairs of the State of Michigan, the Municipal Securities Rulemaking Board (“MSRB”) and the Securities and Exchange Commission (“SEC”) (in the case of Comerica Securities, Inc.); the Department of Insurance and Financial Services of the State of Michigan (in the case of Comerica Insurance Services, Inc.); and the DOL (in the case of Comerica Securities, Inc. and Comerica Insurance Services, Inc.).

Both the scope of the laws and regulations and intensity of supervision to which Comerica’s business is subject continue to increase in response to the financial crisis as well as other factors such as technological, economic and market changes. Many of these changes have occurred as a result of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) and its implementing regulations, most of which are now in place. In 2018, with the passage of the Economic Growth, Regulatory Relief and Consumer Protection Act (“EGRRCPA”), as described below, there was some recalibration of the post-financial crisis framework; however, Comerica’s business remains subject to extensive regulation and supervision.

Comerica is also subject to the disclosure and regulatory requirements of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, both as administered by the SEC, as well as the rules of the New York Stock Exchange.

Described below are material elements of selected laws and regulations applicable to Comerica and its subsidiaries. The descriptions are not intended to be complete and are qualified in their entirety by reference to the full text of the statutes and regulations described. Changes in applicable law or regulation, and in their application by regulatory agencies, cannot be predicted, but they may have a material effect on the business of Comerica and its subsidiaries.

Economic Growth, Regulatory Relief and Consumer Protection Act

On May 24, 2018, EGRRCPA was signed into law. Among other regulatory changes, EGRRCPA amended various sections of the Dodd-Frank Act, including section 165 of Dodd-Frank Act, which was revised to raise the asset thresholds for determining the application of enhanced prudential standards for bank holding companies. Under EGRRCPA bank holding companies with less than \$100 billion of consolidated assets, including Comerica, are exempt from all of the Dodd-Frank enhanced prudential standards, except risk committee requirements. As a result, Comerica currently is not subject to the remaining Dodd-Frank Act enhanced prudential standards or certain capital and liquidity rules to large bank holding companies and depository institutions (the “Tailoring Rules”). Should Comerica cross the \$100 billion asset threshold and thus become a Category IV firm, it will be subject to additional and more stringent regulation, which includes, but is not limited to, enhanced prudential standards for U.S. banking organizations with \$100 to \$250 billion of consolidated assets such as supervisory-run

stress testing; internal liquidity stress testing; and liquidity buffer requirements. In addition, Comerica would be required to pay the supervision and regulation fee assessment under the Dodd-Frank Act.

Requirements for Approval of Activities and Acquisitions

The Gramm-Leach-Bliley Act expanded the activities in which a bank holding company registered as a financial holding company can engage. Comerica became a financial holding company in 2000. As a financial holding company, Comerica may affiliate with securities firms and insurance companies, and engage in activities that are financial in nature or incidental or complementary to activities that are financial in nature. Activities that are “financial in nature” include, but are not limited to: securities underwriting; securities dealing and market making; sponsoring mutual funds and investment companies (subject to regulatory requirements described below); insurance underwriting and agency; merchant banking; and activities that the FRB determines, in consultation with the Secretary of the United States Treasury, to be financial in nature or incidental to a financial activity. “Complementary activities” are activities that the FRB determines upon application to be complementary to a financial activity and that do not pose a substantial risk to the safety or soundness of depository institutions or the financial system generally.

In order to maintain its status as a financial holding company, Comerica and each of its depository institution subsidiaries must each remain “well capitalized” and “well managed,” and Comerica, Comerica Bank and Comerica Bank & Trust, National Association are each “well capitalized” and “well managed” under FRB standards. If Comerica or any subsidiary bank of Comerica were to cease being “well capitalized” or “well managed” under applicable regulatory standards, the FRB could place limitations on Comerica’s ability to conduct the broader financial activities permissible for financial holding companies or impose limitations or conditions on the conduct or activities of Comerica or its affiliates. If the deficiencies persisted, the FRB could order Comerica to divest any subsidiary bank or to cease engaging in any activities permissible for financial holding companies that are not permissible for bank holding companies, or Comerica could elect to conform its non-banking activities to those permissible for a bank holding company that is not also a financial holding company.

In addition, the Community Reinvestment Act of 1977 (“CRA”) requires U.S. banks to help serve the credit needs of their communities. Comerica Bank’s current rating under the CRA is “Satisfactory.” If any subsidiary bank of Comerica were to receive a rating under the CRA of less than “Satisfactory,” Comerica would be prohibited from engaging in certain activities.

Federal and state laws impose notice and approval requirements for mergers and acquisitions of other depository institutions or bank holding companies. In many cases, no FRB approval is required for Comerica to acquire a company engaged in activities that are financial in nature or incidental to activities that are financial in nature, as determined by the FRB. Prior approval is required before Comerica may acquire the beneficial ownership or control of more than 5% of any class of voting shares or substantially all of the assets of a bank holding company (including a financial holding company) or a bank. In considering applications for approval of acquisitions, the banking regulators may take several factors into account, including whether Comerica and its subsidiaries are well capitalized and well managed, are in compliance with anti-money laundering laws and regulations, or have CRA ratings of less than “Satisfactory.”

Acquisitions of Ownership of Comerica

Acquisitions of Comerica’s voting stock above certain thresholds are subject to prior regulatory notice or approval under federal banking laws, including the Bank Holding Company Act of 1956 and the Change in Bank Control Act of 1978. Under the Change in Bank Control Act, a person or entity generally must provide prior notice to the FRB before acquiring the power to vote 10% or more of Comerica’s outstanding common stock. Investors should be aware of these requirements when acquiring shares of Comerica’s stock.

Capital and Liquidity

Comerica and its bank subsidiaries are subject to risk-based capital requirements and guidelines imposed by the FRB, FDIC and/or the OCC. In calculating risk-based capital requirements, a depository institution’s or holding company’s assets and certain specified off-balance sheet items (such as unused commitments and standby letters of credit) are assigned to various risk categories defined by the FRB, each weighted differently based on the level of credit risk that is ascribed to such assets or commitments, based on counterparty type, asset class and maturity. A depository institution’s or holding company’s capital is divided into three tiers: Common Equity Tier 1 (“CET1”), additional Tier 1, and Tier 2. CET1 capital predominantly includes common shareholders’ equity, less certain deductions for goodwill, intangible assets and deferred tax assets that arise from net operating losses and tax credit carry-forwards, if any. Additional Tier 1 capital primarily includes any outstanding noncumulative perpetual preferred stock and related surplus. Comerica has also made the election to permanently exclude accumulated other comprehensive income related to debt and equity securities classified as available-for-sale, cash flow hedges, and defined benefit postretirement plans from CET1 capital. Tier 2 capital primarily includes qualifying subordinated debt and qualifying allowance for credit losses. More information is set forth in the “Capital” section starting on page F-14.

Entities that engage in trading activities that exceed specified levels also are required to maintain capital to account for market risk. Market risk includes changes in the market value of trading account, foreign exchange, and commodity positions, whether resulting from broad market movements (such as changes in the general level of interest rates, equity prices, foreign exchange rates, or commodity prices) or from position specific factors. From time to time, Comerica's trading activities may exceed specified regulatory levels, in which case Comerica adjusts its risk-weighted assets to account for market risk as required.

Comerica and its bank subsidiaries, like other bank holding companies and banks, currently are required to maintain a minimum CET1 capital ratio, minimum Tier 1 capital ratio and minimum total capital ratio equal to at least 4.5 percent, 6 percent and 8 percent of their total risk-weighted assets (including certain off-balance-sheet items, such as unused commitments and standby letters of credit), respectively. Comerica and its bank subsidiaries are required to maintain a minimum capital conservation buffer of 2.5 percent in order to avoid restrictions on capital distributions and discretionary bonuses. Comerica and its bank subsidiaries are also required to maintain a minimum "leverage ratio" (Tier 1 capital to non-risk-adjusted average total assets) of 4 percent.

To be well capitalized, Comerica's bank subsidiaries are required to maintain a minimum leverage ratio, minimum CET1 capital ratio, minimum Tier 1 capital ratio and minimum total capital ratio equal to at least 5.0 percent, 6.5 percent, 8.0 percent and 10.0 percent, respectively. For purposes of the FRB's Regulation Y, including determining whether a bank holding company meets the requirements to be a financial holding company, bank holding companies, such as Comerica, must maintain a Tier 1 capital ratio of at least 6.0 percent and a total capital ratio of at least 10.0 percent to be well capitalized. The FRB may require bank holding companies, including Comerica, to maintain capital ratios substantially in excess of mandated minimum levels, depending upon general economic conditions and a bank holding company's particular condition, risk profile and growth plans.

Failure to be well capitalized or to meet minimum capital requirements could result in certain mandatory and possible additional discretionary actions by regulators, including restrictions on Comerica's or its bank subsidiaries' ability to pay dividends or otherwise distribute capital or to receive regulatory approval of applications, or other restrictions on growth.

At December 31, 2022, Comerica met all of its minimum risk-based capital ratio and leverage ratio requirements plus the applicable capital conservation buffer and the applicable well capitalized requirements, as shown in the table below:

<i>(dollar amounts in millions)</i>	Comerica Incorporated (Consolidated)	Comerica Bank
December 31, 2022		
CET1 capital (minimum \$3.5 billion (Consolidated))	\$ 7,884	\$ 7,801
Tier 1 capital (minimum \$4.7 billion (Consolidated))	8,278	7,801
Total capital (minimum \$6.3 billion (Consolidated))	9,817	9,190
Risk-weighted assets	78,871	78,781
Average assets (fourth quarter)	86,726	86,608
CET1 capital to risk-weighted assets (minimum-4.5%)	10.00 %	9.90 %
Tier 1 capital to risk-weighted assets (minimum-6.0%)	10.50	9.90
Total capital to risk-weighted assets (minimum-8.0%)	12.45	11.67
Tier 1 capital to average assets (minimum-4.0%)	9.55	9.01
Capital conservation buffer (minimum-2.5%)	4.45	3.67
December 31, 2021		
CET1 capital (minimum \$3.1 billion (Consolidated))	\$ 7,064	\$ 7,634
Tier 1 capital (minimum \$4.2 billion (Consolidated))	7,458	7,634
Total capital (minimum \$5.6 billion (Consolidated))	8,608	8,584
Risk-weighted assets	69,708	69,542
Average assets (fourth quarter)	96,417	96,216
CET1 capital to risk-weighted assets (minimum-4.5%)	10.13 %	10.98 %
Tier 1 capital to risk-weighted assets (minimum-6.0%)	10.70	10.98
Total capital to risk-weighted assets (minimum-8.0%)	12.35	12.34
Tier 1 capital to average assets (minimum-4.0%)	7.74	7.93
Capital conservation buffer (minimum-2.5%)	4.35	4.34

Additional information on the calculation of Comerica's and its bank subsidiaries' CET1 capital, Tier 1 capital, total capital and risk-weighted assets is set forth in the "Capital" section starting on page F-14 of the Financial Section of this report and Note 20 of the Notes to Consolidated Financial Statements starting on page F-88 of the Financial Section of this report.

Federal Deposit Insurance Corporation Improvement Act

The Federal Deposit Insurance Corporation Improvement Act (“FDICIA”) requires, among other things, the federal banking agencies to take “prompt corrective action” with respect to depository institutions that do not meet certain minimum capital requirements. FDICIA establishes five capital tiers: “well capitalized,” “adequately capitalized,” “undercapitalized,” “significantly undercapitalized” and “critically undercapitalized.” An institution that fails to remain well capitalized becomes subject to a series of restrictions that increase in severity as its capital condition weakens. Such restrictions may include a prohibition on capital distributions, restrictions on asset growth or restrictions on the ability to receive regulatory approval of applications. The FDICIA also provides for enhanced supervisory authority over undercapitalized institutions, including authority for the appointment of a conservator or receiver for the institution.

As of December 31, 2022, each of Comerica’s bank subsidiaries’ capital ratios exceeded those required for an institution to be considered “well capitalized” under these regulations.

As an additional means to identify problems in the financial management of depository institutions, FDICIA requires federal bank regulatory agencies to establish certain non-capital-based safety and soundness standards for institutions any such agency supervises. The standards relate generally to, among others, earnings, liquidity, operations and management, asset quality, various risk and management exposures (e.g., credit, operational, market, interest rate, etc.) and executive compensation. The agencies are authorized to take action against institutions that fail to meet such standards.

FDICIA also contains a variety of other provisions that may affect the operations of depository institutions including reporting requirements, regulatory standards for real estate lending, “truth in savings” provisions, the requirement that a depository institution give 90 days prior notice to customers and regulatory authorities before closing any branch, and a prohibition on the acceptance or renewal of brokered deposits by depository institutions that are not well capitalized or are adequately capitalized and have not received a waiver from the FDIC.

Dividends

Comerica Incorporated is a legal entity separate and distinct from its banking and other subsidiaries. Since Comerica’s consolidated net income and liquidity consists largely of net income of and dividends received from Comerica’s bank subsidiaries, Comerica’s ability to pay dividends and repurchase shares depends upon its receipt of dividends from these subsidiaries. There are statutory and regulatory requirements applicable to the payment of dividends by subsidiary banks to Comerica, as well as by Comerica to its shareholders. Certain, but not all, of these requirements are discussed below. No assurances can be given that Comerica’s bank subsidiaries will, in any circumstances, pay dividends to Comerica.

Comerica Bank and Comerica Bank & Trust, National Association are required by federal law to obtain the prior approval of the FRB and/or the OCC, as the case may be, for the declaration and payment of dividends, if the total of all dividends declared by the board of directors of such bank in any calendar year will exceed the total of (i) such bank's net income (as defined and interpreted by regulation) for that year plus (ii) the retained net income (as defined and interpreted by regulation) for the preceding two years, less any required transfers to surplus or to fund the retirement of preferred stock. At January 1, 2023, Comerica's subsidiary banks could declare aggregate dividends of approximately \$506 million from retained net profits of the preceding two years. Comerica's subsidiary banks declared dividends of \$1.0 billion in 2022, \$852 million in 2021 and \$498 million in 2020.

Comerica and its bank subsidiaries must maintain a CET1 capital conservation buffer of 2.5% to avoid becoming subject to restrictions on capital distributions, including dividends.

Furthermore, federal regulatory agencies can prohibit a bank or bank holding company from paying dividends under circumstances in which such payment could be deemed an unsafe and unsound banking practice. Under the FDICIA “prompt corrective action” regime discussed above, which applies to each of Comerica Bank and Comerica Bank & Trust, National Association, a bank is specifically prohibited from paying dividends to its parent company if payment would result in the bank becoming “undercapitalized.” In addition, Comerica Bank is also subject to limitations under Texas state law regarding the amount of earnings that may be paid out as dividends to Comerica and requires prior approval for payments of dividends that exceed certain levels.

FRB supervisory guidance generally provides that a bank holding company should not maintain its existing rate of dividends on common stock unless (1) the organization’s net income over the past year has been sufficient to fully fund the dividends, (2) the prospective rate of earnings retention appears consistent with the organization's capital needs, asset quality and overall financial condition and (3) the organization will continue to meet minimum required capital adequacy ratios. The supervisory guidance also provides that a bank holding company should inform the FRB reasonably in advance of declaring or paying a dividend that exceeds earnings for the period for which the dividend is being paid or that could result in a material adverse change to the bank holding company’s capital structure. Bank holding companies also are required to consult with the FRB before redeeming or repurchasing capital instruments, or materially increasing dividends.

Transactions with Affiliates

Federal banking laws and regulations impose qualitative standards and quantitative limitations upon certain transactions between a bank and its affiliates, including between Comerica and its nonbank subsidiaries, on the one hand, and Comerica's affiliate insured depository institutions, on the other. For example, Section 23A of the Federal Reserve Act limits the aggregate outstanding amount of any insured depository institution's loans and other "covered transactions" with any particular nonbank affiliate (including financial subsidiaries) to no more than 10% of the institution's total capital and limits the aggregate outstanding amount of any insured depository institution's covered transactions with all of its nonbank affiliates to no more than 20% of its total capital. "Covered transactions" are defined by statute to include (i) a loan or extension of credit to an affiliate, (ii) a purchase of securities issued by an affiliate, (iii) a purchase of assets (unless otherwise exempted by the FRB) from the affiliate, (iv) the acceptance of securities issued by the affiliate as collateral for a loan, (v) the issuance of a guarantee, acceptance or letter of credit on behalf of an affiliate and (vi) securities borrowing or lending transactions and derivative transactions with an affiliate, to the extent that either causes a bank or its affiliate to have credit exposure to the securities borrowing/lending or derivative counterparty. Section 23A of the Federal Reserve Act also generally requires that an insured depository institution's loans to its nonbank affiliates be, at a minimum, 100% secured, and Section 23B of the Federal Reserve Act generally requires that an insured depository institution's transactions with its nonbank affiliates be on terms and under circumstances that are substantially the same or at least as favorable as those prevailing for comparable transactions with nonaffiliates. Federal banking laws also place similar restrictions on loans and other extensions of credit by FDIC-insured banks, such as Comerica Bank and Comerica Bank & Trust, National Association, and their subsidiaries to their directors, executive officers and principal shareholders.

Data Privacy and Cybersecurity Regulation

Comerica is subject to many U.S. federal, U.S. state and international laws and regulations governing consumer data privacy protection, which require, among other things, maintaining policies and procedures to protect the non-public confidential information of customers and employees. The privacy provisions of the Gramm-Leach-Bliley Act generally prohibit financial institutions, including Comerica and its subsidiaries, from disclosing nonpublic personal financial information of consumer customers to third parties for certain purposes (primarily marketing) unless customers have the opportunity to "opt out" of the disclosure. Other laws and regulations, at the international, federal and state levels, limit Comerica's ability to share certain information with affiliates and non-affiliates for marketing and/or non-marketing purposes, or to contact customers with marketing offers. The Gramm-Leach-Bliley Act also requires banks to implement a comprehensive information security program that includes administrative, technical and physical safeguards to ensure the security and confidentiality of customer records and information.

On November 18, 2021, the federal banking regulators issued the final rule regarding Computer-Security Incident Notification Requirements for Banking Organizations and Their Service Providers, which became effective April 1, 2022 and requires a bank to notify its primary federal regulator of certain cybersecurity incidents within thirty-six (36) hours after the bank determines that a cybersecurity incident has occurred. The rule defines what constitutes a reportable incident and also requires bank service providers to provide notice to their respective banking organization customers of certain cybersecurity incidents.

Data privacy and data protection are areas of increasing state legislative focus. For example, the California Consumer Privacy Act of 2018 (the "CCPA"), which became effective on January 1, 2020, applies to for-profit businesses that conduct business in California and meet certain revenue or data collection thresholds. The CCPA gives consumers the right to request disclosure of information collected about them, and whether that information has been sold or shared with others, the right to request deletion of personal information (subject to certain exceptions), the right to opt out of the sale of the consumer's personal information, and the right not to be discriminated against for exercising these rights. The CCPA contains several exemptions, including an exemption applicable to information that is collected, processed, sold or disclosed pursuant to the Gramm-Leach-Bliley Act. Additionally, in November of 2020, California voters approved the adoption of the California Privacy Rights Act (the "CPRA"), which is effective as of January 1, 2023, and which, among other things, expands certain consumer rights granted under the CCPA. Comerica has a physical footprint in California and is required to comply with both the CCPA and CPRA. Similar laws have also been adopted by other states, including the state of Colorado, where Comerica does business but does not have banking centers, and may be adopted by other states in the future. For example, the Michigan legislature is currently considering a consumer privacy rights law, which could potentially impact Comerica due to its physical presence in Michigan. The federal government may also pass data privacy or data protection legislation.

Like other lenders, Comerica Bank and other of Comerica's subsidiaries use credit bureau data in their underwriting activities. Use of such data is regulated under the Fair Credit Reporting Act ("FCRA"), and the FCRA also regulates reporting information to credit bureaus, prescreening individuals for credit offers, sharing of information between affiliates, and using affiliate data for marketing purposes. Similar state laws may impose additional requirements on Comerica and its subsidiaries.

FDIC Insurance Assessments

The DIF provides deposit insurance coverage for certain deposits up to \$250,000 per depositor in each deposit account category. Comerica's subsidiary banks are subject to FDIC deposit insurance assessments to maintain the DIF. The FDIC imposes a risk-based deposit premium assessment system, where the assessment rates for an insured depository institution are determined by an assessment rate calculator, which is based on a number of elements to measure the risk each institution poses to the DIF. The assessment rate is applied to total average assets less tangible equity. Under the current system, premiums are assessed quarterly and could increase if, for example, criticized loans and/or other higher risk assets increase or balance sheet liquidity decreases. For 2022, Comerica's FDIC insurance expense totaled \$31 million.

On October 18, 2022, the FDIC finalized a rule that would increase initial base deposit insurance assessment rates by 2 basis points, beginning with the first quarterly assessment period of 2023. The FDIC, as required under the Federal Deposit Insurance Act, established a plan in September 2020 to restore the DIF reserve ratio to meet or exceed the statutory minimum of 1.35 percent within eight years. This plan did not include an increase in the deposit insurance assessment rate. Based on the FDIC's recent projections, however, the FDIC determined that the DIF reserve ratio is at risk of not reaching the statutory minimum by the statutory deadline of September 30, 2028 without increasing the deposit insurance assessment rates. The increased assessment would improve the likelihood that the DIF reserve ratio would reach the required minimum by the statutory deadline, consistent with the FDIC's Amended Restoration Plan. The rule is effective as of January 1, 2023.

Anti-Money Laundering Regulations

Comerica is subject to several federal laws that are designed to combat money laundering, terrorist financing, and transactions with persons, companies or foreign governments designated by U.S. authorities ("AML laws"). This category of laws includes the Bank Secrecy Act, the Money Laundering Control Act, and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, or USA PATRIOT Act.

The AML laws and their implementing regulations require insured depository institutions, broker-dealers, and certain other financial institutions to have policies, procedures, and controls to detect, prevent, and report money laundering and terrorist financing. The AML laws and their regulations also provide for information sharing, subject to conditions, between federal law enforcement agencies and financial institutions, as well as among financial institutions, for counter-terrorism purposes. Federal banking regulators are required, when reviewing bank holding company acquisition and bank merger applications, to take into account the effectiveness of the anti-money laundering activities of the applicants. To comply with these obligations, Comerica and its various operating units have implemented appropriate internal practices, procedures, and controls.

Office of Foreign Assets Control Regulation

The Office of Foreign Assets Control ("OFAC") is responsible for administering economic sanctions that affect transactions with designated foreign countries, nationals and others, as defined by various Executive Orders and Acts of Congress. OFAC-administered sanctions take many different forms. For example, sanctions may include: (1) restrictions on trade with or investment in a sanctioned country, including prohibitions against direct or indirect imports from and exports to a sanctioned country and prohibitions on U.S. persons engaging in financial transactions relating to, making investments in, or providing investment-related advice or assistance to, a sanctioned country; and (2) a blocking of assets in which the government or "specially designated nationals" of the sanctioned country have an interest, by prohibiting transfers of property subject to U.S. jurisdiction (including property in the possession or control of U.S. persons). OFAC also publishes lists of persons, organizations, and countries suspected of aiding, harboring or engaging in terrorist acts, known as Specially Designated Nationals and Blocked Persons. Blocked assets (e.g., property and bank deposits) cannot be paid out, withdrawn, set off or transferred in any manner without a license from OFAC. Failure to comply with these sanctions could have serious legal and reputational consequences.

Interstate Banking and Branching

The Interstate Banking and Branching Efficiency Act (the "Interstate Act"), as amended by the Dodd-Frank Act, permits a bank holding company, with FRB approval, to acquire banking institutions located in states other than the bank holding company's home state without regard to whether the transaction is prohibited under state law, but subject to any state requirement that the bank has been organized and operating for a minimum period of time, not to exceed five years, and the requirement that the bank holding company, prior to and following the proposed acquisition, control no more than 10 percent of the total amount of deposits of insured depository institutions in the U.S. and no more than 30 percent of such deposits in that state (or such amount as established by state law if such amount is lower than 30 percent). The Interstate Act, as amended, also authorizes banks to operate branch offices outside their home states by merging with out-of-state banks, purchasing branches in other states and by establishing *de novo* branches in other states, subject to various conditions. In the case of purchasing branches in a state in which it does not already have banking operations, *de novo* interstate branching is permissible if under the law of the state in which the branch is to be located, a state bank chartered by that state would be permitted to establish the

branch. A bank holding company or bank must be well capitalized and well managed in order to take advantage of these interstate banking and branching provisions.

Comerica has consolidated the majority of its banking business into one bank, Comerica Bank, with banking centers in Texas, Arizona, California, Florida and Michigan, as well as Canada.

Source of Strength and Cross-Guarantee Requirements

Federal law and FRB regulations require that bank holding companies serve as a source of strength to each subsidiary bank and commit resources to support each subsidiary bank. This support may be required at times when a bank holding company may not be able to provide such support without adversely affecting its ability to meet other obligations. The FRB may require a bank holding company to make capital injections into a troubled subsidiary bank and may charge the bank holding company with engaging in unsafe and unsound practices if the bank holding company fails to commit resources to such a subsidiary bank or if it undertakes actions that the FRB believes might jeopardize the bank holding company's ability to commit resources to such subsidiary bank. Under these requirements, Comerica may in the future be required to provide financial assistance to its subsidiary banks should they experience financial distress. Capital loans by Comerica to its subsidiary banks would be subordinate in right of payment to deposits and certain other debts of the subsidiary banks. In the event of Comerica's bankruptcy, any commitment by Comerica to a federal bank regulatory agency to maintain the capital of its subsidiary banks would be assumed by the bankruptcy trustee and entitled to a priority of payment.

Similarly, under the cross-guarantee provisions of the Federal Deposit Insurance Act, in the event of a loss suffered or anticipated by the FDIC (either as a result of the failure of a banking subsidiary or related to FDIC assistance provided to such a subsidiary in danger of failure), the other banking subsidiaries may be assessed for the FDIC's loss, subject to certain exceptions. An FDIC cross-guarantee claim against a depository institution is superior in right of payment to claims of the holding company and its affiliates against such depository institution.

Supervisory and Enforcement Powers of Federal and State Banking Agencies

The FRB and other federal and state banking agencies have broad supervisory and enforcement powers, including, without limitation, and as prescribed to each agency by applicable law, the power to conduct examinations and investigations, impose nonpublic supervisory agreements, issue cease and desist orders, terminate deposit insurance, impose substantial fines and other civil penalties and appoint a conservator or receiver. Failure to comply with applicable laws or regulations could subject Comerica or its banking subsidiaries, as well as officers and directors of these organizations, to administrative sanctions and potentially substantial civil and criminal penalties. Bank regulators regularly examine the operations of bank holding companies and banks, and the results of these examinations, as well as certain supervisory and enforcement actions, are confidential and may not be made public.

Resolution Plans

As a depository institution with \$50 billion or more of total consolidated assets, Comerica Bank is required to periodically file a resolution plan with the FDIC. On April 16, 2019, the FDIC released an advanced notice of proposed rulemaking ("ANPR") with respect to the FDIC's bank resolution plan requirements meant to better tailor bank resolution plans to a firm's size, complexity and risk profile. In connection with this rulemaking, the FDIC placed a moratorium on resolution plans until the rulemaking process was complete.

On June 25, 2021, the FDIC lifted the moratorium on resolution plan submissions for institutions with \$100 billion or more in total assets. Under the FDIC's *Statement on Resolution Plans for IDIs*, an institution will be required to submit resolution plans when it has \$100 billion or more in total assets as determined based upon the average of the institution's four most recent Reports of Condition and Income.

Incentive-Based Compensation

Comerica is subject to guidance issued by the FRB, OCC and FDIC intended to ensure that the incentive compensation policies of banking organizations do not undermine the safety and soundness of such organizations by encouraging excessive risk-taking. The guidance, which covers senior executives as well as other employees who, either individually or as part of a group, have the ability to expose the banking organization to material amounts of risk, is based upon the key principles that a banking organization's incentive compensation arrangements (i) should provide employees incentives that appropriately balance risk and financial results in a manner that does not encourage employees to expose their organizations to imprudent risk; (ii) should be compatible with effective controls and risk-management; and (iii) should be supported by strong corporate governance, including active and effective oversight by the organization's board of directors. Banking organizations are expected to review regularly their incentive compensation arrangements based on these three principles. Where there are deficiencies in the incentive compensation arrangements, they should be promptly addressed. Enforcement actions may be taken against a banking organization if its incentive compensation arrangements, or related risk-management control or governance processes, pose a risk to the organization's safety and soundness, particularly if the organization is not taking

prompt and effective measures to correct the deficiencies. Similar to other large banking organizations, Comerica has been subject to a continuing review of incentive compensation policies and practices by representatives of the FRB, the Federal Reserve Bank of Dallas and the Texas Department of Banking since 2011. As part of that review, Comerica has undertaken a thorough analysis of all the incentive compensation programs throughout the organization, the individuals covered by each plan and the risks inherent in each plan's design and implementation. Comerica has determined that risks arising from employee compensation plans are not reasonably likely to have a material adverse effect on Comerica. It is Comerica's intent to continue monitoring regulations and best practices for sound incentive compensation practices.

In 2016, the FRB, OCC and several other federal financial regulators revised and re-proposed rules to implement Section 956 of the Dodd-Frank Act. Section 956 directed regulators to jointly prescribe regulations or guidelines prohibiting incentive-based payment arrangements, or any feature of any such arrangement, at covered financial institutions that encourage inappropriate risks by providing excessive compensation or that could lead to a material financial loss. This proposal supplements the final guidance issued by the banking agencies in June 2010. Consistent with the Dodd-Frank Act, the proposed rule would impose heightened standards for institutions with \$50 billion or more in total consolidated assets, which includes Comerica. For these larger institutions, the proposed rule would require the deferral of at least 40 percent of incentive-based payments for designated executives and significant risk-takers who individually have the ability to expose the institution to possible losses that are substantial in relation to the institution's size, capital or overall risk tolerance. Moreover, incentive-based compensation of these individuals would be subject to potential clawback for seven years following vesting. Further, the rule imposes enhanced risk management controls and governance and internal policy and procedure requirements with respect to incentive compensation. Comerica is monitoring the development of this rule.

The Volcker Rule

Comerica is prohibited under the Volcker Rule from (1) engaging in short-term proprietary trading for its own account and (2) having certain ownership interests in and relationships with hedge funds or private equity funds ("Covered Funds"). The Volcker Rule regulations contain exemptions for market-making, hedging, underwriting and trading in U.S. government and agency obligations, and permit certain ownership interests in certain types of Covered Funds to be retained. They also permit the offering and sponsoring of Covered Funds under certain conditions. The Volcker Rule regulations impose significant compliance and reporting obligations on banking entities. Comerica has compliance programs required by the Volcker Rule and has either divested or received extensions for any holdings in Covered Funds.

In October 2019, the five federal agencies with rulemaking authority with respect to the Volcker Rule finalized changes designed to simplify compliance with the Volcker Rule. The final rule formalized a three-tiered approach to compliance program requirements for banking entities based on their level of trading activity. As a banking entity with "moderate" trading assets and liabilities (less than \$20 billion), Comerica is subject to simplified compliance requirements. In June 2020, regulators finalized a rule further modifying the Volcker Rule's prohibition on banking entities investing in or sponsoring Covered Funds. The final rule modifies three areas of the rule by: streamlining the covered funds portion of the rule; addressing the extraterritorial treatment of certain foreign funds; and permitting banking entities to offer financial services and engage in other activities that do not raise concerns that the Volcker Rule was intended to address. Comerica continues to follow Volcker Rule developments.

Derivative Transactions

As a state member bank, Comerica Bank may engage in derivative transactions, as permitted by applicable Texas and federal law. Title VII of the Dodd-Frank Act contains a comprehensive framework for over-the-counter ("OTC") derivatives transactions. Even though many of the requirements do not impact Comerica directly, since Comerica Bank does not meet the definition of swap dealer or major swap participant, Comerica continues to review and evaluate the extent to which such requirements impact its business indirectly. On November 5, 2018, the CFTC issued a final rule that sets the permanent aggregate gross notional amount threshold for the *de minimis* exception from the definition of swap dealer at \$8 billion in swap dealing activity entered into by a person over the preceding 12 months. Comerica's swap dealing activities for purposes of the *de minimis* exception are currently below this threshold.

The initial margin requirements for non-centrally cleared swaps and security-based swaps were effective for Comerica's swap and security-based swap counterparties that are swap dealers or major swap participants on September 1, 2022, and such counterparties are required to collect initial margin from Comerica. The initial margin requirements were issued for the purpose of ensuring safety and soundness of swap trading in light of the risk to the financial system associated with non-cleared swaps activity.

Comerica is subject to regulation by the CFPB, which has broad rule-making authority for a wide range of consumer protection laws that apply to all banks and savings institutions and possesses examination and enforcement authority over all banks and savings institutions with more than \$10 billion in assets, including Comerica Bank, and their depository affiliates.

Comerica is also subject to certain state consumer protection laws, and under the Dodd-Frank Act, state attorneys general and other state officials are empowered to enforce certain federal consumer protection laws and regulations. In recent years, state authorities have increased their focus on and enforcement of consumer protection rules. These federal and state consumer protection laws apply to a broad range of Comerica's activities and to various aspects of its business and include laws relating to interest rates, fair lending, disclosures of credit terms and estimated transaction costs to consumer borrowers, debt collection practices, the use of and the provision of information to consumer reporting agencies, and the prohibition of unfair, deceptive or abusive acts or practices in connection with the offer, sale or provision of consumer financial products and services.

UNDERWRITING APPROACH

The loan portfolio is a primary source of profitability and risk, so proper loan underwriting is critical to Comerica's long-term financial success. Comerica extends credit to businesses, individuals and public entities based on sound lending principles and consistent with prudent banking practice. During the loan underwriting process, a qualitative and quantitative analysis of potential credit facilities is performed, and the credit risks associated with each relationship are evaluated. Important factors considered as part of the underwriting process for new loans and loan renewals include:

- **People:** Including the competence, integrity and succession planning of customers.
- **Purpose:** The legal, logical and productive purposes of the credit facility.
- **Payment:** Including the source, timing and probability of payment.
- **Protection:** Including obtaining alternative sources of repayment, securing the loan, as appropriate, with collateral and/or third-party guarantees and ensuring appropriate legal documentation is obtained.
- **Perspective:** The risk/reward relationship and pricing elements (cost of funds; servicing costs; time value of money; credit risk).

Comerica prices credit facilities to reflect risk, the related costs and the expected return, while maintaining competitiveness with other financial institutions. Loans with variable and fixed rates are underwritten to achieve expected risk-adjusted returns on the credit facilities and for the full relationship including the borrower's ability to repay the principal and interest based on such rates.

Credit Approval and Monitoring

Approval of new loan exposure and oversight and monitoring of Comerica's loan portfolio is the joint responsibility of the Credit Risk Management and Decisioning department and the Credit Underwriting department (collectively referred to as "Credit"), plus the business units ("Line"). Credit assists the Line with underwriting by providing objective financial analysis, including an assessment of the borrower's business model, balance sheet, cash flow and collateral. The approval of new loan exposure is the joint responsibility of Credit Risk Management and Decisioning and the Line. Each commercial borrower relationship is assigned an internal risk rating by Credit Risk Management and Decisioning. Further, Credit updates the assigned internal risk rating as new information becomes available as a result of periodic reviews of credit quality, a change in borrower performance or approval of new loan exposure. The goal of the internal risk rating framework is to support Comerica's risk management capability, including its ability to identify and manage changes in the credit risk profile of its portfolio, predict future losses and price the loans appropriately for risk. Finally, the Line and Credit (including its Credit Analytics and Strategy department) work together to insure the overall credit risk within the loan portfolio is consistent with the bank's Credit Risk Appetite.

Credit Policy

Comerica maintains a comprehensive set of credit policies. Comerica's credit policies provide Line and Credit Personnel with a framework of sound underwriting practices and potential loan structures. These credit policies also provide the framework for loan committee approval authorities based on its internal risk-rating system and establish maximum exposure limits based on risk ratings and Comerica's legal lending limit. Credit, in conjunction with the Line, monitors compliance with the credit policies and modifies the existing policies as necessary. New or modified policies/guidelines require approval by the Strategic Credit Committee, chaired by Comerica's Chief Credit Officer and comprised of senior credit, market and risk management executives.

Commercial Loan Portfolio

Commercial loans are underwritten using a comprehensive analysis of the borrower's operations. The underwriting process includes an analysis of some or all of the factors listed below:

- The borrower's business model and industry characteristics.
- Periodic review of financial statements including financial statements audited by an independent certified public accountant when appropriate.
- The proforma financial condition including financial projections.
- The borrower's sources and uses of funds.
- The borrower's debt service capacity.
- The guarantor's financial strength.
- A comprehensive review of the quality and value of collateral, including independent third-party appraisals of machinery and equipment and commercial real estate, as appropriate, to determine the advance rates.
- Physical inspection of collateral and audits of receivables, as appropriate.

For additional information specific to certain businesses within our commercial portfolio, please see the caption "Concentrations of Credit Risk" starting on page F-20 of the Financial Section of this report.

Commercial Real Estate (CRE) Loan Portfolio

Comerica's CRE loan portfolio consists of real estate construction and commercial mortgage loans and includes loans to real estate developers and investors and loans secured by owner-occupied real estate. Comerica's CRE loan underwriting policies are consistent with the approach described above and provide maximum loan-to-value ratios that limit the size of a loan to a maximum percentage of the value of the real estate collateral securing the loan. The loan-to-value percentage varies by the type of collateral and is limited by advance rates established by our regulators. Our loan-to-value limitations are, in certain cases, more restrictive than those required by regulators and are influenced by other risk factors such as the financial strength of the borrower or guarantor, the equity provided to the project and the viability of the project itself. CRE loans generally require cash equity. CRE loans are normally originated with full recourse or limited recourse to all principals and owners. There are limitations to the size of a single project loan and to the aggregate dollar exposure to a single guarantor. For additional information specific to our CRE loan portfolio, please see the caption "Commercial Real Estate Lending" on page F-21 of the Financial Section of this report.

Consumer and Residential Mortgage Loan Portfolios

Comerica's consumer and residential mortgage loan underwriting includes an assessment of each borrower's personal financial condition, including a review of credit reports and related FICO scores (a type of credit score used to assess an applicant's credit risk) and verification of income and assets, as applicable. After origination, internal risk ratings are assigned based on payment status and product type.

Comerica does not originate subprime loans. Although a standard industry definition for subprime loans (including subprime mortgage loans) does not exist, Comerica defines subprime loans as specific product offerings for higher risk borrowers, including individuals with one or a combination of high credit risk factors. These credit factors include low FICO scores, poor patterns of payment history, high debt-to-income ratios and elevated loan-to-value. Comerica generally considers subprime FICO scores to be those below 620 on a secured basis (excluding loans with cash or near-cash collateral and adequate income to make payments) and below 660 for unsecured loans. Residential mortgage loans retained in the portfolio are largely relationship based. The remaining loans are typically eligible to be sold on the secondary market. Adjustable-rate loans are limited to standard conventional loan programs. For additional information specific to our residential real estate loan portfolio, please see the caption "Residential Real Estate Lending" on page F-22 of the Financial Section of this report.

HUMAN CAPITAL RESOURCES

Comerica's relationship banking strategy relies heavily on the personal relationships and the quality of service provided by employees. Accordingly, Comerica aims to attract, develop and retain employees who can drive financial and strategic growth objectives and build long-term shareholder value. Key items related to Comerica's human capital resources are described below.

Structure. As of December 31, 2022, Comerica and its subsidiaries had 7,280 full-time and 369 part-time employees, primarily located in Comerica's core markets of Michigan, Texas, California, Arizona and Florida. Comerica's Chief Human Resources Officer reports directly to the Chairman, President and CEO and manages all aspects of the employee experience, including talent acquisition, diversity and inclusion, learning and development, talent management, compensation and benefits.

The Governance, Compensation and Nominating Committee of the Board is tasked with reviewing Comerica’s human capital management strategy and talent development program, including recruitment, evaluations and development activities. This Committee also reviews Comerica’s employee diversity, equity and inclusion initiatives, as well as the results of those initiatives. The full Board is provided annual workforce updates. To enhance the Board’s understanding of Comerica’s talent pipeline, the Board routinely meets with high-potential employees in formal and informal settings.

Productivity. Comerica carefully manages the size of its workforce and reallocates resources as needed. As of December 31, 2022, Comerica’s total employee headcount, on a full-time equivalent basis, was 16 percent lower than as of December 31, 2015. Additionally, for 2022, Comerica managed an average of \$17 million of loans and deposits per employee.

Diversity. Comerica has an organization-wide focus to improve recruitment and retention of women and ethnic minorities especially in leadership positions through its diversity outreach, diversity awareness and learning program and leadership development programs. As of December 31, 2022, Comerica’s U.S. colleagues had the following attributes:

	Female (%)	Minority (%)
Employees	64	42
Officials and Managers ⁽¹⁾	53	29
Executive Officers ⁽²⁾	43	21

(1) Based on EEO-1 job classifications.

(2) Using Securities and Exchange Commission definition.

Comerica was recognized in 2022 as a Best Employer for Women by Forbes, included on Newsweek’s 2023 list of America’s Greatest Workplaces for Diversity and received five stars – the highest marking – in the category of governance as part of the 2022 Hispanic Association on Corporate Responsibility Corporate Inclusion Index. Additionally, Comerica again received a perfect score of 100% on the Human Rights Campaign’s Corporate Equality Index (for LGBTQ+ equality).

There are ten Comerica Employee Resource Groups (ERGs), consisting of employees with common interests organized to promote professional development, social networking, awareness and inclusion, social impact and talent attraction and retention. The ERGs help support and sustain Comerica’s diversity and inclusion model. These groups include Comerica African American Network; Comerica Asian Indian Association; Comerica Asian and Pacific Islander; European Connection; Mi Gente; PRISM – LGBTQ+; Quantitative Professionals; Veteran’s Leadership Network; Women’s Forum and Young Professionals.

Compensation and Benefits. Comerica strives to provide pay, benefits, and programs that help meet the varying needs of its employees. Compensation and benefits include market-competitive pay, retirement programs, broad-based bonuses, an employee stock purchase plan, health and welfare benefits, an employee assistance program, financial counseling, paid time off, family leave and flexible work schedules. In 2022, Comerica increased its minimum wage from \$17 per hour to \$18 per hour. Additionally, for 2023, Comerica held employee health and welfare premiums steady, absorbing the rising cost of medical coverage. Comerica periodically examines the main components of compensation, like salaries and bonuses, by grade level and position to ensure similar positions receive similar pay to the extent other factors can be equalized (e.g., time in position, performance, education). Comerica also considers equitable benefits and looks at policies and practices that potentially drive inequities. Solicitation of salary history from applicants is prohibited.

Attraction, Development and Retention. Comerica measures the success of its talent acquisition strategy on speed and quality of acquisition, diversity of its applicant pool, and new colleague retention. In addition, overall performance metrics are tracked for each key business line. Sourcing strategies and support structures are evaluated and modified to ensure that performance targets are met consistently.

Comerica operates and continues to evolve multiple internal programs to support the development and retention of its colleagues, including Comerica University, internal Leadership Development, Emerging Leaders, and Senior Leadership programs designed to develop high potential employees, a Future-Ready Technology skills program to help re- and up-skill Technology colleagues, a Managing Essentials Certificate series for managers and organizational change management learning for all colleagues. In 2022, over 9,900 skills-based titles were offered to Comerica colleagues and an average of around 25 hours of training per employee were completed. Comerica also supports its employees’ involvement in external development programs and volunteerism. All full-time colleagues are granted up to 8 hours of PTO annually, and all part-time colleagues are granted up to 4 hours of PTO annually to use for volunteer events. This includes volunteer opportunities related and unrelated to Comerica.

Comerica’s investment in its employees has resulted in a long-tenured workforce, with average tenure of around 12 years of service. Of the approximately 2,750 open employee positions filled in 2022, 57% were filled by external hires and 43% positions were filled by internal hires. Employee turnover for 2022 was approximately 20%. In 2021, Comerica conducted its

second enterprise-wide employee engagement survey, with approximately 80% of colleagues participating, and plans to launch its third engagement survey in 2023.

AVAILABLE INFORMATION

Comerica maintains an Internet website at www.comerica.com where 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 are available without charge, as soon as reasonably practicable after those reports are filed with or furnished to the SEC. The Code of Business Conduct and Ethics for Employees, the Code of Business Conduct and Ethics for Members of the Board of Directors and the Senior Financial Officer Code of Ethics adopted by Comerica are also available on the Internet website and are available in print to any shareholder who requests them. Such requests should be made in writing to the Corporate Secretary at Comerica Incorporated, Comerica Bank Tower, 1717 Main Street, MC 6404, Dallas, Texas 75201.

In addition, pursuant to regulations adopted by the FRB, Comerica makes additional regulatory capital-related disclosures. Under these regulations, Comerica satisfies a portion of these requirements through postings on its website, and Comerica has done so and expects to continue to do so without also providing disclosure of this information through filings with the SEC.

Where we have included web addresses in this report, such as our web address and the web address of the SEC, we have included those web addresses as inactive textual references only. Except as specifically incorporated by reference into this report, information on those websites is not part hereof.

Item 1A. Risk Factors.

This report includes forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. In addition, Comerica may make other written and oral communications from time to time that contain such statements. All statements regarding Comerica's expected financial position, strategies and growth prospects and general economic conditions Comerica expects to exist in the future are forward-looking statements. The words, "anticipates," "believes," "contemplates," "feels," "expects," "estimates," "seeks," "strives," "plans," "intends," "outlook," "forecast," "position," "target," "mission," "assume," "achievable," "potential," "strategy," "goal," "aspiration," "opportunity," "initiative," "outcome," "continue," "remain," "maintain," "on track," "trend," "objective," "looks forward," "projects," "models" and variations of such words and similar expressions, or future or conditional verbs such as "will," "would," "should," "could," "might," "can," "may" or similar expressions, as they relate to Comerica or its management, are intended to identify forward-looking statements.

Comerica cautions that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date the statement is made, and Comerica does not undertake to update forward-looking statements to reflect facts, circumstances, assumptions or events that occur after the date the forward-looking statements are made. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

In addition to factors mentioned elsewhere in this report or previously disclosed in Comerica's SEC reports (accessible on the SEC's website at www.sec.gov or on Comerica's website at www.comerica.com), the factors contained below, among others, could cause actual results to differ materially from forward-looking statements, and future results could differ materially from historical performance.

CREDIT RISK

- **Changes in customer behavior due to outside factors may adversely impact Comerica's business, financial condition and results of operations.**

Individual, economic, political, industry-specific conditions and other factors outside of Comerica's control, such as pandemics, inflation, military conflicts, labor shortages, supply chain constraints, fuel prices, energy costs, tariffs, real estate values or other factors that affect customer income levels, could alter predicted customer borrowing, repayment, investment and deposit practices. Such a change in these practices could materially adversely affect Comerica's ability to anticipate business needs and meet regulatory requirements.

Further, difficult economic conditions, such as a recession, may negatively affect consumer confidence levels. A decrease in consumer confidence levels would likely aggravate the adverse effects of these difficult market conditions on Comerica, Comerica's customers and others in the financial institutions industry.

- **Unfavorable developments concerning credit quality could adversely affect Comerica's financial results.**

Although Comerica regularly reviews credit exposure related to its customers and various industry sectors in which it has business relationships, default risk may arise from events or circumstances that are difficult to detect or foresee. Under such circumstances, as occurred during the COVID-19 pandemic, Comerica could experience an increase in the

level of provision for credit losses and reserve for credit losses, which could adversely affect Comerica's financial results. Additionally, some of Comerica's loan portfolios have higher risk profiles relative to the rest of our portfolio, such as Technology and Life Sciences, automotive production and the leveraged transactions book. For more information, please see "Leveraged Loans" starting on page F-23 of the Financial Section of this report and "Automotive Lending - Production" starting on page F-22 of the Financial Section of this report.

- **Declines in the businesses or industries of Comerica's customers could cause increased credit losses or decreased loan balances, which could adversely affect Comerica.**

Comerica's business customer base consists, in part, of customers in volatile businesses and industries such as the automotive, commercial real estate, residential real estate and energy industries. These industries are sensitive to global economic conditions, supply chain factors and/or commodities prices. In particular, in 2022, loan balances in Dealer Services remained low and credit quality in automotive production remained under pressure due to lingering effects of shortages in parts which depressed manufacturing, and thus sales volumes. Additionally, certain segments of the commercial real estate industry have been under pressure due to rapidly rising interest rates, shifts in demand (*i.e.*, office, retail), labor and materials shortages and capital markets volatility. Finally, energy prices continued to fluctuate in 2022, and energy companies are expected to experience environmental pressure over the long-term. Any decline in one of these businesses or industries could cause increased credit losses or reduced loan demand, which in turn could adversely affect Comerica. For more information regarding certain of Comerica's lines of business, please see "Concentrations of Credit Risk," "Commercial Real Estate Lending," "Automotive Lending - Dealer," "Automotive Lending - Production," "Residential Real Estate Lending," and "Energy Lending" starting on page F-20 of the Financial Section of this report.

MARKET RISK

- **Governmental monetary and fiscal policies may adversely affect the financial services industry, and therefore impact Comerica's financial condition and results of operations.**

Monetary and fiscal policies of various governmental and regulatory agencies, in particular the FRB, affect the financial services industry, directly and indirectly. The FRB regulates the supply of money and credit in the U.S., and its monetary policies determine in large part Comerica's cost of funds for lending and investing and the return that can be earned on such loans and investments. Changes in such policies, including changes in interest rates or changes in the FRB's balance sheet, influence the origination of loans, the value of investments, the generation of deposits and the rates received on loans and investment securities and paid on deposits. Changes in monetary and fiscal policies are beyond Comerica's control and difficult to predict. Comerica's financial condition and results of operations could be materially adversely impacted by changes in governmental monetary and fiscal policies.

- **Fluctuations in interest rates and their impact on deposit pricing could adversely affect Comerica's net interest income and balance sheet.**

The operations of financial institutions such as Comerica are dependent to a large degree on net interest income, which is the difference between interest income from loans and investments and interest expense on deposits and borrowings. Prevailing economic conditions and the trade, fiscal and monetary policies of the federal government and various regulatory agencies all affect market rates of interest and the availability and cost of credit, which in turn significantly affect financial institutions' net interest income and the market value of its investment securities. The Federal Reserve raised interest rates seven times in 2022; if the Federal Reserve lowers interest rates in the future, it will adversely affect the interest income Comerica earns on loans and investments. Further, while Comerica has taken steps to reduce its interest rate sensitivity, those actions, such as the execution of Comerica's hedging strategy, do not fully eliminate interest rate risk. For a discussion of Comerica's interest rate sensitivity and risk management strategies, please see, "Market and Liquidity Risk" beginning on page F-24 of the Financial Section of this report.

Deposits make up a large portion of Comerica's funding portfolio. Comerica's funding costs may increase if it raises deposit rates to avoid losing customer deposits, or if it loses customer deposits and must rely on more expensive sources of funding. In 2022, interest expense increased \$149 million from 2021, due to a rising rate environment. Higher funding costs will reduce Comerica's net interest margin and net interest income.

Volatility in interest rates can also result in disintermediation, which is the flow of funds away from financial institutions into direct investments, such as federal government and corporate securities and other investment vehicles, which, because of the absence of federal insurance premiums and reserve requirements, generally pay higher rates of return than financial institutions. Comerica's financial results could be materially adversely impacted by changes in financial market conditions.

- **Interest rates on Comerica's outstanding financial instruments might be subject to change based on developments related to LIBOR, which could adversely affect its revenue, expenses, and the value of those financial instruments.**

On July 27, 2017, the United Kingdom's Financial Conduct Authority ("FCA"), which regulates LIBOR, publicly announced that it intended to stop persuading or compelling banks to submit LIBOR rates after 2021. Certain LIBOR tenors are no longer supported as of December 31, 2021, and the FCA has announced that the remaining tenors, including those most commonly used by Comerica, will cease to be supported after June 30, 2023. While Comerica stopped originating LIBOR-based products in the fourth quarter of 2021, it still has remaining exposure to outstanding LIBOR-based products, including loans and derivatives. As of December 31, 2022, there are approximately \$16.0 billion of LIBOR-based loans. Of these, approximately 18 percent have maturity dates prior to cessation, 46 percent mature after cessation but have fallback language and the remaining 36 percent are in process of remediation.

Comerica is currently issuing new Secured Overnight Financing Rate (SOFR)-based and Bloomberg Short-Term Bank Yield Index (BSBY)-based cash and derivative products. Comerica continues to monitor market developments and regulatory updates, as well as collaborate with regulators and industry groups on the transition.

The market transition away from LIBOR to an alternative reference rate is complex and could have a range of adverse effects on Comerica's business, financial condition and results of operations. In particular, such transition could:

- adversely affect the interest rates paid or received on, and the revenues and expenses associated with, Comerica's floating rate obligations, loans, deposits, derivatives, and other financial instruments tied to LIBOR rates, or other securities or financial arrangements given LIBOR's historical role in determining market interest rates globally;
- adversely affect the value of Comerica's floating rate obligations, loans, deposits, derivatives, and other financial instruments tied to LIBOR rates, or other securities or financial arrangements given LIBOR's historical role in determining market interest rates globally;
- prompt inquiries or other actions from regulators in respect to Comerica's selection of alternative reference rates other than SOFR; and
- result in disputes, litigation or other actions with counterparties regarding the interpretation and enforceability of certain fallback language in LIBOR-based instruments.

More information regarding the LIBOR transition is available on page F-27 under "LIBOR Transition."

The manner and impact of this transition, as well as the effect of these developments on Comerica's funding costs, loan and investment and trading securities portfolios, asset-liability management, and business, is uncertain.

LIQUIDITY RISK

- **Comerica must maintain adequate sources of funding and liquidity to meet regulatory expectations, support its operations and fund outstanding liabilities.**

Comerica's liquidity and ability to fund and run its business could be materially adversely affected by a variety of conditions and factors, including financial and credit market disruptions and volatility, a lack of market or customer confidence in financial markets in general, or deposit competition based on interest rates, which may result in a loss of customer deposits or outflows of cash or collateral and/or adversely affect Comerica's ability to access capital markets on favorable terms.

Other conditions and factors that could materially adversely affect Comerica's liquidity and funding include a lack of market or customer confidence in, or negative news about, Comerica or the financial services industry generally which also may result in a loss of deposits and/or negatively affect Comerica's ability to access the capital markets; the loss of customer deposits to alternative investments; counterparty availability; interest rate fluctuations; general economic conditions; and the legal, regulatory, accounting and tax environments governing Comerica's funding transactions. Many of the above conditions and factors may be caused by events over which Comerica has little or no control. There can be no assurance that significant disruption and volatility in the financial markets will not occur in the future. Further, Comerica's customers may be adversely impacted by such conditions, which could have a negative impact on Comerica's business, financial condition and results of operations.

Additionally, if Comerica is unable to continue to fund assets through customer bank deposits or access funding sources on favorable terms, or if Comerica suffers an increase in borrowing costs or otherwise fails to manage liquidity effectively, Comerica's liquidity, operating margins, financial condition and results of operations may be materially adversely affected.

- **Reduction in our credit ratings could adversely affect Comerica and/or the holders of its securities.**

Rating agencies regularly evaluate Comerica, and their ratings are based on a number of factors, including Comerica's financial strength as well as factors not entirely within its control, such as conditions affecting the financial services industry generally. There can be no assurance that Comerica will maintain its current ratings. While recent credit rating actions have had little to no detrimental impact on Comerica's profitability, borrowing costs, or ability to access the capital markets, future downgrades to Comerica's or its subsidiaries' credit ratings could adversely affect Comerica's profitability, borrowing costs, or ability to access the capital markets or otherwise have a negative effect on Comerica's results of operations or financial condition. If such a reduction placed Comerica's or its subsidiaries' credit ratings below investment grade, it could also create obligations or liabilities under the terms of existing arrangements that could increase Comerica's costs under such arrangements. Additionally, a downgrade of the credit rating of any particular security issued by Comerica or its subsidiaries could negatively affect the ability of the holders of that security to sell the securities and the prices at which any such securities may be sold.

- **The soundness of other financial institutions could adversely affect Comerica.**

Comerica's ability to engage in routine funding transactions could be adversely affected by the actions and commercial soundness of other financial institutions. Financial services institutions are interrelated as a result of trading, clearing, counterparty or other relationships. Comerica has exposure to many different industries and counterparties, and it routinely executes transactions with counterparties in the financial industry, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional clients. As a result, defaults by, or even rumors or questions about, one or more financial services institutions, or the financial services industry generally, have led, and may further lead, to market-wide liquidity problems and could lead to losses or defaults by us or by other institutions. Many of these transactions could expose Comerica to credit risk in the event of default of its counterparty or client. In addition, Comerica's credit risk may be impacted when the collateral held by it cannot be monetized or is liquidated at prices not sufficient to recover the full amount of the financial instrument exposure due to Comerica. There is no assurance that any such losses would not adversely affect, possibly materially, Comerica.

TECHNOLOGY RISK

- **Comerica faces security risks, including denial of service attacks, hacking, social engineering attacks targeting Comerica's colleagues and customers, malware intrusion or data corruption attempts, and identity theft that could result in the disclosure of confidential information, adversely affect its business or reputation, and create significant legal and financial exposure.**

Comerica's computer systems and network infrastructure and those of third parties, on which Comerica is highly dependent, are subject to security risks and could be susceptible to cyber attacks, such as denial of service attacks, hacking, terrorist activities or identity theft. Comerica's business relies on the secure processing, transmission, storage and retrieval of confidential, proprietary and other information in its computer and data management systems and networks, and in the computer and data management systems and networks of third parties. In addition, to access Comerica's network, products and services, its customers and other third parties may use personal mobile devices or computing devices that are outside of its network environment and are subject to their own cybersecurity risks.

Cyber attacks could include computer viruses, malicious or destructive code, phishing attacks, denial of service or information, ransomware, improper access by employees or vendors, attacks on personal email of employees, ransom demands to not expose security vulnerabilities in Comerica's systems or the systems of third parties, or other security breaches, and could result in the destruction or exfiltration of data and systems. As cyber threats continue to evolve, Comerica may be required to expend significant additional resources to continue to modify or enhance its protective measures or to investigate and remediate any information security vulnerabilities or incidents. Despite efforts to ensure the integrity of Comerica's systems and implement controls, processes, policies and other protective measures, Comerica may not be able to anticipate all security breaches, nor may it be able to implement guaranteed preventive measures against such security breaches. Cyber threats are rapidly evolving and Comerica may not be able to anticipate or prevent all such attacks and could be held liable for any security breach or loss.

Although Comerica has programs in place related to business continuity, disaster recovery and information security to maintain the confidentiality, integrity, and availability of its systems, business applications and customer information, such disruptions may still give rise to interruptions in service to customers and loss or liability to Comerica, including loss of customer data. Like other financial services firms, Comerica and its third party providers continue to be the subject of cyber attacks. Although to this date Comerica has not experienced any material losses or other material consequences related to cyber attacks, future cyber attacks could be more disruptive and damaging, and Comerica may not be able to anticipate or prevent all such attacks. Further, cyber attacks may not be detected in a timely manner.

Cyber attacks or other information or security breaches, whether directed at Comerica or third parties, may result in a material loss or have material consequences. Furthermore, the public perception that a cyber attack on Comerica's systems has been successful, whether or not this perception is correct, may damage its reputation with customers and third parties with whom it does business. Hacking of personal information and identity theft risks, in particular, could cause serious reputational harm. A successful penetration or circumvention of system security could cause Comerica serious negative consequences, including loss of customers and business opportunities, costs associated with maintaining business relationships after an attack or breach; significant business disruption to Comerica's operations and business, misappropriation, exposure, or destruction of its confidential information, intellectual property, funds, and/or those of its customers; or damage to Comerica's or Comerica's customers' and/or third parties' computers or systems, and could result in a violation of applicable privacy laws and other laws, litigation exposure, regulatory fines, penalties or intervention, loss of confidence in Comerica's security measures, reputational damage, reimbursement or other compensatory costs, additional compliance costs, and could adversely impact its results of operations, liquidity and financial condition. In addition, although Comerica maintains insurance coverage that may cover certain cyber losses (subject to policy terms and conditions), we may not have adequate insurance coverage to compensate for losses from a cybersecurity event.

- **Cybersecurity and data privacy are areas of heightened legislative and regulatory focus.**

As cybersecurity and data privacy risks for banking organizations and the broader financial system have significantly increased in recent years, cybersecurity and data privacy issues have become the subject of increasing legislative and regulatory focus. The federal bank regulatory agencies have proposed enhanced cyber risk management standards, which would apply to a wide range of large financial institutions and their third-party service providers, including Comerica and its bank subsidiaries, and would focus on cyber risk governance and management, management of internal and external dependencies, and incident response, cyber resilience and situational awareness. Several states have also proposed or adopted cybersecurity legislation and regulations, which require, among other things, notification to affected individuals when there has been a security breach of their personal data. For more information regarding cybersecurity regulation, refer to the "Supervision and Regulation" section of this report.

Comerica receives, maintains and stores non-public personal information of Comerica's customers and counterparties, including, but not limited to, personally identifiable information and personal financial information. The sharing, use, disclosure and protection of this information are governed by federal and state law. Both personally identifiable information and personal financial information is increasingly subject to legislation and regulation, the intent of which is to protect the privacy of personal information that is collected and handled. For example, the CCPA, which became effective on January 1, 2020, applies to for-profit businesses that conduct business in California and meet certain revenue or data collection thresholds, including Comerica. For more information regarding data privacy regulation, refer to the "Supervision and Regulation" section of this report.

Comerica may become subject to new legislation or regulation concerning cybersecurity or the privacy of personally identifiable information and personal financial information or of any other information Comerica may store or maintain. Comerica could be adversely affected if new legislation or regulations are adopted or if existing legislation or regulations are modified such that Comerica is required to alter its systems or require changes to its business practices or privacy policies. If cybersecurity, data privacy, data protection, data transfer or data retention laws are implemented, interpreted or applied in a manner inconsistent with Comerica's current practices, it may be subject to fines, litigation or regulatory enforcement actions or ordered to change its business practices, policies or systems in a manner that adversely impacts Comerica's operating results.

OPERATIONAL RISK

- **Comerica's operational or security systems or infrastructure, or those of third parties, could fail or be breached, which could disrupt Comerica's business and adversely impact Comerica's results of operations, liquidity and financial condition, as well as cause legal or reputational harm.**

The potential for operational risk exposure exists throughout Comerica's business and, as a result of its interactions with, and reliance on, third parties, is not limited to Comerica's own internal operational functions. Comerica's operations rely on the secure processing, storage and transmission of confidential and other information on its technology systems and networks. These networks are subject to infrastructure failures, ongoing system maintenance and upgrades and planned network outages. Comerica's use of mobile and cloud technologies, as well as its hybrid work options permitting remote work, can heighten these and other operational risks. Any failure, interruption or breach in security of these systems could result in failures or disruptions in Comerica's customer relationship management, general ledger, deposit, loan and other systems.

Comerica relies on its employees and third parties in its day-to-day and ongoing operations, who may, as a result of human error, misconduct, malfeasance or failure, or breach of Comerica's or of third-party systems or infrastructure,

expose Comerica to risk. For example, Comerica's ability to conduct business may be adversely affected by any significant disruptions to Comerica or to third parties with whom Comerica interacts or upon whom it relies. Although Comerica has programs in place related to business continuity, disaster recovery and information security to maintain the confidentiality, integrity and availability of its systems, business applications and customer information, such disruptions may still give rise to interruptions in service to customers and loss or liability to Comerica, including loss of customer data. In addition, Comerica's ability to implement backup systems and other safeguards with respect to third-party systems is more limited than with respect to its own systems.

Comerica's financial, accounting, data processing, backup or other operating or security systems and infrastructure may fail to operate properly or become disabled or damaged as a result of a number of factors, including events that are wholly or partially beyond its control, which could adversely affect its ability to process transactions or provide services. Such events may include sudden increases in customer transaction volume and/or customer activity; electrical, telecommunications or other major physical infrastructure outages; natural disasters such as earthquakes, tornadoes, hurricanes and floods; disease pandemics; cyber attacks; and events arising from local or larger scale political or social matters, including wars and terrorist acts.

The occurrence of any failure or interruption in Comerica's operations or information systems, or any security breach, could cause reputational damage, jeopardize the confidentiality of customer information, result in a loss of customer business, subject Comerica to regulatory intervention or expose it to civil litigation and financial loss or liability, any of which could have a material adverse effect on Comerica.

- **Comerica relies on other companies to provide certain key components of its delivery systems, and certain failures could materially adversely affect operations.**

Comerica faces the risk of operational disruption, failure or capacity constraints due to its dependency on third party vendors for components of its delivery systems. Third party vendors provide certain key components of Comerica's delivery systems, such as cloud-based computing, networking and storage services, cash services, payment processing services, recording and monitoring services, internet connections and network access, clearing agency services, card processing services and trust processing services. While Comerica conducts due diligence prior to engaging with third party vendors and performs ongoing monitoring of vendor controls, it does not control their operations. Further, while Comerica's vendor management policies and practices are designed to comply with current regulations, these policies and practices cannot eliminate this risk. In this context, any vendor failure to properly deliver these services could adversely affect Comerica's business operations, and result in financial loss, reputational harm, and/or regulatory action.

- **Legal and regulatory proceedings and related matters with respect to the financial services industry, including those directly involving Comerica and its subsidiaries, could adversely affect Comerica or the financial services industry in general.**

Comerica has been, and may in the future be, subject to various legal and regulatory proceedings. It is inherently difficult to assess the outcome of these matters, and there can be no assurance that Comerica will prevail in any proceeding or litigation. Any such matter could result in substantial cost and diversion of Comerica's efforts, which by itself could have a material adverse effect on Comerica's financial condition and operating results. Further, adverse determinations in such matters could result in fines or actions by Comerica's regulators that could materially adversely affect Comerica's business, financial condition or results of operations.

Comerica establishes reserves for legal claims when payments associated with the claims become probable and the costs can be reasonably estimated. Comerica may still incur legal costs for a matter even if it has not established a reserve. In addition, due to the inherent subjectivity of the assessments and unpredictability of the outcome of legal proceedings, the actual cost of resolving a legal claim may be substantially higher than any amounts reserved for that matter. The ultimate resolution of a pending legal proceeding, depending on the remedy sought and granted, could adversely affect Comerica's results of operations and financial condition.

- **Comerica may incur losses due to fraud.**

Fraudulent activity can take many forms and has escalated as more tools for accessing financial services emerge, such as real-time payments. Fraud schemes are broad and continuously evolving. Examples include but are not limited to: debit card/credit card fraud, check fraud, mechanical devices attached to ATM machines, social engineering and phishing attacks to obtain personal information, impersonation of clients through the use of falsified or stolen credentials, employee fraud, information theft and other malfeasance. Increased deployment of technologies, such as chip card technology, defray and reduce aspects of fraud; however, criminals are turning to other sources to steal personally identifiable information in order to impersonate the consumer to commit fraud. Many of these data compromises have been widely reported in the media. Further, as a result of the increased sophistication of fraud

activity, Comerica continues to invest in systems, resources, and controls to detect and prevent fraud. This will result in continued ongoing investments in the future.

- **Controls and procedures may not prevent or detect all errors or acts of fraud.**

Controls and procedures are designed to provide reasonable assurance that information required to be disclosed in reports Comerica files or submits under the Exchange Act is accurately accumulated and communicated to management, and recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met, due to certain inherent limitations. These limitations include the realities that judgments in decision making can be faulty, that alternative reasoned judgments can be drawn, that breakdowns can occur because of an error or mistake, or that controls may be fraudulently circumvented. Accordingly, because of the inherent limitations in control systems, misstatements due to error or fraud may occur and not be detected.

COMPLIANCE RISK

- **Changes in regulation or oversight, or changes in Comerica's status with respect to existing regulations or oversight, may have a material adverse impact on Comerica's operations.**

Comerica is subject to extensive regulation, supervision and examination by the U.S. Treasury, the Texas Department of Banking, the FDIC, the FRB, the OCC, the CFPB, the CFTC, the SEC, FINRA, DOL, MSRB and other regulatory bodies. Such regulation and supervision governs and limits the activities in which Comerica may engage. Regulatory authorities have extensive discretion in their supervisory and enforcement activities, including the imposition of restrictions on Comerica's operations and ability to make acquisitions, investigations and limitations related to Comerica's securities, the classification of Comerica's assets and determination of the level of Comerica's allowance for loan losses. Any change in such regulation and oversight, whether in the form of regulatory policy, regulations, legislation or supervisory action, may have a material adverse impact on Comerica's business, financial condition or results of operations. The impact of any future legislation or regulatory actions may adversely affect Comerica's businesses or operations.

Further, even if such regulations or oversight do not change, Comerica's business may develop such that it may be subject to increased regulatory requirements. For example, if Comerica's asset size increases in the future and exceeds \$100 billion in average total consolidated assets calculated over four consecutive financial quarters, Comerica will become a Category IV institution. Category IV institutions (\$100 to \$250 billion in assets) under the Tailoring Rules are subject to additional requirements, such as certain enhanced prudential standards and monitoring and reporting certain risk-based indicators. Under the Tailoring Rules, Category IV firms are, among other things, subject to (1) supervisory capital stress testing on a biennial basis, (2) requirements to develop and maintain a capital plan on an annual basis and (3) certain liquidity risk management and risk committee requirements, including liquidity buffer and liquidity stress testing requirements. Comerica would also incur additional assessments under Regulation TT. If Comerica becomes subject to enhanced prudential standards, it will face more stringent requirements or limitations on its business, as well as increased compliance costs, and, depending on its levels of capital and liquidity, stress test results and other factors, may be limited in the types of activities it may conduct and be limited as to how it utilizes capital. Further, Comerica may be subject to heightened expectations, which could result in additional regulatory scrutiny, higher penalties, and more severe consequences if it is unable to meet those expectations.

- **Compliance with stringent capital requirements may adversely affect Comerica.**

Comerica is required to satisfy stringent regulatory capital standards, as set forth in the "Supervision and Regulation" section of this report. These requirements, and any other new laws or regulations related to capital and liquidity, or any existing requirements that Comerica becomes subject to as a result of its increased asset size, could adversely affect Comerica's ability to pay dividends or make share repurchases, or could require Comerica to reduce business levels or to raise capital, including in ways that may adversely affect its results of operations or financial condition and/or existing shareholders. Maintaining higher levels of capital may reduce Comerica's profitability and otherwise adversely affect its business, financial condition, or results of operations.

- **Tax regulations could be subject to potential legislative, administrative or judicial changes or interpretations.**

Federal income tax treatment of corporations may be clarified and/or modified by legislative, administrative or judicial changes or interpretations at any time. Any such changes could adversely affect Comerica, either directly, or indirectly as a result of effects on Comerica's customers. For example, the U.S. government recently enacted the Inflation Reduction Act (IRA), which includes changes to the U.S. corporate income tax system, including a 15% minimum tax based on "adjusted financial statement income" for certain large corporations, which is effective in 2023, and a 1% excise tax on share repurchases after December 31, 2022. In addition, the current administration has announced a

proposal to increase such excise tax to 4%. While Comerica does not believe that the IRA will have a material impact on its consolidated financial statements, any future corporate tax legislation could have that effect.

STRATEGIC RISK

- **Damage to Comerica's reputation could damage its businesses.**

Reputational risk is an increasing concern for businesses as customers are interested in doing business with companies they admire and trust. Such risks include compliance issues, operational challenges, or a strategic, high profile event. Comerica's business is based on the trust of its customers, communities, and entire value chain, which makes managing reputational risk extremely important. News or other publicity that impairs Comerica's reputation, or the reputation of the financial services industry generally, can therefore cause significant harm to Comerica's business and prospects. Further, adverse publicity or negative information posted on social media websites regarding Comerica, whether or not true, may result in harm to Comerica's prospects.

- **Comerica may not be able to utilize technology to efficiently and effectively develop, market, and deliver new products and services to its customers.**

The financial services industry experiences rapid technological change with regular introductions of new technology-driven products and services. The ability to access and use technology is an increasingly important competitive factor in the financial services industry, and having the right technology is a critically important component to customer satisfaction. As well, the efficient and effective utilization of technology enables financial institutions to reduce costs. Comerica's future success depends, in part, upon its ability to address the needs of its customers by using technology to market and deliver products and services that will satisfy customer demands, meet regulatory requirements, and create additional efficiencies in Comerica's operations. Comerica may not be able to effectively develop new technology-driven products and services or be successful in marketing or supporting these products and services to its customers, which could have a material adverse impact on Comerica's financial condition and results of operations.

- **Competitive product and pricing pressures within Comerica's markets may change.**

Comerica operates in a very competitive environment, which is characterized by competition from a number of other financial institutions in each market in which it operates. Comerica competes largely on the basis of industry expertise, the range of products and services offered, pricing and reputation, convenience, quality of service, responsiveness to customer needs and the overall customer relationship. Comerica's competitors include financial institutions of all sizes. Some of Comerica's larger competitors, including certain nationwide banks that have a significant presence in Comerica's markets, may have a broader array of products and structure alternatives and, due to their size, may more easily absorb credit losses. Some of Comerica's competitors (larger or smaller) may have more liberal lending policies and and aggressive pricing standards for loans, deposits and services. Increasingly, Comerica competes with other companies based on financial technology and capabilities, such as mobile banking applications and funds transfer.

Additionally, the financial services industry is subject to extensive regulation. For more information, see the "Supervision and Regulation" section of this report. Such regulations may require significant additional investments in technology, personnel or other resources or place limitations on the ability of financial institutions, including Comerica, to engage in certain activities. Comerica's competitors may be subject to significantly different or lesser regulation due to their asset size or types of products offered. Some competitors may also have the ability to more efficiently utilize resources to comply with regulations or may be able to more effectively absorb the cost of regulations.

In addition to banks, Comerica and its banking subsidiaries also face competition from financial intermediaries, including savings and loan associations, consumer and commercial finance companies, leasing companies, venture capital funds, credit unions, investment banks, insurance companies and securities firms. Competition among providers of financial products and services continues to increase as technology advances have lowered the barriers to entry for financial technology companies, with customers having the opportunity to select from a growing variety of traditional and nontraditional alternatives, including crowdfunding, digital wallets and money transfer services. The ability of non-banks to provide services previously limited to traditional banks has intensified competition. Because non-banks are not subject to many of the same regulatory restrictions as banks and bank holding companies, they can often operate with greater flexibility and lower cost structures.

If Comerica is unable to compete effectively in products and pricing in its markets, business could decline, which could have a material adverse effect on Comerica's business, financial condition or results of operations.

- **The introduction, implementation, withdrawal, success and timing of business initiatives and strategies may be less successful or may be different than anticipated, which could adversely affect Comerica's business.**

Comerica makes certain projections and develops plans and strategies for its banking and financial products. If Comerica does not accurately determine demand for its banking and financial product needs, it could result in Comerica incurring significant expenses without the anticipated increases in revenue, which could result in a material adverse effect on its business. Recently Comerica expanded its presence in the Southeastern and Mountain West regions of the U.S. If Comerica's expansion is not successful, it could adversely impact Comerica's expenses.

- **Management's ability to maintain and expand customer relationships may differ from expectations.**

The financial services industry is very competitive. Comerica not only vies for business opportunities with new customers, but also competes to maintain and expand the relationships it has with its existing customers. While management believes that it can continue to grow many of these relationships, Comerica will continue to experience pressures to maintain these relationships as its competitors attempt to capture its customers. Failure to create new customer relationships and to maintain and expand existing customer relationships to the extent anticipated may adversely impact Comerica's earnings.

- **Management's ability to retain key officers and employees may change.**

Comerica's future operating results depend substantially upon the continued service of its executive officers and key personnel. Comerica's future operating results also depend in significant part upon its ability to attract and retain qualified management, financial, technical, marketing, sales and support personnel. Competition for qualified personnel is intense, and Comerica cannot ensure success in attracting or retaining qualified personnel. There may be only a limited number of persons with the requisite skills to serve in these positions, and it may be increasingly difficult for Comerica to hire personnel over time. The increased prevalence of remote work environments has intensified the competition for talent as job opportunities may be less constrained by physical geography.

Further, Comerica's ability to retain key officers and employees may be impacted by legislation and regulation affecting the financial services industry. In 2016, the FRB, OCC and several other federal financial regulators revised and re-proposed rules to implement Section 956 of the Dodd-Frank Act. Section 956 directed regulators to jointly prescribe regulations or guidelines prohibiting incentive-based payment arrangements, or any feature of any such arrangement, at covered financial institutions that encourage inappropriate risks by providing excessive compensation or that could lead to a material financial loss. Consistent with the Dodd-Frank Act, the proposed rule would impose heightened standards for institutions with \$50 billion or more in total consolidated assets, which includes Comerica. For these larger institutions, the proposed rule would require the deferral of at least 40 percent of incentive-based payments for designated executives and significant risk-takers who individually have the ability to expose the institution to possible losses that are substantial in relation to the institution's size, capital or overall risk tolerance. Moreover, incentive-based compensation of these individuals would be subject to potential clawback for seven years following vesting. Further, the rule imposes enhanced risk management controls and governance and internal policy and procedure requirements with respect to incentive compensation. Accordingly, Comerica may be at a disadvantage to offer competitive compensation compared to other financial institutions (as referenced above) or companies in other industries, which may not be subject to the same requirements.

Comerica's business, financial condition or results of operations could be materially adversely affected by the loss of any of its key employees, or Comerica's inability to attract and retain skilled employees.

- **Any future strategic acquisitions or divestitures may present certain risks to Comerica's business and operations.**

Difficulties in capitalizing on the opportunities presented by a future acquisition may prevent Comerica from fully achieving the expected benefits from the acquisition, or may cause the achievement of such expectations to take longer to realize than expected.

Further, the assimilation of any acquired entity's customers and markets could result in higher than expected deposit attrition, loss of key employees, disruption of Comerica's businesses or the businesses of the acquired entity or otherwise adversely affect Comerica's ability to maintain relationships with customers and employees or achieve the anticipated benefits of the acquisition. These matters could have an adverse effect on Comerica for an undetermined period. Comerica would be subject to similar risks and difficulties in connection with any future decisions to downsize, sell or close units or otherwise change the business mix of Comerica.

GENERAL RISK

- **General political, economic or industry conditions, either domestically or internationally, may be less favorable than expected.**

Local, domestic, and international events including economic, financial market, political and industry-specific conditions affect the financial services industry, directly and indirectly. The economic environment and market conditions in which Comerica operates continue to be uncertain. The U.S. economy is facing headwinds from recessionary pressures, surging interest rates, high inflation, the end of fiscal stimulus, lower housing market activity and weak export markets abroad. Foreign developments pose additional headwinds, including the impacts of the Russia-Ukraine conflict, uncertainties about China's reopening and the impact of tighter monetary policy across much of the global economy. While some of these headwinds are expected to dissipate in 2023, U.S. debt ceiling and budget deficit concerns have increased the possibility of further credit-rating downgrades and economic slowdowns, or a recession in the U.S. Conditions related to inflation, recession, unemployment, volatile interest rates, international conflicts, changes in trade policies and other factors, such as real estate values, energy prices, state and local municipal budget deficits, government spending and the U.S. national debt, outside of our control may, directly and indirectly, adversely affect Comerica.

- **Inflation could negatively impact Comerica's business, profitability and stock price.**

Prolonged periods of inflation may impact Comerica profitability by negatively impacting its fixed costs and expenses, including increasing funding costs and expense related to talent acquisition and retention, and negatively impacting the demand for its products and services. Additionally, inflation may lead to a decrease in consumer and clients purchasing power and negatively affect the need or demand for Comerica's products and services. If significant inflation continues, Comerica's business could be negatively affected by, among other things, increased default rates leading to credit losses which could decrease the appetite for new credit extensions. These inflationary pressures could result in missed earnings and budgetary projections causing Comerica's stock price to suffer.

- **Methods of reducing risk exposures might not be effective.**

Instruments, systems and strategies used to hedge or otherwise manage exposure to various types of credit, market, liquidity, technology, operational, compliance, financial reporting and strategic risks could be less effective than anticipated. As a result, Comerica may not be able to effectively mitigate its risk exposures in particular market environments or against particular types of risk, which could have a material adverse impact on Comerica's business, financial condition or results of operations.

For more information regarding risk management, please see "Risk Management" starting on page F-15 of the Financial Section of this report.

- **Catastrophic events, including pandemics, may adversely affect the general economy, financial and capital markets, specific industries, and Comerica.**

Acts of terrorism, cyber-terrorism, political unrest, war, civil disturbance, armed regional and international hostilities and international responses to these hostilities, natural disasters (including tornadoes, hurricanes, earthquakes, fires, droughts and floods), global health risks or pandemics, or the threat of or perceived potential for these events could have a negative impact on us. Comerica's business continuity and disaster recovery plans may not be successful upon the occurrence of one of these scenarios, and a significant catastrophic event anywhere in the world could materially adversely affect Comerica's operating results.

In particular, certain of the regions where Comerica operates, including California, Texas, and Florida, are known for being vulnerable to natural disasters. These types of natural catastrophic events have at times disrupted the local economies, Comerica's business and customers, and have caused physical damage to Comerica's property in these regions.

In addition, COVID-19 and concerns regarding the extent to which it may continue to spread, including the currently discovered and potential future variants of COVID-19, have affected, and may increasingly affect, international trade (including supply chains and export levels), travel, employee productivity, and other economic activities. COVID-19 or other potential epidemics or pandemics, have the potential to negatively impact Comerica's and/or its clients' costs, demand for its clients' products, and/or the U.S. economy or certain sectors thereof and, thus, adversely affect Comerica's business, financial condition, and results of operations.

Further, catastrophic events may have an impact on Comerica's customers and in turn, on Comerica.

In addition, these events have had and may continue to have an adverse impact on the U.S. and world economy in general and consumer confidence and spending in particular, which could harm Comerica's operations. Any of these events could increase volatility in the U.S. and world financial markets, which could harm Comerica's stock price and may limit the capital resources available to Comerica and its customers. This could have a material adverse impact on Comerica's operating results, revenues and costs and may result in increased volatility in the market price of Comerica's common stock.

- **Climate change manifesting as physical or transition risks could adversely affect Comerica's operations, businesses and customers.**

There is an increasing concern over the risks of climate change and related environmental sustainability matters. The physical risks of climate change include discrete events, such as flooding and wildfires, and longer term shifts in climate patterns, such as extreme heat, sea level rise, and more frequent and prolonged drought. Such events could disrupt Comerica's operations or those of its clients or third parties on which it relies, including through direct damage to assets and indirect impacts from supply chain disruption and market volatility. Additionally, transitioning to a low carbon economy may entail extensive policy, legal, technology, and market initiatives. Transition risks, including changes in consumer preferences and additional regulatory requirements or taxes, could increase expenses and undermine business strategies. In addition, Comerica's reputation and client relationships may be damaged as a result of practices related to climate change, including its involvement, or its clients' involvement, in certain industries or projects associated with causing or exacerbating climate change, as well as any decisions Comerica makes to continue to conduct or change its activities in response to considerations relating to climate change, including the setting of climate-related goals, commitments and targets. As climate risk is interconnected with all key risk types, Comerica is advancing its processes to embed climate risk considerations into risk management strategies such as market, credit and operational risks; however, because the timing and severity of climate change may not be predictable, risk management strategies may not be effective in mitigating climate risk exposure.

- **Changes in accounting standards could materially impact Comerica's financial statements.**

From time to time accounting standards setters change the financial accounting and reporting standards that govern the preparation of Comerica's financial statements. These changes can be difficult to predict and can materially impact how Comerica records and reports its financial condition and results of operations. In some cases, Comerica could be required to apply a new or revised standard retroactively, resulting in changes to previously reported financial results, or a cumulative charge to retained earnings.

- **Comerica's accounting estimates and processes are critical to the reporting of financial condition and results of operations. They require management to make estimates about matters that are uncertain.**

Accounting estimates and processes are fundamental to how Comerica records and reports its financial condition and results of operations. Management must exercise judgment in selecting and applying many of these accounting estimates and processes so they comply with U.S. Generally Accepted Accounting Principles ("GAAP"). In some cases, management must select an accounting policy or method to apply from two or more alternatives, any of which may be reasonable under the circumstances, yet may result in the Company reporting materially different results than would have been reported under a different alternative.

Management has identified certain accounting estimates as being critical because they require management's judgment to make difficult, subjective or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions or estimates. Comerica has established detailed policies and control procedures that are intended to ensure these critical accounting estimates and judgments are well controlled and applied consistently. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. Because of the uncertainty surrounding management's judgments and the estimates pertaining to these matters, Comerica cannot guarantee that it will not be required to adjust accounting policies or restate prior period financial statements. See "Critical Accounting Estimates" starting on page F-31 of the Financial Section of this report and Note 1 of the Notes to Consolidated Financial Statements starting on page F-43 of the Financial Section of this report.

- **Comerica's stock price can be volatile.**

Stock price volatility may make it more difficult for shareholders to resell their common stock when they want and at prices they find attractive. Comerica's stock price can fluctuate significantly in response to a variety of factors including, among other things:

- Actual or anticipated variations in quarterly results of operations.
- Recommendations or projections by securities analysts.
- Operating and stock price performance of other companies that investors deem comparable to Comerica.

- News reports relating to trends, concerns and other issues in the financial services industry.
- Perceptions in the marketplace regarding Comerica and/or its competitors.
- New technology used, or services offered, by competitors.
- Significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving Comerica or its competitors.
- Changes in dividends and capital returns.
- Changes in government regulations.
- Cyclical fluctuations.
- Geopolitical conditions such as acts or threats of terrorism or military conflicts.
- Activity by short sellers and changing government restrictions on such activity.

General market fluctuations, including real or anticipated changes in the strength of the economy; industry factors and general economic and political conditions and events, such as economic slowdowns or recessions; interest rate changes, oil price volatility or credit loss trends, among other factors, could also cause Comerica's stock price to decrease regardless of operating results.

For the above and other reasons, the market price of Comerica's securities may not accurately reflect the underlying value of the securities, and investors should consider this before relying on the market prices of Comerica's securities when making an investment decision.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

The executive offices of Comerica are located in the Comerica Bank Tower, 1717 Main Street, Dallas, Texas 75201. Comerica Bank occupies six floors of the building, plus additional space on the building's lower level. Comerica does not own the Comerica Bank Tower space, but has naming rights to the building and leases the space from an unaffiliated third party. The lease for the majority of such space used by Comerica and its subsidiaries extends through September 2028; however, the lease for one floor will terminate sooner, in November 2023. Comerica's Michigan headquarters are located in a 10-story building in the central business district of Detroit, Michigan at 411 W. Lafayette, Detroit, Michigan 48226. Such building is owned by Comerica Bank. As of December 31, 2022, Comerica, through its banking affiliates, operated at a total of 551 locations. This includes banking centers, trust services locations, and/or loan production or other financial services offices, primarily in the States of Texas, Michigan, California, Florida and Arizona. Of the 551 locations, 217 were owned and 334 were leased. As of December 31, 2022, affiliates also operated from leased spaces in Denver, Colorado; Wilmington, Delaware; Alpharetta, Georgia; Rosemont, Illinois; Boston, Massachusetts; Minneapolis, Minnesota; Morristown, New Jersey; New York, New York; Charlotte, North Carolina; Raleigh, North Carolina; Winston-Salem, North Carolina; Charleston, South Carolina; Greenville, South Carolina; Memphis, Tennessee; Bellevue, Washington; Monterrey, Mexico; Toronto, Ontario, Canada and Windsor, Ontario, Canada. Comerica and its subsidiaries own, among other properties, a check processing center in Livonia, Michigan, and three buildings in Auburn Hills, Michigan, used mainly for lending functions and operations.

Item 3. Legal Proceedings.

Please see Note 21 of the Notes to Consolidated Financial Statements starting on page F-90 of the Financial Section of this report.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Market Information, Holders of Common Stock and Dividends

The common stock of Comerica Incorporated is traded on the New York Stock Exchange (NYSE Trading Symbol: CMA). At February 10, 2023, there were approximately 8,031 record holders of Comerica's common stock.

Subject to approval of the Board of Directors, applicable regulatory requirements and the Series A Preferred Stock dividend preference, Comerica expects to continue its policy of paying regular cash dividends on a quarterly basis. A discussion of dividend restrictions applicable to Comerica is set forth in Note 20 of the Notes to Consolidated Financial Statements starting on page F-88 of the Financial Section of this report, in the "Capital" section starting on page F-14 of the Financial Section of this report and in the "Supervision and Regulation" section of this report.

Performance Graph

Our performance graph is available under the caption "Performance Graph" on page F-2 of the Financial Section of this report.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

As of December 31, 2022, a total of 97.2 million shares have been authorized for repurchase under the share repurchase program since its inception in 2010. There is no expiration date for Comerica's share repurchase program.

The following table summarizes Comerica's share repurchase activity for the year ended December 31, 2022.

<i>(shares in thousands)</i>	Total Number of Shares Purchased as Part of Publicly Announced Repurchase Plans or Programs	Remaining Share Repurchase Authorization (a)	Total Number of Shares Purchased (b)	Average Price Paid Per Share
Total first quarter 2022	377	4,997	399	\$ 92.58
Total second quarter 2022	—	4,997	2	90.85
Total third quarter 2022	—	4,997	2	74.64
October 2022	—	4,997	2	72.44
November 2022	—	4,997	—	—
December 2022	—	4,997	—	—
Total fourth quarter 2022	—	4,997	2	72.44
Total 2022	377	4,997	405	\$ 92.39

(a) Maximum number of shares that may yet be purchased under the publicly announced plans or programs.

(b) Includes approximately 28,000 shares (including 2,000 shares in the quarter ended December 31, 2022) purchased pursuant to deferred compensation plans and shares purchased from employees to pay for taxes related to restricted stock vesting under the terms of an employee share-based compensation plan during the year ended December 31, 2022. These transactions are not considered part of Comerica's repurchase program.

Item 6. [Reserved]

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

Reference is made to the sections entitled "2022 Overview," "Results of Operations," "Strategic Lines of Business," "Balance Sheet and Capital Funds Analysis," "Risk Management," "Critical Accounting Estimates," "Supplemental Financial Data" and "Forward-Looking Statements" on pages F-3 through F-37 of the Financial Section of this report.

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

Reference is made to the subheadings entitled "Market and Liquidity Risk," "Operational Risk," "Technology Risk," "Compliance Risk" and "Strategic Risk" on pages F-24 through F-30 of the Financial Section of this report.

Item 8. Financial Statements and Supplementary Data.

Reference is made to the sections entitled “Consolidated Balance Sheets,” “Consolidated Statements of Income,” “Consolidated Statements of Comprehensive Income,” “Consolidated Statements of Changes in Shareholders' Equity,” “Consolidated Statements of Cash Flows,” “Notes to Consolidated Financial Statements,” “Report of Management,” and “Reports of Independent Registered Public Accounting Firm,” (PCAOB ID: 42) on pages F-38 through F-104 of the Financial Section of this report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.*Disclosure Controls and Procedures*

As required by Rule 13a-15(b) of the Exchange Act, management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of the end of the period covered by this Annual Report on Form 10-K, of the effectiveness of our disclosure controls and procedures as defined in Exchange Act Rule 13a-15(e). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that Comerica's disclosure controls and procedures were effective as of the end of the period covered by this Annual Report on Form 10-K.

Internal Control over Financial Reporting

Management's annual report on internal control over financial reporting and the related attestation report of Comerica's registered public accounting firm are included on pages F-101 and F-102 in the Financial Section of this report.

As required by Rule 13a-15(d) of the Exchange Act, management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our internal control over financial reporting to determine whether any changes occurred during the last quarter of the fiscal year covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, Comerica's internal control over financial reporting. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that there has been no such change during the last quarter of the fiscal year covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, Comerica's internal control over financial reporting.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

None.

PART III**Item 10. Directors, Executive Officers and Corporate Governance.**

Comerica has a Senior Financial Officer Code of Ethics that applies to the Chief Executive Officer, the Chief Financial Officer, the Chief Accounting Officer and the Treasurer. The Senior Financial Officer Code of Ethics is available on Comerica's website at www.comerica.com. If any substantive amendments are made to the Senior Financial Officer Code of Ethics or if Comerica grants any waiver, including any implicit waiver, from a provision of the Senior Financial Officer Code of Ethics to the Chief Executive Officer, the Chief Financial Officer, the Chief Accounting Officer or the Treasurer, we will disclose the nature of such amendment or waiver on our website.

The remainder of the response to this item will be included under the sections captioned “Information About Nominees,” “Board and Committee Governance,” “Committees and Meetings of Directors,” and “Executive Officers” of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 25, 2023, which sections are hereby incorporated by reference.

Item 11. Executive Compensation.

The response to this item will be included under the sections captioned “Compensation Committee Interlocks and Insider Participation,” “Compensation Discussion and Analysis,” “Compensation of Directors,” “Governance, Compensation and Nominating Committee Report,” “2022 Summary Compensation Table,” “2022 Grants of Plan-Based Awards,” “Outstanding Equity Awards at Fiscal Year-End 2022,” “2022 Option Exercises and Stock Vested,” “Pension Benefits at Fiscal Year-End 2022,” “2022 Nonqualified Deferred Compensation,” “Potential Payments upon Termination or Change of Control at Fiscal Year-End 2022,” and "Pay Ratio Disclosure" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 25, 2023, which sections are hereby incorporated by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The response to this item will be included under the sections captioned “Security Ownership of Certain Beneficial Owners,” “Security Ownership of Management” and "Securities Authorized for Issuance Under Equity Compensation Plans" of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 25, 2023, which sections are hereby incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The response to this item will be included under the sections captioned “Director Independence” and “Transactions with Related Persons” of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 25, 2023, which sections are hereby incorporated by reference.

Item 14. Principal Accountant Fees and Services.

The response to this item will be included under the section captioned “Independent Registered Public Accounting Firm” of Comerica's definitive Proxy Statement relating to the Annual Meeting of Shareholders to be held on April 25, 2023, which section is hereby incorporated by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

The following documents are filed as a part of this report:

1. Financial Statements: The financial statements that are filed as part of this report are included in the Financial Section on pages F-38 through F-104.
2. All of the schedules for which provision is made in the applicable accounting regulations of the SEC are either not required under the related instruction, the required information is contained elsewhere in the Form 10-K, or the schedules are inapplicable and therefore have been omitted.
3. Exhibits:
 - 2 (not applicable)
 - 3.1 Restated Certificate of Incorporation of Comerica Incorporated (filed as Exhibit 3.2 to Registrant's Current Report on Form 8-K dated August 4, 2010, and incorporated herein by reference).
 - 3.2 Certificate of Amendment to Restated Certificate of Incorporation of Comerica Incorporated (filed as Exhibit 3.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, and incorporated herein by reference).
 - 3.3 Amended and Restated Bylaws of Comerica Incorporated (filed as Exhibit 3.3 to Registrant's Current Report on Form 8-K dated November 3, 2020, and incorporated herein by reference).
 - 3.4 Certificate of Designations of 5.625% Fixed-Rate Reset Non-Cumulative Perpetual Preferred Stock, Series A, dated May 26, 2020, of Comerica Incorporated (including the form of 5.625% Fixed-Rate Reset Non-Cumulative Perpetual Preferred Stock, Series A Certificate of Comerica Incorporated attached as Exhibit A thereto) (filed as Exhibit 3.1 to Registrant's Current Report on Form 8-K dated May 26, 2020, and incorporated herein by reference).
- 4 [Reference is made to Exhibits 3.1, 3.2, 3.3 and 3.4 in respect of instruments defining the rights of security holders. In accordance with Regulation S-K Item No. 601(b)(4)(iii), the Registrant is not filing copies of instruments defining the rights of holders of long-term debt because none of those instruments authorizes debt in excess of 10% of the total assets of the Registrant and its subsidiaries on a consolidated basis. The Registrant hereby agrees to furnish a copy of any such instrument to the SEC upon request.]
- 4.1 Deposit Agreement, dated May 26, 2020, among Comerica Incorporated, Computershare Inc., Computershare Trust Company, N.A. and the holders from time to time of the depositary receipts issued thereunder (including the form of depositary share receipt attached as Exhibit A thereto) (filed as Exhibit 4.1 to Registrant's Current Report on Form 8-K dated May 26, 2020, and incorporated herein by reference).
- 4.2 Description of Registrant's Securities
- 9 (not applicable)
- 10.1† Comerica Incorporated Amended and Restated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 30, 2021, and incorporated herein by reference).
- A† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
- B† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (non-cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.3 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
- C† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (2020 non-cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1I to Registrant's Current Report on Form 8-K dated November 3, 2020, and incorporated herein by reference).
- D† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (2-year cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1H to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, and incorporated herein by reference).
- E† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (2021 three-year non-cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1K to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, and incorporated herein by reference).

- F† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (non-cliff vesting without retirement provisions) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1N to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2022, and incorporated herein by reference).
- G† Form of Standard Comerica Incorporated Restricted Stock Unit Agreement (Director Version) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.1L to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, and incorporated herein by reference).
- H† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (2020 version) (filed as Exhibit 10.1G to Registrant's Annual Report on Form 10-K for the year ended December 31, 2020, and incorporated herein by reference).
- I† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (2022 version) (filed as Exhibit 10.1H to Registrant's Annual Report on Form 10-K for the year ended December 31, 2021, and incorporated herein by reference).
- J† Form of Standard Comerica Incorporated Senior Executive Long-Term Performance Restricted Stock Unit Award Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (2023 version) (filed as Exhibit 10.1N to Registrant's Current Report on Form 8-K dated January 24, 2023, and incorporated herein by reference).
- K† Form of Standard Comerica Incorporated Restricted Stock Agreement (cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.6 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
- L† Form of Standard Comerica Incorporated Restricted Stock Agreement (non-cliff vesting) under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.7 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
- M† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated 2018 Long-Term Incentive Plan (filed as Exhibit 10.4 to Registrant's Current Report on Form 8-K dated April 24, 2018, and incorporated herein by reference).
- 10.2† Comerica Incorporated 2006 Amended and Restated Long-Term Incentive Plan (filed as Exhibit 10.1 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).
- A† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2012 version) (filed as Exhibit 10.1C to Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, and incorporated herein by reference).
- B† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2014 version) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 21, 2014, and incorporated herein by reference).
- C† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2014 version 2) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated July 22, 2014, and incorporated herein by reference).
- D† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2015 version) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 10, 2015, and incorporated herein by reference).
- E† Form of Standard Comerica Incorporated Non-Qualified Stock Option Agreement under the Comerica Incorporated Amended and Restated 2006 Long-Term Incentive Plan (2017 version) (filed as Exhibit 10.1G to Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, and incorporated herein by reference).
- F† Form of Standard Comerica Incorporated Restricted Stock Unit Award Agreement under the Amended and Restated Comerica Incorporated 2006 Long-Term Incentive Plan (2018 version - non-cliff vesting) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 8, 2017, and incorporated herein by reference).
- 10.3† Comerica Incorporated 2016 Management Incentive Plan (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated May 2, 2016, and incorporated herein by reference).

- 10.4† Form of Standard Comerica Incorporated No Sale Agreement under the Comerica Incorporated Amended and Restated Management Incentive Plan (filed as Exhibit 10.5 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2004, and incorporated herein by reference).
- 10.5† Supplemental Retirement Income Account Plan (formerly known as the Amended and Restated Benefit Equalization Plan for Employees of Comerica Incorporated) (amended and restated October 13, 2016, with amendments effective January 1, 2017) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 24, 2017, and incorporated herein by reference).
- 10.6† 1999 Comerica Incorporated Amended and Restated Deferred Compensation Plan (amended and restated effective December 31, 2022) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 8, 2022, and incorporated herein by reference).
- 10.7† 1999 Comerica Incorporated Amended and Restated Common Stock Deferred Incentive Award Plan (amended and restated effective December 31, 2022) (filed as Exhibit 10.2 to Registrant's Current Report on Form 8-K dated November 8, 2022, and incorporated herein by reference).
- 10.8† Amended and Restated Comerica Incorporated Non-Employee Director Fee Deferral Plan (amended and restated effective July 1, 2020) (filed as Exhibit 10.11 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, and incorporated herein by reference).
- 10.9† Amended and Restated Comerica Incorporated Common Stock Non-Employee Director Fee Deferral Plan (amended and restated effective July 1, 2020)(filed as Exhibit 10.12 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, and incorporated herein by reference).
- 10.10† Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (amended and restated effective May 15, 2014) (filed as Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, and incorporated herein by reference).
- A† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, and incorporated herein by reference).
- B† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 2) (filed as Exhibit 10.6 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, and incorporated herein by reference).
- C† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 2.5) (filed as Exhibit 10.48 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2010, and incorporated herein by reference).
- D† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 3) (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, and incorporated herein by reference).
- E† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the Comerica Incorporated Amended and Restated Incentive Plan for Non-Employee Directors (Version 4) (filed as Exhibit 10.4 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011, and incorporated herein by reference).
- 10.11† 2015 Comerica Incorporated Incentive Plan for Non-Employee Directors (filed as Exhibit 10.4 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, and incorporated herein by reference).
- A† Form of Standard Comerica Incorporated Non-Employee Director Restricted Stock Unit Agreement under the 2015 Comerica Incorporated Incentive Plan for Non-Employee Directors (filed as Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, and incorporated herein by reference).
- 10.12† Form of Indemnification Agreement between Comerica Incorporated and certain of its directors and officers (filed as Exhibit 10.6 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2002, and incorporated herein by reference).
- 10.13† Supplemental Pension and Retiree Medical Agreement with Ralph W. Babb Jr. (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1998, and incorporated herein by reference).

- 10.14† Restrictive Covenants and General Release Agreement by and between John D. Buchanan and Comerica Incorporated dated May 12, 2022 (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated May 12, 2022, and incorporated herein by reference.)
- 10.15† Form of Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-current) (filed as Exhibit 10.10 to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, and incorporated herein by reference).
- A† Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-current).
- 10.16† Form of Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-2015 version) (filed as Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, and incorporated herein by reference).
- A† Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-2015 version).
- 10.17† Form of Change of Control Employment Agreement (BE4 and Higher Version) (filed as Exhibit 10.1 to Registrant's Current Report on Form 8-K dated November 18, 2008, and incorporated herein by reference).
- A† Schedule of Named Executive Officers Party to Change of Control Employment Agreement (BE4 and Higher Version).
- 10.18† Form of Change of Control Employment Agreement (BE4 and Higher Version without gross-up or window period-2009 version) (filed as Exhibit 10.42 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2009, and incorporated herein by reference).
- 10.19† Form of Change of Control Employment Agreement (BE2-BE3 Version) (filed as Exhibit 10.22 to Registrant's Annual Report on Form 10-K for the year ended December 31, 2019, and incorporated herein by reference).
- 13 (not applicable)
- 14 (not applicable)
- 16 (not applicable)
- 18 (not applicable)
- 21 Subsidiaries of Registrant.
- 22 (not applicable)
- 23.1 Consent of Ernst & Young LLP.
- 24 (not applicable)
- 31.1 Chairman, President and CEO Rule 13a-14(a)/15d-14(a) Certification of Periodic Report (pursuant to Section 302 of the Sarbanes-Oxley Act of 2002).
- 31.2 Senior Executive Vice President and CFO Rule 13a-14(a)/15d-14(a) Certification of Periodic Report (pursuant to Section 302 of the Sarbanes-Oxley Act of 2002).
- 32 Section 1350 Certification of Periodic Report (pursuant to Section 906 of the Sarbanes-Oxley Act of 2002).
- 33 (not applicable)
- 34 (not applicable)
- 35 (not applicable)
- 95 (not applicable)
- 96 (not applicable)
- 99 (not applicable)
- 101 Financial statements from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2022, formatted in Inline XBRL: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Changes in Shareholders' Equity, (iv) the Consolidated Statements of Cash Flows and (v) the Notes to Consolidated Financial Statements.

104 The cover page from the Registrant's Annual Report on Form 10-K for the year ended December 31, 2022, formatted in Inline XBRL (included in Exhibit 101).

† Management contract or compensatory plan or arrangement.

File No. for all filings under Exchange Act, unless otherwise noted: 1-10706.

Item 16. Form 10-K Summary.

Not applicable.

FINANCIAL REVIEW AND REPORTS

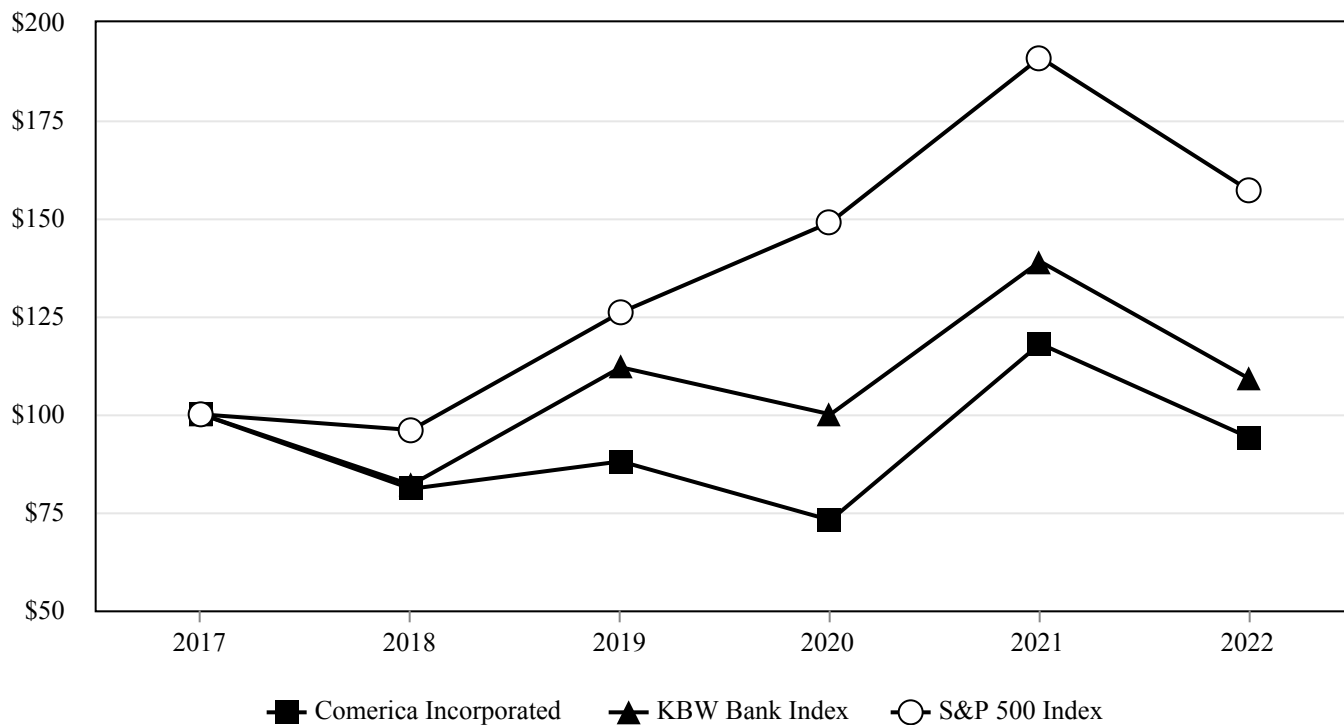
Comerica Incorporated and Subsidiaries

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PERFORMANCE GRAPH

The graph shown below compares the total returns (assuming reinvestment of dividends) of Comerica Incorporated common stock, the S&P 500 Index and the KBW Bank Index. The graph assumes \$100 invested in Comerica Incorporated common stock (returns based on stock prices per the NYSE) and each of the indices on December 31, 2017 and the reinvestment of all dividends during the periods presented.

**Comparison of Five Year Cumulative Total Return
Among Comerica Incorporated, KBW Bank and S&P 500 Index
(Assumes \$100 Invested on 12/31/17 and Reinvestment of Dividends)**



	2017	2018	2019	2020	2021	2022
Comerica Incorporated	100	81	88	73	118	94
KBW Bank Index	100	82	112	100	139	109
S&P 500 Index	100	96	126	149	191	157

The performance shown on the graph is not necessarily indicative of future performance.

2022 OVERVIEW

Comerica Incorporated (the Corporation) is a financial holding company headquartered in Dallas, Texas. The Corporation's major business segments are the Commercial Bank, the Retail Bank and Wealth Management. Information about the activities of the Corporation's business segments is provided in Note 22 to the consolidated financial statements.

As a financial institution, the Corporation's principal activity is lending to and accepting deposits from businesses and individuals. The primary source of revenue is net interest income, which is principally derived from the difference between interest earned on loans and investment securities and interest paid on deposits and other funding sources. The Corporation also provides other products and services that meet the financial needs of customers which generate noninterest income, the Corporation's secondary source of revenue. Growth in loans, deposits and noninterest income is affected by many factors, including economic conditions in the markets the Corporation serves, the financial requirements and economic health of customers and the ability to add new customers and/or increase the number of products used by current customers. Success in providing products and services depends on the financial needs of customers and the types of products desired.

The accounting and reporting policies of the Corporation and its subsidiaries conform to generally accepted accounting principles (GAAP) in the United States (U.S.). The Corporation's consolidated financial statements are prepared based on the application of accounting policies, the most significant of which are described in Note 1 to the consolidated financial statements. When necessary, the Corporation uses reasonable assumptions to develop estimates that affect the consolidated results of operations. The most critical of these estimates are discussed in the "Critical Accounting Estimates" section of this financial review.

Full-Year 2022 compared to Full-Year 2021

- Net income decreased \$17 million to \$1.2 billion, driven by an increase in the provision for credit losses, partially offset by an increase in net interest income due to higher short-term rates and growth in investment securities and loans. Pre-tax, pre-provision net revenue (PPNR) increased \$430 million to \$1.5 billion. (See Supplemental Financial Data section for reconciliations of non-GAAP financial measures.) Diluted net income per common share was \$8.47 in 2022 compared to \$8.35 in 2021.
- Average loans increased \$1.4 billion, or 3 percent, to \$50.5 billion, and included increases in Corporate Banking, general Middle Market, Equity Fund Services, Environmental Services, National Dealer Services, Commercial Real Estate and Entertainment Lending, partially offset by declines in Mortgage Banker Finance, Business Banking and Retail Banking. Excluding the impact of a \$2.2 billion decline in average Paycheck Protection Program (PPP) loans, which are reported within lines of business, average loans increased \$3.6 billion, or 8 percent.
- Average securities increased \$3.3 billion, or 21 percent, to \$19.0 billion, reflecting the investment of a portion of excess liquidity into mortgage-backed securities, partly offset by maturities of Treasury securities.
- Average deposits decreased \$2.2 billion, or 3 percent, to \$75.5 billion. Average interest-bearing deposits decreased \$2.8 billion, or 8 percent, reflecting strategic deposit management and customers utilizing balances to fund business activities, partially offset by an increase in average noninterest bearing-deposits of \$577 million, or 1 percent.
- Net interest income increased \$622 million to \$2.5 billion, and the net interest margin increased 81 basis points to 3.02 percent, largely due to higher short-term rates and growth in loans and securities balances, partly offset by the net impact of PPP loans.
- The provision for credit losses increased to an expense of \$60 million, compared to a benefit of \$384 million in 2021, which was primarily the result of loan growth and reflected strong credit metrics and a modest deterioration in economic forecasts.
- Noninterest income decreased \$55 million to \$1.1 billion, reflecting decreases in deferred compensation asset returns (offset in noninterest expenses), warrant-related income, card fees and investment banking fees, partially offset by increases in derivative income, risk management hedging income, brokerage fees and commercial lending fees.
- Noninterest expenses increased \$137 million to \$2.0 billion, primarily due to increases in salaries and benefits expense, operational losses, occupancy expense, travel and entertainment expense, FDIC insurance expense and consulting fees, partially offset by decreases in outside processing fee expense, non-salary pension expense and legal-related expenses.
- The Corporation declared common dividends of \$2.72 per share, returning \$391 million to common shareholders. Additionally, the Corporation declared \$23 million in preferred dividends.

RESULTS OF OPERATIONS

The following provides a comparative discussion of the Corporation's consolidated results of operations for 2022 compared to 2021. A comparative discussion of results for 2021 compared to 2020 is provided in the "Results of Operations" section beginning on page F-4 of the Corporation's 2021 Annual Report.

Analysis of Net Interest Income

(dollar amounts in millions)

Years Ended December 31	2022			2021			2020		
	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate
Commercial loans (a) (b)	\$ 29,846	\$ 1,278	4.28%	\$ 29,283	\$ 1,009	3.45%	\$ 32,144	\$ 1,099	3.42%
Real estate construction loans	2,607	132	5.07	3,609	123	3.40	3,912	147	3.76
Commercial mortgage loans	12,135	513	4.22	10,610	305	2.88	9,839	320	3.25
Lease financing (c)	680	21	3.12	596	(2)	(0.37)	594	20	3.37
International loans	1,246	56	4.46	1,063	33	3.14	1,028	37	3.61
Residential mortgage loans	1,776	56	3.16	1,813	55	3.04	1,905	66	3.45
Consumer loans	2,170	97	4.49	2,109	71	3.34	2,209	84	3.80
Total loans (d)	50,460	2,153	4.27	49,083	1,594	3.25	51,631	1,773	3.44
Mortgage-backed securities (e)	16,199	385	2.14	11,747	224	1.92	9,820	221	2.30
U.S. Treasury securities (f)	2,816	29	0.98	3,977	56	1.42	3,612	70	1.98
Total investment securities	19,015	414	1.97	15,724	280	1.79	13,432	291	2.21
Interest-bearing deposits with banks (g)	9,376	104	1.02	18,729	27	0.14	10,203	28	0.27
Other short-term investments	174	1	0.81	183	—	0.22	153	1	0.72
Total earning assets	79,025	2,672	3.27	83,719	1,901	2.27	75,419	2,093	2.79
Cash and due from banks	1,481			1,006			878		
Allowance for loan losses	(569)			(729)			(900)		
Accrued income and other assets	7,335			6,156			5,749		
Total assets	\$ 87,272			\$ 90,152			\$ 81,146		
Money market and interest-bearing checking deposits (h)	\$ 28,347	94	0.33	\$ 31,063	18	0.06	\$ 26,798	72	0.27
Savings deposits	3,304	2	0.05	3,018	—	0.01	2,454	1	0.03
Customer certificates of deposit	1,756	5	0.30	2,110	4	0.21	2,626	27	1.02
Other time deposits	16	1	4.17	—	—	—	17	—	2.00
Foreign office time deposits	40	—	1.05	49	—	0.08	90	1	0.42
Total interest-bearing deposits	33,463	102	0.30	36,240	22	0.06	31,985	101	0.31
Federal funds purchased	82	3	3.28	2	—	—	30	—	0.98
Other short-term borrowings	354	14	4.08	—	—	—	284	1	0.25
Medium- and long-term debt	2,818	87	3.07	3,035	35	1.11	6,549	80	1.23
Total interest-bearing sources	36,717	206	0.56	39,277	57	0.14	38,848	182	0.47
Noninterest-bearing deposits	42,018			41,441			33,053		
Accrued expenses and other liabilities	2,086			1,481			1,554		
Shareholders' equity	6,451			7,953			7,691		
Total liabilities and shareholders' equity	\$ 87,272			\$ 90,152			\$ 81,146		
Net interest income/rate spread		\$ 2,466	2.71		\$ 1,844	2.13		\$ 1,911	2.32
Impact of net noninterest-bearing sources of funds			0.31			0.08			0.22
Net interest margin (as a percentage of average earning assets)			3.02%			2.21%			2.54%

(a) Interest income on commercial loans included \$(25) million, \$95 million and \$70 million of business loan swap (loss) income for the years ended December 31, 2022, 2021 and 2020, respectively.

(b) Included Paycheck Protection Program (PPP) loans with average balances of \$147 million, \$2.3 billion and \$2.5 billion, interest income of \$11 million, \$111 million and \$63 million and average yields of 7.25%, 4.77% and 2.49% for the years ended December 31, 2022, 2021 and 2020, respectively.

(c) Included residual value adjustments totaling \$3 million and \$20 million, which impacted the average yield on loans by 1 basis point and 4 basis points for the years ended December 31, 2022 and 2021, respectively. There were no residual value adjustments recorded for the year ended December 31, 2020.

(d) Nonaccrual loans are included in average balances reported and in the calculation of average rates.

(e) Average balances included \$(1.8) billion, \$61 million and \$213 million of unrealized (losses) gains for the years ended December 31, 2022, 2021 and 2020, respectively; yields calculated gross of these unrealized gains and losses.

(f) Average balances included \$(117) million, \$27 million and \$90 million of unrealized (losses) gains for the years ended December 31, 2022, 2021 and 2020, respectively; yields calculated gross of these unrealized gains and losses.

(g) Average balances excluded \$769 million, \$375 million and \$28 million of collateral posted and netted against derivative liability positions for the years ended December 31, 2022, 2021 and 2020, respectively; yields calculated gross of derivative netting amounts.

(h) Average balances excluded \$128 million, \$156 million and \$279 million of collateral posted and netted against derivative liability positions for the years ended December 31, 2022, 2021 and 2020, respectively; yields calculated gross of derivative netting amounts.

Rate/Volume Analysis

(in millions)

Years Ended December 31	2022/2021			2021/2020		
	Increase (Decrease) Due to Rate	Increase (Decrease) Due to Volume (a)	Net Increase (Decrease)	Decrease Due to Rate	(Decrease) Increase Due to Volume (a)	Net (Decrease) Increase
Interest Income:						
Commercial loans	\$ 244	\$ 25	\$ 269	\$ (1)	\$ (89)	\$ (90)
Real estate construction loans	60	(51)	9	(14)	(10)	(24)
Commercial mortgage loans	143	65	208	(37)	22	(15)
Lease financing	21	2	23	(22)	—	(22)
International loans	14	9	23	(5)	1	(4)
Residential mortgage loans	2	(1)	1	(8)	(3)	(11)
Consumer loans	24	2	26	(10)	(3)	(13)
Total loans	508	51	559	(97)	(82)	(179)
Mortgage-backed securities	5	156	161	(37)	40	3
U.S. Treasury securities	(17)	(10)	(27)	(20)	6	(14)
Total investment securities	(12)	146	134	(57)	46	(11)
Interest-bearing deposits with banks	170	(93)	77	(13)	12	(1)
Other short-term investments	1	—	1	(1)	—	(1)
Total interest income	667	104	771	(168)	(24)	(192)
Interest Expense:						
Money market and interest-bearing checking deposits	85	(9)	76	(56)	2	(54)
Savings deposits	2	—	2	(1)	—	(1)
Customer certificates of deposit	2	(1)	1	(22)	(1)	(23)
Other time deposits	—	1	1	—	—	—
Foreign office time deposits	—	—	—	(1)	—	(1)
Total interest-bearing deposits	89	(9)	80	(80)	1	(79)
Federal funds purchased	—	3	3	—	—	—
Other short term borrowings	—	14	14	—	(1)	(1)
Medium- and long-term debt	43	9	52	(7)	(38)	(45)
Total interest expense	132	17	149	(87)	(38)	(125)
Net interest income	\$ 535	\$ 87	\$ 622	\$ (81)	\$ 14	\$ (67)

(a) Rate/volume variances are allocated to variances due to volume.

Net interest income is the difference between interest earned on assets and interest paid on liabilities. Gains and losses related to risk management interest rate swaps that convert fixed rate debt to a floating rate and qualify as fair value hedges are included in interest expense on medium- and long-term debt. Additionally, the portion of gains and losses on risk management interest rate swaps that convert variable-rate loans to fixed rates through cash flow hedges that relate to the earnings effect of the hedged loans during the period are included in loan interest income. Refer to the Analysis of Net Interest Income and the Rate/Volume Analysis tables above for an analysis of net interest income for the years ended December 31, 2022, 2021 and 2020 and details of the components of the change in net interest income for 2022 compared to 2021 as well as 2021 compared to 2020.

Net interest income was \$2.5 billion for the year ended December 31, 2022, an increase of \$622 million compared to the year ended December 31, 2021. The increase in net interest income reflected higher yields on earning assets and growth in mortgage-backed securities and loan balances, partially offset by higher rates paid on deposits and debt as well as the net impact of PPP loans. Net interest margin was 3.02 percent for the year ended December 31, 2022, an increase of 81 basis points compared to 2.21 percent for the comparable period in 2021. The increase in net interest margin was driven by higher short-term rates as well as a decrease in lower-yielding deposits held with the Federal Reserve.

Average earning assets decreased \$4.7 billion, due to declines of \$9.4 billion in interest-bearing deposits with banks and \$1.2 billion in Treasury securities, partially offset by increases of \$4.5 billion in mortgage-backed securities and \$1.4 billion in loans. Average interest-bearing funding sources decreased \$2.6 billion, reflecting a \$2.8 billion decrease in interest-bearing deposits, partially offset by a \$434 million increase in short-term borrowings.

The Corporation utilizes various asset and liability management strategies to manage net interest income exposure to interest rate risk. Refer to the “Market and Liquidity Risk” section of this financial review for additional information regarding

the Corporation's asset and liability management policies and the "Balance Sheet and Capital Funds Analysis" section for further discussion on changes in earning assets and interest-bearing liabilities.

Provision for Credit Losses

The provision for credit losses was an expense of \$60 million for the year ended December 31, 2022, compared to a benefit of \$384 million for the year ended December 31, 2021. The increase in provision was primarily the result of loan growth and reflected strong credit metrics and a modest deterioration in economic forecasts. Net loan charge-offs for the year ended December 31, 2022 were \$17 million, or 0.03 percent of average total loans, compared to net recoveries of \$10 million, or 0.02 percent of average total loans, for the year ended December 31, 2021. Energy net charge-offs for the 2022 period totaled \$3 million, compared to \$48 million of Energy net recoveries recorded in the 2021 period, an increase of \$51 million, which was partially offset by decreases of \$12 million in general Middle Market and \$9 million in Corporate Banking. The provision for credit losses on lending-related commitments increased \$35 million to \$21 million for the year ended December 31, 2022.

An analysis of the allowance for credit losses and a summary of nonperforming assets are presented under the "Credit Risk" subheading in the "Risk Management" section of this financial review. For information regarding methodology used in the determination of allowance for credit losses, refer to Note 1 to the consolidated financial statements.

Noninterest Income

(in millions)

Years Ended December 31	2022	2021	2020
Card fees	\$ 273	\$ 298	\$ 270
Fiduciary income	233	231	209
Service charges on deposit accounts	195	195	185
Commercial lending fees	109	104	77
Derivative income	109	99	67
Bank-owned life insurance	47	43	44
Letter of credit fees	38	40	37
Brokerage fees	21	14	21
Other noninterest income (a)	43	99	91
Total noninterest income	\$ 1,068	\$ 1,123	\$ 1,001

(a) The table below provides further details on certain categories included in other noninterest income.

Noninterest income decreased \$55 million to \$1.1 billion, reflecting decreases in other noninterest income and card fees, partially offset by increases in derivative income, brokerage fees and commercial lending fees. Other noninterest income included decreases in deferred compensation asset returns (offset in noninterest expenses), warrant-related income and investment banking fees, partially offset by an increase in risk management hedging income.

Card fees consist primarily of interchange and other fee income earned on government prepaid card, commercial card, debit/Automated Teller Machine (ATM) card and merchant payment processing services. Card fees decreased \$25 million, or 8 percent, reflecting a decline in government cards due to elevated activity from stimulus payments during 2021. Commercial card and merchant services increased from higher sales and payment processing volumes, respectively, while ATM surcharge income decreased.

Commercial lending fees include fees assessed on the unused portion of lines of credit (unused commitment fees), syndication agent fees and loan servicing fees. These fees increased \$5 million, or 3 percent, reflecting higher syndication agent fees from an increase in the number of deals, as well as an increase in loan commitment fees from growth and lower utilization rates on lines of credit. These increases were partially offset by a decline in loan service charges from lower application volumes, primarily in Mortgage Banker Finance.

Derivative income consists of net gains and losses recognized on customer-initiated derivative instruments, net of the impact of offsetting positions. Derivative income increased \$10 million, or 11 percent, primarily due to increases in energy and interest rate swap activity, partially offset by less favorable credit valuation adjustments.

Brokerage fees are commissions earned for facilitating securities transactions for customers as well as other brokerage services provided. Brokerage fees increased \$7 million, or 45 percent, driven by higher money market funds revenue from increased service fees, partially offset by lower transactional revenue related to mutual funds.

Other noninterest income decreased \$56 million, or 55 percent, as detailed below, driven by losses on deferred compensation assets, lower warrant-related income mostly due to elevated gains on monetization in the 2021 period and a decrease in investment banking fees from a decline in the average size and number of deals. These were partially offset by higher risk management hedging income related to an increase in price alignment income received for centrally cleared risk management positions.

(in millions)

Years Ended December 31	2022	2021	2020
Securities trading income	\$ 13	\$ 7	\$ 8
Risk management hedging income (a)	8	—	—
Investment banking fees	4	11	11
Principal investing and warrant-related income (b)	(4)	26	18
Deferred compensation asset returns (c)	(18)	14	16
All other noninterest income	40	41	38
Other noninterest income	\$ 43	\$ 99	\$ 91

- (a) Centrally-cleared derivative positions are settled daily based on derivative fair values and the party receiving net settlement amounts pays price alignment, based on an earning rate, to the party making settlement payments. Accordingly, the Corporation may recognize risk management hedging income consisting of price alignment income or expense depending on the fair value of its positions.
- (b) Includes changes in value of shares obtained through monetization of warrants, previously reported in securities trading income.
- (c) Compensation deferred by the Corporation's officers and directors is invested based on investment selections of the officers and directors. Income earned on these assets is reported in noninterest income and the offsetting change in deferred compensation plan liabilities is reported in salaries and benefits expense.

Noninterest Expenses

(in millions)

Years Ended December 31	2022	2021	2020
Salaries and benefits expense	\$ 1,208	\$ 1,133	\$ 1,019
Outside processing fee expense	251	266	242
Occupancy expense	175	161	156
Software expense	161	155	154
Equipment expense	50	50	49
Advertising expense	38	35	35
FDIC insurance expense	31	22	33
Other noninterest expenses	84	39	66
Total noninterest expenses	\$ 1,998	\$ 1,861	\$ 1,754

Noninterest expenses increased \$137 million to \$2.0 billion, primarily due to higher salaries and benefits expense, operational losses, occupancy expense, travel and entertainment expense, FDIC insurance expense and consulting fees, partially offset by decreases in outside processing fee expense, non-salary pension expense and legal-related expenses.

Salaries and benefits expense increased \$75 million, or 7 percent, reflecting increases from annual merit adjustments, performance- and stock-based compensation, contract labor and severance costs, partially offset by a decrease in deferred compensation expense (offset in other noninterest income).

Outside processing fee expense decreased \$15 million, or 5 percent, reflecting a decline in data processing support for PPP loans and lower volumes of government card transactions tied to card fee revenues.

Occupancy expense increased \$14 million, or 8 percent, largely due to lease termination costs and accelerated amortization related to closures of bank branches and offices, as well as rent on newly leased corporate facilities.

FDIC insurance expense increased \$9 million, or 41 percent, reflecting higher assessment rates in 2022 primarily driven by a \$16.9 billion decrease in interest-bearing deposits with banks, declining from elevated levels seen in 2021, which had a punitive impact on the assessment rate.

Other noninterest expenses increased \$45 million, or 116 percent, driven by increases in operational losses, travel and entertainment expense and consulting fees, partially offset by decreases in non-salary pension expense and legal-related expenses.

For the year ended December 31, 2022, the above detail included expenses for certain modernization initiatives related to the transformation of the retail banking delivery model, alignment of corporate facilities and optimization of technology platforms totaling \$38 million, comprised of transitional real estate costs (\$13 million reported in occupancy expense), asset impairments and consulting fees (\$11 million reported in other noninterest expenses) as well as contract labor and severance costs (\$14 million reported in salaries and benefits expense).

Income Taxes and Related Items

The provision for income taxes was \$325 million in 2022, compared to \$322 million in 2021. Net deferred tax assets were \$1.1 billion at December 31, 2022, compared to \$9 million at December 31, 2021. Refer to Note 18 to the consolidated financial statements for information about the components of net deferred tax assets. Deferred tax assets of \$1.4 billion were evaluated for realization and it was determined that a valuation allowance of \$5 million for federal foreign tax credits and certain state net operating loss (NOL) carryforwards was needed at both December 31, 2022 and December 31, 2021.

For further information on the Corporation's valuation policy for deferred tax assets, refer to Note 1 of the consolidated financial statements.

STRATEGIC LINES OF BUSINESS

The Corporation has strategically aligned its operations into three major business segments: the Commercial Bank, the Retail Bank and Wealth Management. These business segments are differentiated based on the type of customer and the related products and services provided. In addition to the three major business segments, the Finance Division is also reported as a segment. The Other category includes items not directly associated with the business segments or the Finance segment. The performance of the business segments is not comparable with the Corporation's consolidated results and is not necessarily comparable with similar information for any other financial institution. Additionally, because of the interrelationships of the various segments, the information presented is not indicative of how the segments would perform if they operated as independent entities. Note 22 to the consolidated financial statements describes the Corporation's segment reporting methodology as well as the business activities of each business segment and presents financial results of the business segments for the years ended December 31, 2022, 2021 and 2020.

The Corporation's management accounting system assigns balance sheet and income statement items to each segment using certain methodologies, which are regularly reviewed and refined. These methodologies may be modified as the management accounting system is enhanced and changes occur in the organizational structure and/or product lines.

Net interest income for each segment reflects the interest income generated by earning assets less interest expense on interest-bearing liabilities plus the net impact from associated internal funds transfer pricing (FTP). The FTP methodology allocates credits to each business segment for deposits and other funds provided as well as charges for loans and other assets being funded. FTP crediting rates on deposits and other funds provided reflect the long-term value of deposits and other funding sources based on their implied maturities. Due to the longer-term nature of implied maturities, FTP crediting rates are generally less volatile than changes in interest rates observed in the market. FTP charge rates for funding loans and other assets reflect a matched cost of funds based on the pricing and duration characteristics of the assets. As a result of applying matched funding, interest revenue for each segment resulting from loans and other assets is generally not impacted by changes in interest rates. Therefore, net interest income for each segment primarily reflects the volume of loans and other earning assets at the spread over the matched cost of funds, as well as the volume of deposits at the associated FTP crediting rates. Generally, in periods of rising interest rates, FTP charge rates for funding loans and FTP crediting rates on deposits will increase, with FTP crediting rates for deposits typically repricing at a slower pace than FTP charge rates for funding loans.

The following table presents net income (loss) by business segment.

(dollar amounts in millions)

Years Ended December 31	2022		2021		2020				
Commercial Bank	\$	1,052	85 %	\$	1,329	89 %	\$	668	90 %
Retail Bank		80	6		43	3		2	—
Wealth Management		107	9		124	8		78	10
		1,239	100 %		1,496	100 %		748	100 %
Finance		(93)			(331)			(253)	
Other		5			3			2	
Total	\$	1,151		\$	1,168		\$	497	

The following sections present a summary of the performance of each of the Corporation's business segments for 2022 compared to 2021.

Commercial Bank

<i>(dollar amounts in millions)</i>	Years Ended December 31,		Change	Percent Change
	2022	2021		
Earnings summary:				
Net interest income	\$ 1,753	\$ 1,574	\$ 179	11%
Provision for credit losses	32	(346)	378	n/m
Noninterest income	607	663	(56)	(9)
Noninterest expenses	963	870	93	11
Provision for income taxes	313	384	(71)	(19)
Net income	\$ 1,052	\$ 1,329	\$ (277)	(21)
Net credit-related charge-offs (recoveries)	\$ 21	\$ (12)	\$ 33	n/m
Selected average balances:				
Loans (a)	\$ 43,481	\$ 41,801	\$ 1,680	4 %
Deposits	42,584	45,602	(3,018)	(7)

(a) Included PPP loans with average balances of \$100 million and \$1.8 billion for the years ended December 31, 2022 and 2021, respectively.

n/m - not meaningful

Average loans increased \$1.7 billion, reflecting increases in Corporate Banking, general Middle Market, Equity Fund Services, Environmental Services, National Dealer Services, Commercial Real Estate and Entertainment, partially offset by decreases in Mortgage Banker Finance and Business Banking (driven by the decline in PPP balances). Average deposits decreased \$3.0 billion, reflecting decreases in general Middle Market, Corporate Banking and Technology and Life Sciences, partially offset by increases in Energy and Commercial Real Estate, due to strategic deposit management and customers utilizing balances to fund business activities. The Commercial Bank's net income decreased \$277 million to \$1.1 billion. Net interest income increased \$179 million due to an increase in loan income, partially offset by higher allocated net FTP charges and a decline in PPP loan fees. The provision for credit losses increased \$378 million to an expense of \$32 million, which primarily resulted from loan growth and reflected strong credit metrics and a modest deterioration in economic forecasts. Net credit-related charge-offs were \$21 million, an increase of \$33 million, primarily due to an increase in Energy net charge-offs, partially offset by decreases in general Middle Market and Corporate Banking net charge-offs. Noninterest income decreased \$56 million, driven by lower warrant-related income as well as a decline in card fees due to higher activity in 2021 from stimulus payments. Noninterest expenses increased \$93 million, primarily reflecting increases in salaries and benefits expense, corporate overhead and operational losses, partially offset by a decrease in outside processing fee expense.

Retail Bank

<i>(dollar amounts in millions)</i>	Years Ended December 31,		Change	Percent Change
	2022	2021		
Earnings summary:				
Net interest income	\$ 680	\$ 565	\$ 115	20 %
Provision for credit losses	11	(5)	16	n/m
Noninterest income	122	123	(1)	(1)
Noninterest expenses	689	645	44	7
Provision for income taxes	22	5	17	n/m
Net income	\$ 80	\$ 43	\$ 37	90 %
Net credit-related (recoveries) charge-offs	\$ (1)	\$ 2	\$ (3)	n/m
Selected average balances:				
Loans (a)	\$ 2,063	\$ 2,382	\$ (319)	(13)%
Deposits	26,672	25,682	990	4

(a) Included PPP loans with average balances of \$31 million and \$428 million for the years ended December 31, 2022 and 2021, respectively.

n/m - not meaningful

Average loans decreased \$319 million due to a \$397 million decline in PPP loans. Average deposits increased \$1.0 billion, reflecting increases in all deposit categories with the exception of time deposits as consumer deposits benefited from government stimulus payments made in 2021, which remained through 2022. The Retail Bank's net income increased \$37 million to \$80 million. Net interest income increased \$115 million to \$680 million, primarily due to higher FTP crediting rates on deposits. The provision for credit losses increased \$16 million from a benefit of \$5 million. Noninterest income was relatively stable, while noninterest expenses increased \$44 million, primarily due to increases in corporate overhead, occupancy expense, operational losses and salaries and benefits expense, partially offset by a decrease in litigation-related expenses.

Wealth Management

<i>(dollar amounts in millions)</i>	Years Ended December 31,			Percent Change
	2022	2021	Change	
Earnings summary:				
Net interest income	\$ 199	\$ 166	\$ 33	20 %
Provision for credit losses	9	(32)	41	n/m
Noninterest income	298	279	19	7
Noninterest expenses	348	317	31	10
Provision for income taxes	33	36	(3)	(7)
Net income	\$ 107	\$ 124	\$ (17)	(15)%
Net credit-related recoveries	\$ (3)	\$ —	\$ (3)	n/m
Selected average balances:				
Loans (a)	\$ 4,906	\$ 4,903	\$ 3	—%
Deposits	5,439	5,218	221	4

(a) Included PPP loans with average balances of \$16 million and \$127 million for the years ended December 31, 2022 and 2021, respectively.

n/m - not meaningful

Average loans remained relatively stable despite a \$111 million decrease in PPP loans, while average deposits increased \$221 million, primarily reflecting increases in noninterest-bearing and time deposits, partially offset by a decrease in money market and interest-bearing checking deposits. Wealth Management's net income decreased \$17 million to \$107 million. Net interest income increased \$33 million to \$199 million, primarily due to an increase in loan income, partially offset by an increase in allocated net FTP charges. The provision for credit losses increased \$41 million to an expense of \$9 million. Noninterest income increased \$19 million to \$298 million, primarily due to increases in investment fees and derivative income. Noninterest expenses increased \$31 million, primarily reflecting higher salaries and benefits expenses and corporate overhead.

Finance & Other

<i>(dollar amounts in millions)</i>	Years Ended December 31,			Percent Change
	2022	2021	Change	
Earnings summary:				
Net interest expense	\$ (166)	\$ (461)	\$ 295	(64)%
Provision for credit losses	8	(1)	9	n/m
Noninterest income	41	58	(17)	(29)
Noninterest expenses	(2)	29	(31)	n/m
Benefit for income taxes	(43)	(103)	60	(58)
Net loss	\$ (88)	\$ (328)	\$ 240	(73)%
Selected average balances:				
Loans	\$ 10	\$ (3)	\$ 13	n/m
Deposits	786	1,179	(393)	(33)

n/m - not meaningful

Average deposits, which primarily consist of brokered and reciprocal deposits, decreased \$393 million. Net loss for the Finance and Other category decreased \$240 million to \$88 million. Net interest expense decreased \$295 million to \$166 million, primarily reflecting an increase in net FTP revenue as a result of higher rates charged to the business segments under the Corporation's internal FTP methodology. Noninterest income decreased \$17 million to \$41 million, primarily due to a decrease in securities trading income. Noninterest expenses decreased \$31 million, primarily reflecting lower corporate overhead expense, partially offset by an increase in salaries and benefits expenses.

The following table lists the Corporation's banking centers by geographic market.

December 31	2022	2021	2020
Michigan	177	188	189
Texas	115	124	123
California	92	95	96
Other Markets:			
Arizona	17	17	17
Florida	8	8	7
Canada	1	1	1
Total Other Markets	26	26	25
Total	410	433	433

BALANCE SHEET AND CAPITAL FUNDS ANALYSIS

Earning Assets

Period-End Loans

(in millions)

December 31	2022	2021	Change	Percent Change
Commercial loans	\$ 30,909	\$ 29,366	\$ 1,543	5 %
Real estate construction loans	3,105	2,948	157	5
Commercial mortgage loans	13,306	11,255	2,051	18
Lease financing	760	640	120	19
International loans	1,197	1,208	(11)	(1)
Residential mortgage loans	1,814	1,771	43	2
Consumer loans:				
Home equity	1,776	1,533	243	16
Other consumer	535	564	(29)	(5)
Total consumer loans	2,311	2,097	214	10
Total loans	\$ 53,402	\$ 49,285	\$ 4,117	8 %

On a period-end basis, total loans increased \$4.1 billion to \$53.4 billion at December 31, 2022, compared to \$49.3 billion at December 31, 2021, which included a \$424 million decrease in PPP loans (reported in commercial loans).

Average Loans

(in millions)

Years Ended December 31	2022	2021	Change	Percent Change
Average Loans By Business Line:				
General Middle Market	\$ 12,686	\$ 11,937	\$ 749	6 %
National Dealer Services	4,633	4,349	284	7
Equity Fund Services	3,345	2,781	564	20
Environmental Services	2,119	1,711	408	24
Energy	1,387	1,376	11	1
Entertainment	1,141	983	158	16
Technology and Life Sciences	909	920	(11)	(1)
Total Middle Market	26,220	24,057	2,163	9
Commercial Real Estate	6,898	6,737	161	2
Corporate Banking	5,528	4,445	1,083	24
Business Banking	3,256	3,732	(476)	(13)
Mortgage Banker Finance	1,579	2,833	(1,254)	(44)
Total Commercial Bank	43,481	41,804	1,677	4
Total Retail Bank	2,063	2,382	(319)	(13)
Total Wealth Management	4,906	4,903	3	—
Total Finance and Other	10	(6)	16	n/m
Total loans	\$ 50,460	\$ 49,083	\$ 1,377	3 %

n/m - not meaningful

Average total loans increased \$1.4 billion to \$50.5 billion in 2022, compared to \$49.1 billion in 2021, which included a \$2.2 billion decline in PPP loans. Organic growth through the expansion of new and existing relationships helped drive increases in most business lines, including a \$1.1 billion increase in Corporate Banking, which generally serves customers with revenue over \$500 million. Middle Market business lines, which generally serve customers with annual revenue between \$30 million and \$500 million, increased by \$2.2 billion, including a \$749 million increase in general Middle Market and a \$564 million increase in Equity Fund Services.

Mortgage Banker Finance, which provides short-term, revolving lines of credit to mortgage banking companies, decreased by \$1.3 billion, reflecting the market-wide decline in home sales and refinancing activity resulting from lower average home sales volume and the higher interest rate environment.

(in millions)

Years Ended December 31	2022	2021	Change	Percent Change
Average Loans By Loan Type:				
Commercial loans (a)	\$ 29,846	\$ 29,283	\$ 563	2 %
Real estate construction loans	2,607	3,609	(1,002)	(28)
Commercial mortgage loans	12,135	10,610	1,525	14
Lease financing	680	596	84	14
International loans	1,246	1,063	183	17
Residential mortgage loans	1,776	1,813	(37)	(2)
Consumer loans:				
Home equity	1,634	1,554	80	5
Other consumer	536	555	(19)	(3)
Total consumer loans	2,170	2,109	61	3
Total loans	\$ 50,460	\$ 49,083	\$ 1,377	3 %

(a) Included PPP loans with average balances of \$147 million and \$2.3 billion for the years ended December 31, 2022 and 2021.

Investment Securities

(in millions)

December 31	2022	2021	Change	Percent Change
U.S. Treasury securities	\$ 2,664	\$ 2,993	\$ (329)	(11)%
Residential mortgage-backed securities (a)	11,655	13,288	(1,633)	(12)
Commercial mortgage-backed securities (a)	4,693	705	3,988	n/m
Total investment securities	\$ 19,012	\$ 16,986	\$ 2,026	12 %

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

n/m - not meaningful

On a period-end basis, investment securities were \$19.0 billion at December 31, 2022, compared to \$17.0 billion at December 31, 2021, which included unrealized losses totaling \$3.0 billion and \$130 million at December 31, 2022 and December 31, 2021, respectively. Mortgage-backed securities increased \$2.4 billion due to continued deployment of excess liquidity, partially offset by a \$329 million decrease in U.S. Treasury securities related to maturities. At December 31, 2022, the effective duration of the Corporation's residential mortgage-backed securities portfolio was approximately 5.4 years. On an average basis, investment securities increased \$3.3 billion to \$19.0 billion in 2022, compared to \$15.7 billion in 2021 as excess liquidity was invested in mortgage-backed securities.

(weighted average yield) (a)

December 31, 2022	U.S. Treasury securities	Residential mortgage-backed securities (b)	Commercial mortgage-backed securities (b)	Total investment securities
Maturity (c)				
Within 1 year	1.98%	2.54%	—%	2.01%
1-5 Years	0.26	2.32	2.29	1.12
5-10 Years	—	2.14	2.98	2.91
After 10 Years	—	1.93	3.48	1.93
Total	0.93 %	1.97 %	2.99 %	2.08 %
Weighted Average Maturity (years)	1.4	26.7	9.1	19.3

(a) Weighted average yields are calculated on the basis of yield to maturity based on the carrying value of each debt security, aggregated by type and agency.

(b) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

(c) Based on final contractual maturity.

Interest-Bearing Deposits with Banks and Other Short-Term Investments

Interest-bearing deposits with banks, which are mostly used to manage liquidity requirements of the Corporation, primarily include deposits with the Federal Reserve Bank (FRB) and also include deposits with banks in developed countries or international banking facilities of foreign banks located in the United States. On a period-end basis, interest-bearing deposits with banks decreased \$16.9 billion to \$4.5 billion at December 31, 2022, declining from elevated levels seen in 2021. On an average basis, interest-bearing deposits with banks decreased \$9.4 billion to \$9.4 billion in 2022.

Other short-term investments include federal funds sold, trading securities, money market investments and loans held-for-sale. Substantially all trading securities are deferred compensation plan assets. Loans held-for-sale typically represent residential mortgage loans originated with management's intention to sell and, from time to time, other loans that are transferred to held-for-sale. On a period-end basis, other short-term investments decreased \$40 million to \$157 million at December 31, 2022. On an average basis, other short-term investments decreased \$9 million to \$174 million in 2022.

Deposits and Borrowed Funds

On a period-end basis, total deposits were \$71.4 billion at December 31, 2022, a decrease of \$10.9 billion compared to \$82.3 billion at December 31, 2021, reflecting decreases of \$5.9 billion, or 13 percent, in noninterest-bearing deposits and \$5.1 billion, or 14 percent, in interest-bearing deposits. The Corporation's average deposits and borrowed funds balances are detailed in the following table.

(dollar amounts in millions)

Years Ended December 31	2022	2021	Change	Percent Change
Noninterest-bearing deposits	\$ 42,018	\$ 41,441	\$ 577	1 %
Money market and interest-bearing checking deposits	28,347	31,063	(2,716)	(9)
Savings deposits	3,304	3,018	286	9
Customer certificates of deposit	1,756	2,110	(354)	(17)
Other time deposits	16	—	16	n/m
Foreign office time deposits	40	49	(9)	(17)
Total deposits	\$ 75,481	\$ 77,681	\$ (2,200)	(3)%
Short-term borrowings	\$ 436	\$ 2	\$ 434	n/m
Medium- and long-term debt	2,818	3,035	(217)	(7)
Total borrowed funds	\$ 3,254	\$ 3,037	\$ 217	7 %

n/m - not meaningful

Average deposits decreased \$2.2 billion to \$75.5 billion in 2022, compared to \$77.7 billion in 2021, reflecting a \$2.8 billion decrease in interest-bearing deposits due to strategic deposit management and customers utilizing balances to fund business activities, partially offset by a \$577 million increase in noninterest-bearing deposits.

Uninsured deposits are defined as the portion of deposit accounts in U.S. offices that exceed the FDIC insurance limit and amounts in any other uninsured investment or deposit account that are classified as deposits and are not subject to any federal or state deposit insurance regimes. Total uninsured deposits were \$45.5 billion and \$56.7 billion at December 31, 2022 and 2021, respectively, as calculated per regulatory guidance. The portion of domestic time deposits in excess of insurance limits was \$370 million and \$554 million at December 31, 2022 and 2021, respectively. Time deposits otherwise uninsured, which consist of foreign office time deposits, totaled \$51 million at December 31, 2022 and all mature in three months or less.

On a period-end basis, short-term borrowings totaled \$3.2 billion at December 31, 2022 and included federal funds purchased and short-term Federal Home Loan Bank (FHLB) advances. There were no short-term borrowings at December 31, 2021. Average short-term borrowings were \$436 million in 2022, compared to \$2 million in 2021.

The Corporation uses medium- and long-term debt, which includes medium- and long-term senior notes as well as subordinated notes, to provide funding for earning assets, liquidity and regulatory capital. On a period-end basis, total medium- and long-term debt at December 31, 2022 increased \$228 million to \$3.0 billion, compared to \$2.8 billion at December 31, 2021. In the third quarter of 2022, the Bank issued \$500 million of fixed-to-floating rate subordinated notes due in 2033. Average medium- and long-term debt decreased \$217 million, or 7 percent, to \$2.8 billion in 2022, compared to \$3.0 billion in 2021.

Further information on medium- and long-term debt is provided in Note 12 to the consolidated financial statements.

Capital

Total shareholders' equity decreased \$2.7 billion to \$5.2 billion at December 31, 2022, compared to \$7.9 billion at December 31, 2021, primarily due to a \$3.5 billion decrease in unrealized losses in the Corporation's investment securities portfolio and, to a lesser extent, its cash flow hedge portfolio and defined benefit plan. The following table presents a summary of changes in total shareholders' equity in 2022.

(in millions)

Balance at January 1, 2022	\$	7,897
Net income		1,151
Cash dividends declared on common stock		(356)
Cash dividends declared on preferred stock		(23)
Purchase of common stock		(36)
Other comprehensive loss, net of tax:		
Investment securities	\$	(2,220)
Cash flow hedges		(997)
Defined benefit and other postretirement plans		(313)
Total other comprehensive loss, net of tax		(3,530)
Net issuance of common stock under employee stock plans		18
Share-based compensation		60
Balance at December 31, 2022	\$	5,181

The following table summarizes the Corporation's repurchase activity for the year ended December 31, 2022.

<i>(shares in thousands)</i>	Total Number of Shares Purchased as Part of Publicly Announced Repurchase Plans or Programs	Remaining Share Repurchase Authorization (a)	Total Number of Shares Purchased (b)	Average Price Paid Per Share
First Quarter 2022	377	4,997	399	\$ 92.58
Second Quarter 2022	—	4,997	2	90.85
Third Quarter 2022	—	4,997	2	74.64
Fourth Quarter 2022	—	4,997	2	72.44
Total 2022	377	4,997	405	92.39

(a) Maximum number of shares that may be repurchased under the publicly announced plans or programs.

(b) Includes approximately 28,000 shares purchased pursuant to deferred compensation plans and shares purchased from employees to pay for taxes related to restricted stock vesting under the terms of an employee share-based compensation plan during the year ended December 31, 2022. These transactions are not considered part of the Corporation's repurchase program.

Since the inception of the share repurchase program in 2010, a total of 97.2 million shares have been authorized for repurchase. There is no expiration date for the share repurchase program. The Corporation believes that share repurchases will resume in 2023, although the timing and actual amount of share repurchases are subject to various factors, including the Corporation's earnings generation, capital needs to fund future loan growth and the macroeconomic outlook.

The Corporation continues to target a Common Equity Tier 1 (CET1) capital ratio of approximately 10 percent with active capital management. At December 31, 2022, the Corporation's CET1 capital ratio was 10.00 percent, a decrease of 13 basis points compared to December 31, 2021.

The Corporation is subject to the capital adequacy standards under the Basel III regulatory framework (Basel III). This regulatory framework establishes comprehensive methodologies for calculating regulatory capital and risk-weighted assets (RWA). Basel III also set minimum capital ratios as well as overall capital adequacy standards.

Under Basel III, regulatory capital comprises CET1 capital, additional Tier 1 capital and Tier 2 capital. CET1 capital predominantly includes common shareholders' equity, less certain deductions for goodwill, intangible assets and deferred tax assets that arise from net operating losses and tax credit carry-forwards. Additionally, the Corporation has elected to permanently exclude capital in accumulated other comprehensive income (AOCI) related to debt and equity securities classified as available-for-sale as well as for cash flow hedges and defined benefit postretirement plans from CET1, an option available to standardized approach entities under Basel III. Tier 1 capital incrementally includes noncumulative perpetual preferred stock. Tier 2 capital includes Tier 1 capital as well as subordinated debt qualifying as Tier 2 and qualifying allowance for credit losses.

The Corporation computes RWA using the standardized approach. Under the standardized approach, RWA is generally based on supervisory risk-weightings which vary by counterparty type and asset class. Under the Basel III standardized approach, capital is required for credit risk RWA, to cover the risk of unexpected losses due to failure of a customer or counterparty to meet its financial obligations in accordance with contractual terms; and if trading assets and liabilities exceed certain thresholds, capital is also required for market risk RWA, to cover the risk of losses due to adverse market movements or from position-specific factors.

The following table presents the minimum ratios required.

Common equity tier 1 capital to risk-weighted assets	4.5 %
Tier 1 capital to risk-weighted assets	6.0
Total capital to risk-weighted assets	8.0
Capital conservation buffer (a)	2.5
Tier 1 capital to adjusted average assets (leverage ratio)	4.0

(a) In addition to the minimum risk-based capital requirements, the Corporation is required to maintain a minimum capital conservation buffer, in the form of common equity tier 1 capital, in order to avoid restrictions on capital distributions and discretionary bonuses.

The Corporation's capital ratios exceeded minimum regulatory requirements as follows:

(dollar amounts in millions)	December 31, 2022		December 31, 2021	
	Capital/Assets	Ratio	Capital/Assets	Ratio
Common equity tier 1 (a)	\$ 7,884	10.00 %	\$ 7,064	10.13 %
Tier 1 risk-based (a)	8,278	10.50	7,458	10.70
Total risk-based	9,817	12.45	8,608	12.35
Leverage	8,278	9.55	7,458	7.74
Common shareholders' equity	4,787	5.60	7,503	7.93
Tangible common equity (a)	4,143	4.89	6,857	7.30
Risk-weighted assets	78,871		69,708	

(a) See Supplemental Financial Data section for reconciliations of non-GAAP financial measures and regulatory ratios.

At December 31, 2022, the Corporation and its U.S. banking subsidiaries exceeded the capital ratios required for an institution to be considered “well capitalized” by the standards developed under the Federal Deposit Insurance Corporation Improvement Act of 1991. Refer to Note 20 to the consolidated financial statements for further discussion of regulatory capital requirements, capital ratio calculations and restrictions on the ability of the Corporation's banking subsidiaries to transfer assets to the Corporation.

The common shareholders' equity ratio decreased 233 basis points to 5.60 percent at December 31, 2022 primarily due to the change in unrealized losses in the Corporation's investment securities portfolio and, to a lesser extent, its cash flow hedge portfolio and defined benefit plan. The unrealized losses in the Corporation's available-for-sale investment security portfolio are due to market valuations since the time of initial acquisition which, in substantially all cases, are not expected to be realized. The tangible common equity ratio, which excludes goodwill and other intangible assets, decreased 241 basis points to 4.89 percent for the same reasons. The impact of cumulative unrealized losses recorded within other comprehensive loss at December 31, 2022 to both ratios was approximately 440 basis points.

RISK MANAGEMENT

The Corporation assumes various types of risk as a result of conducting business in the normal course. The Corporation's enterprise risk management framework provides a process for identifying, measuring, controlling and managing these risks. This framework incorporates a risk assessment process, a collection of risk committees that manage the Corporation's major risk elements and a risk appetite statement that outlines the levels and types of risks the Corporation accepts. The Corporation continuously enhances its enterprise risk framework with additional processes, tools and systems designed to not only provide management with deeper insight into the various existing and emerging risks in accordance with its appetite for risk, but also to improve the Corporation's ability to control those risks and ensure that appropriate consideration is received for the risks taken.

The Corporation's front line employees, the first line of defense, are responsible for the day-to-day management and ownership of risks, including the identification, assessment, measurement and control of risks encountered as a part of the normal course of business. Each of the major risk categories are further monitored and measured by specialized risk managers in the second line of defense within the Enterprise Risk Division, who provide oversight as well as independent and effective challenge and guidance for the risk management activities of the organization. The Enterprise Risk Division, led by the Chief Risk Officer, is responsible for designing and managing the Corporation's enterprise risk management framework and ensures effective risk management oversight. Risk management committees serve as a point of review and escalation for those risks

which may have risk interdependencies or where risk levels may be nearing the limits outlined in the Corporation's risk appetite statement. These committees comprise senior and executive management that represent views from both the lines of business and risk management. Internal Audit, the third line of defense, monitors and assesses the overall effectiveness of the risk management framework on an ongoing basis and provides an independent, objective assessment of the Corporation's ability to manage and control risk to management and the Audit Committee of the Board.

The Enterprise Risk and Return Committee, chaired by the Chief Risk Officer, is established by the Enterprise Risk Committee of the Board and responsible for governance over the risk management framework, providing oversight in managing the Corporation's aggregate risk position and reporting on the comprehensive portfolio of risks as well as the potential impact these risks can have on the Corporation's risk profile and resulting capital level. Capital provides the primary buffer for risk and also serves as a measuring tool when evaluating risk. The Enterprise Risk and Return Committee is principally composed of senior officers and executives representing the different risk areas and business units who are appointed by the Chairman and Chief Executive Officer of the Corporation.

The Board's Enterprise Risk Committee meets quarterly and is chartered to assist the Board in promoting the best interests of the Corporation by overseeing policies and risk practices relating to enterprise-wide risk and ensuring compliance with bank regulatory obligations. Members of the Enterprise Risk Committee are selected such that the committee comprises individuals whose experiences and qualifications can lead to broad and informed views on risk matters facing the Corporation and the financial services industry. These include, but are not limited to, existing and emerging risk matters related to credit, market, liquidity, operational, technology, compliance and strategic conditions. A comprehensive risk report is submitted to the Enterprise Risk Committee each quarter providing management's view of the Corporation's aggregate risk position.

Further discussion and analyses of each major risk area are included in the following sub-sections of the Risk Management section in this financial review.

Credit Risk

Credit risk represents the risk of loss due to failure of a customer or counterparty to meet its financial obligations in accordance with contractual terms. Credit risk is found in all activities where success depends on counterparty, issuer or borrower performance. It arises any time funds are extended, committed, invested or otherwise exposed, whether reflected on or off the balance sheet. The governance structure is administered through the Strategic Credit Committee. The Strategic Credit Committee is chaired by the Chief Credit Officer and approves recommendations to address credit risk matters through credit policy, credit risk management practices and required credit risk actions. The Strategic Credit Committee also ensures a comprehensive reporting of credit risk levels and trends, including exception levels, along with identification and mitigation of emerging risks. In order to facilitate the corporate credit risk management process, various other corporate functions provide the resources for the Strategic Credit Committee to carry out its responsibilities. The Corporation manages credit risk through underwriting and periodically reviewing and approving its credit exposures in accordance with established credit policies and guidelines. Additionally, the Corporation manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties.

The Credit Division manages credit policy and provides the resources to manage the line of business transactional credit risk, assuring that all exposure is risk rated according to the requirements of the credit risk rating policy and providing business segment reporting support as necessary. The Enterprise Risk Division provides credible and well-documented challenge of overall portfolio credit risk, and other credit-related attributes of the Corporation's loan portfolios, with a particular emphasis on all attendant modeled results. The Corporation's Asset Quality Review function, a division of Internal Audit, audits the accuracy of internal risk ratings that are assigned by the lending and credit groups. The Special Assets Group is responsible for managing the recovery process on distressed or defaulted loans and loan sales.

Credit Analytics and Strategy, within the Credit Division, provides comprehensive reporting on portfolio credit risk levels and trends, continuous assessment and verification of risk rating models, quarterly calculation of the allowance for loan losses and the allowance for credit losses on lending-related commitments and calculations of both expected and unexpected loss.

Allowance for Credit Losses

The allowance for credit losses includes both the allowance for loan losses and the allowance for credit losses on lending-related commitments.

The following table presents metrics of the allowance for credit losses and nonperforming loans.

December 31,	2022	2021
Allowance for credit losses as a percentage of total loans	1.24%	1.26%
Allowance for credit losses as a multiple of total nonaccrual loans	2.8x	2.3x
Allowance for credit losses as a multiple of total nonperforming loans	2.7x	2.3x

The allowance for credit losses increased by \$43 million from \$618 million at December 31, 2021 to \$661 million at December 31, 2022, primarily reflecting loan growth and continued strong credit metrics as well as a modest deterioration in economic forecasts. Excess savings and pent-up demand from consumers, as well as tight labor markets, have supported the U.S. economy. However, there are headwinds from recessionary pressures, surging inflation, higher interest rates and the slowing housing market. Foreign developments pose additional headwinds, including the impacts of the Russia-Ukraine conflict, uncertainties about China's reopening and the impact of tighter monetary policy across much of the global economy.

These factors shaped the 2-year reasonable and supportable forecast used by the Corporation in its CECL estimate at December 31, 2022. The U.S. economy is expected to contract marginally in the first half of 2023 before gradually normalizing to its trend growth rates. Certain economic variables, like oil prices, are expected to decrease as inflation normalizes. Forecasts for other key economic variables are generally consistent with those of Gross Domestic Product (GDP), while interest rate forecasts reflect market expectations and recent guidance from the Federal Reserve. The following table summarizes select economic variables representative of the economic forecasts used to develop the allowance for credit losses estimate at December 31, 2022.

Economic Variable	Base Forecast
Real GDP growth	Contracts slightly in first and second quarters 2023, consistent with a mild recession, before recovering to a trend growth rate of around 2 percent by the end of the forecast period.
Unemployment rate	Increases to 4.7 percent by first quarter 2024 and remaining at that level through fourth quarter 2024.
Corporate BBB bond to 10-year Treasury bond spreads	Spreads widen to 2.8 percent in first quarter 2023 before normalizing to 2.1 percent by the end of the forecast period.
Oil Prices	Prices gradually decline from current levels to \$76 dollars by fourth quarter 2024.

Due to the high degree of uncertainty regarding recessionary pressures, surging inflation and higher interest rates, management considered other economic scenarios to make appropriate qualitative adjustments for certain sectors of its lending portfolio, including more benign and more severe forecasts.

Refer to Note 1 to the consolidated financial statements for a discussion of the methodology used in the determination of the allowance for credit losses.

Allowance for Loan Losses

The allowance for loan losses represents management's estimates of current expected credit losses in the Corporation's loan portfolio. Pools of loans with similar risk characteristics are collectively evaluated, while loans that no longer share risk characteristics with loan pools are evaluated individually. The allowance for loan losses increased \$22 million to \$610 million at December 31, 2022, compared to \$588 million at December 31, 2021.

Collective loss estimates are determined by applying reserve factors, designed to estimate current expected credit losses, to amortized cost balances over the remaining contractual life of the collectively evaluated portfolio. Loans with similar risk characteristics are aggregated into homogeneous pools. The allowance for loan losses also includes qualitative adjustments to bring the allowance to the level management believes is appropriate based on factors that have not otherwise been fully accounted for, including adjustments for foresight risk, input imprecisions and model imprecision. Credit losses for loans that no longer share risk characteristics with the loan pools are estimated on an individual basis. Individual credit loss estimates are typically performed for nonaccrual loans and modified loans classified as troubled debt restructurings (TDRs) and are based on one of several methods, including the estimated fair value of the underlying collateral, observable market value of similar debt or the present value of expected cash flows.

Allowance for Credit Losses on Lending-Related Commitments

The allowance for credit losses on lending-related commitments estimates current expected credit losses on collective pools of letters of credit and unused commitments to extend credit based on reserve factors, determined in a manner similar to

business loans, multiplied by a probability of draw estimate based on historical experience and credit risk, applied to commitment amounts. The allowance for credit losses on lending-related commitments totaled \$51 million and \$30 million at December 31, 2022 and December 31, 2021, respectively.

Analysis of the Allowance for Credit Losses

The table below details net charge-offs (recoveries) as a percentage of total loans by loan category.

<i>(dollar amounts in millions)</i>	2022		2021		2020	
	Net Loan Charge-Offs (Recoveries)	Net Charge-Offs (Recoveries) Ratio (a)	Net Loan Charge-Offs (Recoveries)	Net Charge-Offs (Recoveries) Ratio (a)	Net Loan Charge-Offs (Recoveries)	Net Charge-Offs (Recoveries) Ratio (a)
Commercial	\$ 18	0.06 %	\$ (15)	(0.05)%	\$ 198	0.62 %
Commercial mortgage	—	—	2	0.02	(3)	(0.03)
International	—	—	4	0.38	—	—
Residential mortgage	(1)	(0.03)	(2)	(0.11)	—	—
Consumer	—	—	1	0.05	1	0.05
Total loans	\$ 17	0.03 %	\$ (10)	(0.02)%	\$ 196	0.38 %

(a) Net charge-offs (recoveries) as a percentage of related average loans outstanding.

Net loan charge-offs totaled \$17 million for the year ended December 31, 2022, a \$27 million increase from net loan recoveries of \$10 million for the year ended December 31, 2021. Commercial net charge-offs for the 2022 period included Energy net charge-offs totaling \$3 million, compared to \$48 million of Energy net recoveries recorded in the 2021 period, an increase of \$51 million, which was partially offset by decreases of \$12 million in general Middle Market and \$9 million in Corporate Banking.

Allocation of the Allowance for Credit Losses

<i>(dollar amounts in millions)</i>	2022			2021		
	Allocated Allowance	Allowance Ratio (a)	% (b)	Allocated Allowance	Allowance Ratio (a)	% (b)
December 31,						
Allowance for loan losses						
Business loans						
Commercial (c)	\$ 287	0.93%	58%	\$ 293	1.00 %	60%
Real estate construction	38	1.24	6	28	0.94	6
Commercial mortgage	200	1.51	25	192	1.71	23
Lease financing	6	0.78	1	6	0.97	1
International	10	0.79	2	12	0.96	2
Total business loans	541	1.10	92	531	1.17	92
Retail loans						
Residential mortgage	32	1.74	4	24	1.36	4
Consumer	37	1.61	4	33	1.56	4
Total retail loans	69	1.67	8	57	1.47	8
Total loans	610	1.14%	100%	\$ 588	1.19 %	100%
Allowance for credit losses on lending-related commitments						
Business commitments	40			24		
Retail commitments	11			6		
Total commitments	51			30		
Allowance for credit losses	\$ 661	1.24%		\$ 618	1.26 %	

(a) Allocated allowance as a percentage of related loans outstanding.

(b) Loans outstanding as a percentage of total loans.

(c) Includes PPP loans with a balance of \$35 million and \$459 million at December 31, 2022 and December 31, 2021, respectively.

For additional information regarding the allowance for credit losses, refer to the "Critical Accounting Estimates" section of this financial review and Notes 1 and 4 to the consolidated financial statements.

Nonperforming Assets

Nonperforming assets include loans on nonaccrual status, TDRs which have been renegotiated to less than the original contractual rates (reduced-rate loans) and foreclosed assets. TDRs include performing and nonperforming loans, with nonperforming TDRs on either nonaccrual or reduced-rate status. In accordance with the provisions of the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), the Corporation elected not to consider qualifying COVID-19-related modifications, primarily deferrals, as TDRs and did not designate such loans as past due or nonaccrual. The temporary relief

provided under the CARES Act applied to modifications made from the start of the COVID-19 pandemic through December 31, 2021.

Summary of Nonperforming Assets and Past Due Loans

(dollar amounts in millions)

December 31	2022	2021
Nonaccrual loans	\$ 240	\$ 264
Reduced-rate loans	4	4
Total nonperforming loans	244	268
Foreclosed property	—	1
Total nonperforming assets	\$ 244	\$ 269
Nonaccrual loans as a percentage of total loans	0.45%	0.54%
Nonperforming loans as a percentage of total loans	0.46	0.54
Nonperforming assets as a percentage of total loans and foreclosed property	0.46	0.55
Loans past due 90 days or more and still accruing	\$ 23	\$ 27

Nonperforming assets decreased \$25 million to \$244 million at December 31, 2022, from \$269 million at December 31, 2021. The decrease in nonperforming assets primarily reflected a decrease of \$45 million in nonaccrual business loans, partially offset by an increase of \$21 million in nonaccrual retail loans, as temporary legislative relief for COVID-19-related deferrals ended on December 31, 2021. Nonperforming loans were 0.46 percent of total loans at December 31, 2022, compared to 0.54 percent at December 31, 2021. For further information regarding the composition of nonaccrual loans, refer to Note 4 to the consolidated financial statements.

The following table presents a summary of changes in nonaccrual loans.

(in millions)

Years Ended December 31	2022	2021
Balance at beginning of period	\$ 264	\$ 347
Loans transferred to nonaccrual (a)	132	193
Nonaccrual loan gross charge-offs	(68)	(70)
Loans transferred to accrual status (a)	(11)	(25)
Nonaccrual loans sold	(15)	(34)
Payments/other (b)	(62)	(147)
Balance at end of period	\$ 240	\$ 264

(a) Based on an analysis of nonaccrual loans with book balances greater than \$2 million.

(b) Includes net changes related to nonaccrual loans with balances less than or equal to \$2 million, payments on nonaccrual loans with book balances greater than \$2 million and transfers of nonaccrual loans to foreclosed property.

There were 23 borrowers with a balance greater than \$2 million, totaling \$132 million, transferred to nonaccrual status in 2022, an increase of 5 borrowers compared to 18 borrowers totaling \$193 million in 2021. For further information about the composition of loans transferred to nonaccrual during the current period, refer to the nonaccrual information by industry category table below.

The following table presents the composition of nonaccrual loans by balance and the related number of borrowers at December 31, 2022 and 2021.

	2022		2021	
	Number of Borrowers	Balance	Number of Borrowers	Balance
(dollar amounts in millions)				
Under \$2 million	475	\$ 60	580	\$ 63
\$2 million - \$5 million	14	46	14	46
\$5 million - \$10 million	8	58	7	54
\$10 million - \$25 million	5	76	5	69
Greater than \$25 million	—	—	1	32
Total	502	\$ 240	607	\$ 264

The following table presents a summary of nonaccrual loans at December 31, 2022 and loans transferred to nonaccrual and net loan charge-offs for the year ended December 31, 2022, based on North American Industry Classification System (NAICS) categories.

<i>(dollar amounts in millions)</i> Industry Category	December 31, 2022		Year Ended December 31, 2022			
	Nonaccrual Loans		Loans Transferred to Nonaccrual (a)		Net Loan Charge-Offs (Recoveries)	
Residential Mortgage	\$ 53	22%	\$ 28	21%	\$ (1)	(6)%
Manufacturing	52	21	65	49	28	164
Transportation & Warehousing	23	10	—	—	(3)	(18)
Wholesale Trade	23	9	—	—	—	—
Real Estate & Home Builders	14	6	—	—	1	6
Services	11	5	9	7	(6)	(35)
Retail Trade	11	4	10	7	(2)	(12)
Information & Communication	9	4	4	3	1	6
Mining, Quarrying and Oil & Gas Extraction	7	3	6	5	3	18
Arts, Entertainment & Recreation	7	3	—	—	—	—
Health Care & Social Assistance	7	3	7	5	5	30
Management of Companies and Enterprises	6	3	—	—	(5)	(29)
Other (b)	17	7	3	3	(4)	(24)
Total	\$ 240	100%	\$ 132	100%	\$ 17	100%

(a) Based on an analysis of nonaccrual loans with book balances greater than \$2 million.

(b) Consumer, excluding residential mortgage and certain personal purpose nonaccrual loans and net charge-offs, is included in the Other category.

Loans past due 90 days or more and still accruing interest generally represent loans that are well collateralized and in the process of collection. Loans past due 90 days or more decreased \$4 million to \$23 million at December 31, 2022, compared to \$27 million at December 31, 2021. Loans past due 30-89 days increased \$225 million to \$378 million at December 31, 2022, compared to \$153 million at December 31, 2021. Loans past due 30 days or more and still accruing interest as a percentage of total loans were 0.75 percent and 0.36 percent at December 31, 2022 and December 31, 2021, respectively. An aging analysis of loans included in Note 4 to the consolidated financial statements provides further information about the balances comprising past due loans.

The following table presents a summary of total criticized loans. The Corporation's criticized list is consistent with the Special Mention, Substandard and Doubtful categories defined by regulatory authorities. Criticized loans with balances of \$2 million or more on nonaccrual status or loans with balances of \$1 million or more whose terms have been modified in a TDR are individually subjected to quarterly credit quality reviews, and the Corporation may establish specific allowances for such loans. A table of loans by credit quality indicator included in Note 4 to the consolidated financial statements provides further information about the balances comprising total criticized loans.

<i>(dollar amounts in millions)</i> December 31	2022	2021
Total criticized loans	\$ 1,572	\$ 1,573
As a percentage of total loans	2.9%	3.2%

The \$1 million decrease in criticized loans during the year ended December 31, 2022 included decreases of \$90 million in Business Banking, \$72 million in Corporate Banking, \$60 million in Entertainment Lending and \$46 million in Energy, mostly offset by increases of \$121 million in Technology and Life Sciences, \$99 million in general Middle Market and \$53 million in Environmental Services.

For further information regarding the Corporation's nonperforming assets policies, refer to Notes 1 and 4 to the consolidated financial statements.

Concentrations of Credit Risk

Concentrations of credit risk may exist when a number of borrowers are engaged in similar activities, or activities in the same geographic region, and have similar economic characteristics that would cause them to be similarly impacted by changes in economic or other conditions. The Corporation has concentrations of credit risk with the commercial real estate and automotive industries. All other industry concentrations, as defined by management, individually represented less than 10 percent of total loans at December 31, 2022.

Commercial Real Estate Lending

At December 31, 2022, the Corporation's commercial real estate portfolio represented 31 percent of total loans. The following table summarizes the Corporation's commercial real estate loan portfolio by loan category.

<i>(in millions)</i>	December 31, 2022			December 31, 2021		
	Commercial Real Estate business line (a)	Other (b)	Total	Commercial Real Estate business line (a)	Other (b)	Total
Real estate construction loans	\$ 2,505	\$ 600	\$ 3,105	\$ 2,391	\$ 557	\$ 2,948
Commercial mortgage loans	4,681	8,625	13,306	3,338	7,917	11,255
Total commercial real estate	\$ 7,186	\$ 9,225	\$ 16,411	\$ 5,729	\$ 8,474	\$ 14,203

(a) Primarily loans to real estate developers.

(b) Primarily loans secured by owner-occupied real estate.

The Corporation limits risk inherent in its commercial real estate lending activities by monitoring borrowers directly involved in the commercial real estate markets and adhering to conservative policies on loan-to-value ratios for such loans. Commercial real estate loans, consisting of real estate construction and commercial mortgage loans, totaled \$16.4 billion at December 31, 2022. Of the total, \$7.2 billion, or 44 percent, were to borrowers in the Commercial Real Estate business line, which includes loans to real estate developers, an increase of \$1.5 billion compared to December 31, 2021. Commercial real estate loans in other business lines totaled \$9.2 billion, or 56 percent, at December 31, 2022, an increase of \$751 million compared to December 31, 2021. These loans consisted primarily of owner-occupied commercial mortgages, which bear credit characteristics similar to non-commercial real estate business loans. Generally, loans previously reported as real estate construction are classified as commercial mortgage loans upon receipt of a certificate of occupancy.

The real estate construction loan portfolio primarily contains loans made to long-tenured customers with satisfactory completion experience. There were no criticized real estate construction loans in the Commercial Real Estate business line at both December 31, 2022 and 2021. In other business lines, criticized real estate construction loans totaled \$3 million at December 31, 2022, compared to \$35 million at December 31, 2021. There were no real estate construction loan net charge-offs in the years ended December 31, 2022 and 2021.

Commercial mortgage loans are loans where the primary collateral is a lien on any real property and are primarily loans secured by owner-occupied real estate. Real property is generally considered primary collateral if the value of that collateral represents more than 50 percent of the commitment at loan approval. Loans in the commercial mortgage portfolio generally mature within three to five years. Criticized commercial mortgage loans in the Commercial Real Estate business line totaled \$16 million and \$29 million at December 31, 2022 and 2021, respectively. In other business lines, \$151 million and \$219 million of commercial mortgage loans were criticized at December 31, 2022 and 2021, respectively. There were no commercial mortgage loan net charge-offs in 2022, compared to net charge-offs of \$2 million in 2021.

Automotive Lending - Dealer:

The following table presents a summary of dealer loans.

<i>(dollar amounts in millions)</i>	December 31, 2022		December 31, 2021	
	Loans Outstanding	Percent of Total Loans	Loans Outstanding	Percent of Total Loans
Dealer:				
Floor plan	\$ 1,379		\$ 681	
Other	3,988		3,481	
Total dealer	\$ 5,367	10.1%	\$ 4,162	8.4%

Substantially all dealer loans are in the National Dealer Services business line and primarily include floor plan financing and other loans to automotive dealerships. Floor plan loans, included in commercial loans in the Consolidated Balance Sheets, totaled \$1.4 billion at December 31, 2022, an increase of \$698 million compared to \$681 million at December 31, 2021, although an imbalance in supply and demand impacted by a shortage in microchips used in automotive production continues to depress floor plan loan balances below pre-pandemic levels. At December 31, 2022 and 2021, other loans in the National Dealer Services business line totaled \$4.0 billion and \$3.5 billion, respectively, including \$2.3 billion and \$2.0 billion of owner-occupied commercial real estate mortgage loans, respectively.

There were no nonaccrual dealer loans at both December 31, 2022 and 2021. Additionally, there were no net charge-offs of dealer loans in either of the years ended December 31, 2022 and 2021.

Automotive Lending- Production:

The following table presents a summary of loans to borrowers involved with automotive production.

<i>(dollar amounts in millions)</i>	December 31, 2022		December 31, 2021	
	Loans Outstanding	Percent of Total Loans	Loans Outstanding (a)	Percent of Total Loans
Production:				
Domestic	\$ 797		\$ 789	
Foreign	271		323	
Total production	\$ 1,068	2.0%	\$ 1,112	2.3%

(a) Excludes PPP loans.

Loans to borrowers involved with automotive production, primarily Tier 1 and Tier 2 suppliers, totaled \$1.1 billion at both December 31, 2022 and 2021. These borrowers have faced, and could face in the future, financial difficulties due to disruptions in auto production as well as their supply chains and logistics operations. As such, management continues to monitor this portfolio.

There were \$5 million in nonaccrual loans to borrowers involved with automotive production at December 31, 2022, compared to none at December 31, 2021. Automotive production loan net charge-offs totaled \$2 million for the year ended December 31, 2022, compared to \$7 million for the same period in 2021.

For further information regarding significant group concentrations of credit risk, refer to Note 5 to the consolidated financial statements.

Residential Real Estate Lending

At December 31, 2022, residential real estate loans represented 7 percent of total loans. The following table summarizes the Corporation's residential mortgage and home equity loan portfolios by geographic market.

<i>(dollar amounts in millions)</i>	December 31, 2022				December 31, 2021			
	Residential Mortgage Loans	Percent of Total	Home Equity Loans	Percent of Total	Residential Mortgage Loans	Percent of Total	Home Equity Loans	Percent of Total
Geographic market:								
Michigan	\$ 497	27%	\$ 487	27%	\$ 434	24%	\$ 484	32%
California	866	48	852	48	870	49	660	43
Texas	258	14	354	20	245	14	329	21
Other Markets	193	11	83	5	222	13	60	4
Total	\$ 1,814	100%	\$ 1,776	100%	\$ 1,771	100%	\$ 1,533	100%

Residential real estate loans, which consist of traditional residential mortgages and home equity loans and lines of credit, totaled \$3.6 billion at December 31, 2022. The residential real estate portfolio is principally located within the Corporation's primary geographic markets. Substantially all residential real estate loans past due 90 days or more are placed on nonaccrual status, and substantially all junior lien home equity loans that are current or less than 90 days past due are placed on nonaccrual status if full collection of the senior position is in doubt. At no later than 180 days past due, such loans are charged off to current appraised values less costs to sell.

Residential mortgages totaled \$1.8 billion at December 31, 2022, and were primarily larger, variable-rate mortgages originated and retained for certain private banking relationship customers. Of the \$1.8 billion of residential mortgage loans outstanding, \$53 million were on nonaccrual status at December 31, 2022. The home equity portfolio totaled \$1.8 billion at December 31, 2022, of which 97 percent was outstanding under primarily variable-rate, interest-only home equity lines of credit, 2 percent were in amortizing status and 1 percent were closed-end home equity loans. Of the \$1.8 billion of home equity loans outstanding, \$15 million were on nonaccrual status at December 31, 2022. A majority of the home equity portfolio was secured by junior liens at December 31, 2022.

Energy Lending

The Corporation has a portfolio of Energy loans that are included entirely in commercial loans in the Consolidated Balance Sheets. Customers in the Corporation's Energy business line (approximately 120 relationships) are engaged in three segments of the oil and gas business: exploration and production (E&P), midstream and energy services. E&P generally includes such activities as searching for potential oil and gas fields, drilling exploratory wells and operating active wells. Commitments to E&P borrowers are generally subject to semi-annual borrowing base re-determinations based on a variety of factors including updated prices (reflecting market and competitive conditions), energy reserve levels and the impact of

hedging. The midstream sector is generally involved in the transportation, storage and marketing of crude and/or refined oil and gas products. The Corporation's energy services customers provide products and services primarily to the E&P segment.

The following table summarizes information about the Corporation's Energy business line.

<i>(dollar amounts in millions)</i> December 31	2022				2021			
	Outstandings	Nonaccrual	Criticized (a)		Outstandings	Nonaccrual	Criticized (a)	
Exploration and production (E&P)	\$ 1,149	81%	\$ 7	\$ 7	\$ 971	80%	\$ 14	\$ 46
Midstream	253	18	—	—	212	18	—	—
Services	13	1	—	5	21	2	—	12
Total Energy business line	\$ 1,415	100 %	\$ 7	\$ 12	\$ 1,204	100%	\$ 14	\$ 58
As a percentage of total Energy loans			1%	1%			1%	5%

(a) Includes nonaccrual loans.

Loans in the Energy business line totaled \$1.4 billion, or 3 percent of total loans, at December 31, 2022, an increase of \$211 million compared to December 31, 2021. Total exposure, including unused commitments to extend credit and letters of credit, was \$3.4 billion (a utilization rate of 43 percent) and \$2.9 billion at December 31, 2022 and December 31, 2021, respectively.

Net credit-related Energy charge-offs were \$3 million for the year ended December 31, 2022, compared to net recoveries of \$48 million for the year ended December 31, 2021. Nonaccrual Energy loans decreased by \$7 million to \$7 million at December 31, 2022, compared to \$14 million at December 31, 2021. Criticized loans decreased \$46 million to \$12 million, or 1 percent of total criticized loans, at December 31, 2022 compared to December 31, 2021.

Leveraged Loans

Certain loans in the Corporation's commercial portfolio are considered leveraged transactions. These loans are typically used for mergers, acquisitions, business recapitalizations, refinancing and equity buyouts. To help mitigate the risk associated with these loans, the Corporation focuses on middle market companies with highly capable management teams, strong sponsors and solid track records of financial performance. Industries prone to cyclical downturns and acquisitions with a high degree of integration risk are generally avoided. Other considerations include the sufficiency of collateral, the level of balance sheet leverage and the adequacy of financial covenants. During the underwriting process, cash flows are stress-tested to evaluate the borrowers' abilities to handle economic downturns and an increase in interest rates.

The FDIC defines higher-risk commercial and industrial (HR C&I) loans for assessment purposes as loans generally with leverage of four times total debt to earnings before interest, taxes and depreciation (EBITDA) as well as three times senior debt to EBITDA, excluding certain collateralized loans.

The following table summarizes information about HR C&I loans, which represented 6 percent of total loans at both December 31, 2022 and December 31, 2021, respectively.

<i>(in millions)</i> December 31	2022	2021
Outstandings	\$ 3,120	\$ 2,927
Criticized	393	299
Net loan charge-offs recorded during the years ended December 31,	20	18

Market and Liquidity Risk

Market risk represents the risk of loss due to adverse movement in prices, including interest rates, foreign exchange rates, commodity prices and equity prices. Liquidity risk represents the risk that the Corporation does not have sufficient access to funds to maintain its normal operations at all times, or does not have the ability to raise or borrow funds at a reasonable cost at all times.

The Asset and Liability Policy Committee (ALCO) of the Corporation establishes and monitors compliance with the policies and risk limits pertaining to market and liquidity risk management activities. ALCO meets regularly to discuss and review market and liquidity risk management strategies and consists of executive and senior management from various areas of the Corporation, including treasury, finance, economics, lending, deposit gathering and risk management. Corporate Treasury mitigates market and liquidity risk under the direction of ALCO through the actions it takes to manage the Corporation's market, liquidity and capital positions.

The Corporation performs monthly liquidity stress testing to evaluate its ability to meet funding needs in hypothetical stressed environments. Such environments cover a series of scenarios, including both idiosyncratic and market-wide in nature, which vary in terms of duration and severity. The evaluation as of December 31, 2022 projected that sufficient sources of liquidity were available under each series of events.

In addition to assessing liquidity risk on a consolidated basis, Corporate Treasury also monitors the parent company's liquidity and has established liquidity coverage requirements for meeting expected obligations without the support of additional dividends from subsidiaries. ALCO's policy on liquidity risk management requires the parent company to maintain sufficient liquidity to meet expected cash obligations over a period of no less than 12 months. The Corporation had liquid assets of \$1.8 billion on an unconsolidated basis at December 31, 2022.

Corporate Treasury and the Enterprise Risk Division support ALCO in measuring, monitoring and managing interest rate risk as well as all other market risks. Key activities encompass: (i) providing information and analyses of the Corporation's balance sheet structure and measurement of interest rate and all other market risks; (ii) monitoring and reporting of the Corporation's positions relative to established policy limits and guidelines; (iii) developing and presenting analyses and strategies to adjust risk positions; (iv) reviewing and presenting policies and authorizations for approval; and (v) monitoring of industry trends and analytical tools to be used in the management of interest rate and all other market and liquidity risks.

Interest Rate Risk

Net interest income is the primary source of revenue for the Corporation. Interest rate risk arises in the normal course of business due to differences in the repricing and cash flow characteristics of assets and liabilities, primarily through the Corporation's core business activities of extending loans and acquiring deposits. The Corporation's balance sheet is predominantly characterized by floating-rate loans funded by core deposits. Including the impact of interest rate swaps converting floating-rate loans to fixed, the Corporation's loan composition at December 31, 2022 was 50 percent fixed-rate, 39 percent 30-day rate (primarily BSBY, LIBOR and SOFR), 6 percent 90-day and greater rate and 5 percent prime. The composition of the loan portfolio creates sensitivity to interest rate movements due to the imbalance between the faster repricing of the floating-rate loan portfolio versus deposit products. In addition, the growth and/or contraction in the Corporation's loans and deposits may lead to changes in sensitivity to interest rate movements in the absence of mitigating actions. Examples of such actions are purchasing fixed-rate investment securities, which provide liquidity to the balance sheet and act to mitigate the inherent interest rate sensitivity, as well as hedging with interest rate swaps and options. Other mitigating factors include interest rate floors on a portion of the loan portfolio.

The Corporation actively manages its exposure to interest rate risk with the principal objective of optimizing net interest income and the economic value of equity while operating within acceptable limits established for interest rate risk and maintaining adequate levels of funding and liquidity.

Since no single measurement system satisfies all management objectives, a combination of techniques is used to manage interest rate risk. These techniques examine the impact of interest rate risk on net interest income and the economic value of equity under a variety of alternative scenarios, including changes in the level, slope and shape of the yield curve utilizing multiple simulation analyses. Simulation analyses produce only estimates of net interest income as the assumptions used are inherently uncertain. Actual results may differ from simulated results due to many factors, including, but not limited to, the timing, magnitude and frequency of changes in interest rates, market conditions, regulatory impacts and management strategies.

Sensitivity of Net Interest Income to Changes in Interest Rates

The analysis of the impact of changes in interest rates on net interest income under various interest rate scenarios is management's principal risk management technique. Management models a base-case net interest income under an unchanged interest rate environment using a static balance sheet and generates sensitivity scenarios by changing certain model

assumptions. Each scenario includes assumptions such as loan growth, investment security prepayment levels, depositor behavior and overall balance sheet mix and growth which are in line with historical patterns. Changes in actual economic activity may result in a materially different interest rate environment as well as a balance sheet structure that is different from the changes management included in its simulation analysis. Model assumptions in the sensitivity scenarios at December 31, 2022 included for the rising rate scenario, a modest increase in loan balances and a moderate decrease in deposit balances, and for the declining rate scenario, a modest decrease in loan balances and a moderate increase in deposit balances. In addition, both scenarios assumed loan spreads held at current levels, an incremental interest-bearing deposit beta of approximately 30%, no reinvestment of securities portfolio cash flows and no additions to interest rate swaps.

The average balance of the securities portfolio included in the analysis was \$19.0 billion for the year ended December 31, 2022 with an average yield of 1.97% and effective duration of 5.3 years.

The table below details components of the cash flow hedge portfolio at December 31, 2022.

<i>(dollar amounts in millions)</i>	Cash Flow Hedges			
	Notional Amount	Weighted Average Yield	Years to Maturity (a)	
Swaps under contract at December 31, 2022 (b)	\$ 26,600	2.45%	4.6	
Weighted average notional active per period:				
Full year 2022	12,092	2.16	4.0	
First quarter 2023	22,145	2.34	4.4	
Second quarter 2023	22,384	2.36	4.6	
Third quarter 2023	22,018	2.38	4.7	
Fourth quarter 2023	22,934	2.43	4.8	
First quarter 2024	23,652	2.47	4.9	
Second quarter 2024	23,532	2.49	5.0	
Third quarter 2024	23,484	2.51	5.0	
Fourth quarter 2024	23,633	2.54	5.1	
Full year 2025	22,973	2.57	5.1	

(a) Years to maturity calculated from a starting date of December 31, 2022.

(b) Includes forward starting swaps of \$2.6 billion starting in 2023 and \$2.0 billion starting in 2024. Excluding forward starting swaps, the weighted average yield was 2.35%.

The analysis also includes interest rate swaps that convert \$3.2 billion of fixed-rate medium- and long-term debt to variable rates through fair value hedges. Additionally, included in this analysis are \$14.7 billion of loans that were subject to an average interest rate floor of 52 basis points at December 31, 2022. This base-case net interest income is then compared against interest rate scenarios in which short-term rates rise or decline 100 basis points (with a floor of zero percent) in a linear, parallel fashion from the base case over 12 months, resulting in an average change of 50 basis points over the period.

The table below, as of December 31, 2022 and 2021, displays the estimated impact on net interest income during the next 12 months by relating the base case scenario results to those from the rising and declining rate scenarios described above.

<i>(dollar amounts in millions)</i>	Estimated Annual Change					
	2022		2021			
	Amount	%	Amount		%	
December 31						
Change in Interest Rates:			Change in Interest Rates:			
Rising 100 basis points (50 basis points on average)	\$ 10	—%	Rising 100 basis points (50 basis points on average)	\$ 205	12%	
Declining 100 basis points (50 basis points on average)	(72)	(2)	Declining to zero percent	(46)	(3)	

Overall sensitivity to interest rate movements declined from December 31, 2021 to December 31, 2022 resulting from an increase in fixed-rate loans (including the impact of interest rate swaps) from 22 percent of the loan portfolio at December 31, 2021 to 50 percent at December 31, 2022, as well as from a decrease in non-maturity deposits. The impact on a dollar basis to declining interest rates increased primarily due to an increase in the federal funds rate, allowing for a full 100 basis point repricing of the balance sheet in the 2022 scenario, compared to 25 basis points in the 2021 scenario, as well as an increase in modeled base case net interest income. Sensitivity to rising interest rates decreased due to increased cash flow hedges and non-maturity deposit runoff but was partially offset by the increased repricing potential of floating-rate loans as they moved above their contractual floor rates.

Sensitivity of Economic Value of Equity to Changes in Interest Rates

In addition to the simulation analysis on net interest income, an economic value of equity analysis provides an alternative view of the interest rate risk position. The economic value of equity is the difference between the estimate of the economic value of the Corporation's financial assets, liabilities and off-balance sheet instruments, derived through discounting cash flows based on actual rates at the end of the period, and the estimated economic value after applying the estimated impact of rate movements. The Corporation primarily monitors the percentage change on the base-case economic value of equity. The economic value of equity analysis is based on an immediate parallel 100 basis point shock with a floor of zero percent.

The table below, as of December 31, 2022 and December 31, 2021, displays the estimated impact on the economic value of equity from the interest rate scenario described above.

<i>(dollar amounts in millions)</i> December 31	2022		2021		
	Amount	%	Amount	%	
Change in Interest Rates:			Change in Interest Rates:		
Rising 100 basis points	\$ (417)	(3)%	Rising 100 basis points	\$ 1,353	9%
Declining 100 basis points	627	4	Declining to zero percent	(446)	(3)

The sensitivity of the economic value of equity to rising rates changed from an increase as of December 31, 2021 to a reduction as of December 31, 2022 due to additional receive-fixed cash flow swaps, growth of fixed-rate securities and deposit runoff. Sensitivity to declining rates now increases economic value of equity due to the same factors.

Loans by Maturity and Interest Rate Sensitivity

The contractual maturity distribution of the loan portfolio is presented below.

<i>(in millions)</i> December 31, 2022	Loans Maturing					Total
	Within One Year (a)	After One But Within Five Years	After Five But Within Fifteen Years	After Fifteen Years		
Commercial loans	\$ 12,047	\$ 17,357	\$ 1,377	\$ 128	\$ 30,909	
Real estate construction loans	745	2,133	221	6	3,105	
Commercial mortgage loans	2,346	7,287	3,646	27	13,306	
Lease financing	233	491	36	—	760	
International loans	557	578	62	—	1,197	
Residential mortgage loans	4	6	224	1,580	1,814	
Consumer loans	505	175	125	1,506	2,311	
Total	\$ 16,437	\$ 28,027	\$ 5,691	\$ 3,247	\$ 53,402	

(a) Includes demand loans, loans having no stated repayment schedule or maturity and overdrafts.

The interest rate composition of loans with a maturity date over one year are presented below based on contractual terms.

<i>(in millions)</i> December 31, 2022	Loans Maturing After One Year			Total
	Predetermined (Fixed) Interest Rate	Floating Interest Rate		
Commercial loans	\$ 485	\$ 18,377	\$ 18,862	
Real estate construction loans	23	2,337	2,360	
Commercial mortgage loans	1,376	9,584	10,960	
Lease financing	329	198	527	
International loans	37	603	640	
Residential mortgage loans	400	1,366	1,766	
Consumer loans	32	1,774	1,806	
Total	\$ 2,682	\$ 34,239	\$ 36,921	

Risk Management Derivative Instruments

The Corporation uses investment securities and derivative instruments as asset and liability management tools with the overall objective of managing the volatility of net interest income from changes in interest rates. These tools assist management in achieving the desired interest rate risk management objectives. Activity related to derivative instruments currently involves interest rate swaps effectively converting fixed-rate medium- and long-term debt to a floating rate as well as variable rate loans to a fixed rate.

<i>(in millions)</i> Risk Management Notional Activity	Interest Rate Contracts	Foreign Exchange Contracts	Totals
Balance at January 1, 2021	\$ 8,200	\$ 442	\$ 8,642
Additions	3,000	8,057	11,057
Maturities/amortizations	(500)	(8,047)	(8,547)
Balance at December 31, 2021	\$ 10,700	\$ 452	\$ 11,152
Additions (a)	20,850	8,638	29,488
Maturities/amortizations	(1,800)	(8,698)	(10,498)
Balance at December 31, 2022	\$ 29,750	\$ 392	\$ 30,142

(a) Includes \$4.6 billion of forward starting receive fixed interest rate swaps that will become effective on their contractual start dates in 2023 and 2024.

The notional amount of risk management interest rate swaps totaled \$29.8 billion at December 31, 2022, which included cash flow hedging strategies that convert \$26.6 billion of variable-rate loans to a fixed rate as well as fair value hedging strategies that convert \$3.2 billion of fixed-rate medium- and long-term debt to a floating rate. Risk management interest rate swaps generated no net interest income for the year ended December 31, 2022, compared to \$163 million of net interest income generated for the year ended December 31, 2021.

In addition to interest rate swaps, the Corporation employs various other types of derivative instruments as offsetting positions to mitigate exposures to foreign currency risks associated with specific assets and liabilities (e.g., customer loans or deposits denominated in foreign currencies). Such instruments may include foreign exchange spot and forward contracts as well as foreign exchange swap agreements.

Further information regarding risk management derivative instruments is provided in Note 8 to the consolidated financial statements.

Customer-Initiated and Other Derivative Instruments

<i>(in millions)</i> Customer-Initiated and Other Notional Activity	Interest Rate Contracts	Energy Derivative Contracts	Foreign Exchange Contracts	Totals
Balance at January 1, 2021	\$ 21,521	\$ 3,121	\$ 1,901	\$ 26,543
Additions	5,370	7,992	42,173	55,535
Maturities/amortizations	(2,713)	(2,790)	(42,358)	(47,861)
Terminations	(3,178)	(553)	—	(3,731)
Balance at December 31, 2021	\$ 21,000	\$ 7,770	\$ 1,716	\$ 30,486
Additions	7,593	14,145	42,017	63,755
Maturities/amortizations	(3,017)	(6,002)	(41,029)	(50,048)
Terminations	(5,278)	(1,392)	—	(6,670)
Balance at December 31, 2022	\$ 20,298	\$ 14,521	\$ 2,704	\$ 37,523

The Corporation sells and purchases interest rate caps and floors and enters into foreign exchange contracts, interest rate swaps and energy derivative contracts to accommodate the needs of customers requesting such services. Changes in the fair value of customer-initiated and other derivatives are recognized in earnings as they occur. To limit the market risk of these activities, the Corporation generally takes offsetting positions with dealers. The notional amounts of offsetting positions are included in the table above. Customer-initiated and other notional activity represented 55 percent and 73 percent of total interest rate, energy and foreign exchange contracts at December 31, 2022 and 2021, respectively.

Further information regarding customer-initiated and other derivative instruments is provided in Note 8 to the consolidated financial statements.

LIBOR Transition

On July 27, 2017, the United Kingdom's Financial Conduct Authority (FCA), which regulates LIBOR, publicly announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. Effective March 2021, the FCA confirmed that certain LIBOR tenors will no longer be supported after December 31, 2021 and that the remaining tenors, including those most commonly used by the Corporation, will cease to be supported after June 30, 2023. The Corporation has substantial exposure to LIBOR-based products, including loans and derivatives, and is preparing for a transition from LIBOR toward alternative rates.

The Corporation ceased originating LIBOR-based products in the fourth quarter of 2021 and has since reduced total LIBOR exposure by approximately 50 percent to \$31.5 billion. Substantially all of the Corporation's LIBOR exposure is

comprised of loans, swaps and options. Of the remaining LIBOR-based products, 82 percent required no further remediation because the instruments mature prior to cessation or include fallback language.

As of December 31, 2022, there was approximately \$16.0 billion of LIBOR-based loans, compared to \$40.3 billion at December 31, 2021. Of these, approximately 18 percent have maturity dates prior to cessation, 46 percent mature after cessation but have fallback language and the remaining 36 percent are in process of remediation. The Corporation is confident it will complete its remediation efforts in a timely manner.

In addition to remediation activity on LIBOR-based loans, the Corporation has enacted the International Swaps and Derivatives Association (ISDA) protocols which relates to \$15.5 billion of derivatives. Once events occur that trigger a fallback, the reference rate for the variable leg of the swap will fall back from LIBOR to the ISDA Fallback Rate, which is the daily SOFR plus a spread.

The Corporation's enterprise transition timelines are closely aligned with recommendations from the Alternative Reference Rates Committee for both best practices and recommended objectives. The Corporation will continue to align with industry and regulatory guidelines regarding the cessation of LIBOR as well as monitor market developments for transitioning to alternative reference rates. For a discussion of the various risks facing the Corporation in relation to the transition away from LIBOR, see the market risk discussion within "Item 1A. Risk Factors."

Sources of Liquidity

The Corporation maintains a liquidity position that it believes will adequately satisfy its financial obligations while taking into account potential commitment draws and deposit run-off that may occur in the normal course of business. The majority of the Corporation's balance sheet is funded by customer deposits. Cash flows from loan repayments, increases in deposit accounts, activity in the securities portfolio and the purchased funds market serve as the Corporation's primary liquidity sources.

The Corporation satisfies incremental liquidity needs with either liquid assets or external funding sources. The Corporation had access to liquid assets of \$20.0 billion and \$35.3 billion at December 31, 2022 and December 31, 2021, respectively, which included cash on deposit with the Federal Reserve and the portion of the investment securities portfolio that the Corporation can sell without third-party consent.

In addition, the Corporation may access external funding sources when necessary, which include FHLB advances, federal funds, reverse repurchase agreements, brokered deposits and Corporation-issued bonds. The Corporation maintains a shelf registration statement with the Securities and Exchange Commission from which it may issue debt and equity securities.

Purchased funds increased to \$3.4 billion at December 31, 2022, compared to \$50 million at December 31, 2021, reflecting an increase in short-term FHLB advances. At December 31, 2022, the Bank had pledged loans totaling \$24.5 billion which provided for up to \$19.6 billion of available collateralized borrowing with the Federal Reserve Bank (FRB). The Bank is also a member of the FHLB of Dallas, Texas, which provides short- and long-term funding to its members through advances collateralized by real estate-related loans, certain government agency-backed securities and other eligible assets. Actual borrowing capacity is contingent on the amount of collateral pledged to the FHLB. At December 31, 2022, \$9.5 billion of real estate-related loans were pledged to the FHLB as collateral for \$3.2 billion in short-term advances and providing an additional \$7.2 billion for potential future borrowings.

The ability of the Corporation and the Bank to raise funds at competitive rates is impacted by rating agencies' views of the credit quality, liquidity, capital, earnings and other relevant factors related to the Corporation and the Bank. As of December 31, 2022, the three major rating agencies had assigned the following ratings to long-term senior unsecured obligations of the Corporation and the Bank. A security rating is not a recommendation to buy, sell, or hold securities and may be subject to revision or withdrawal at any time by the assigning rating agency. Each rating should be evaluated independently of any other rating.

December 31, 2022	Comerica Incorporated		Comerica Bank	
	Rating	Outlook	Rating	Outlook
Standard and Poor's	BBB+	Stable	A-	Stable
Moody's Investors Service	A3	Stable	A3	Stable
Fitch Ratings	A-	Stable	A-	Stable

Potential Uses of Liquidity

Various financial obligations such as contractual obligations, unfunded commitments and deposit withdrawals may require future cash payments by the Corporation. Certain obligations are recognized on the Consolidated Balance Sheets, while others are off-balance sheet under U.S. generally accepted accounting principles.

The following table summarizes the Corporation's material noncancelable contractual obligations and future required minimum payments. Refer to Notes 10, 11, 12, and 25 to the consolidated financial statements for further information regarding these contractual obligations.

Selected Contractual Obligations

<i>(in millions)</i> December 31, 2022	Minimum Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	4-5 Years	More than 5 Years
Deposits without a stated maturity (a)	\$ 69,460	\$ 69,460			
Certificates of deposit and other deposits with a stated maturity (a)	1,937	1,789	\$ 112	\$ 31	\$ 5
Short-term borrowings (a)	3,211	3,211	—	—	—
Medium- and long-term debt (a)	3,150	850	850	400	1,050
Operating leases	480	63	132	100	185
Total contractual obligations	\$ 78,238	\$ 75,373	\$ 1,094	\$ 531	\$ 1,240
Medium- and long-term debt (parent company only) (a) (b)	\$ 1,650	\$ 850	\$ —	\$ 250	\$ 550

(a) Deposits and borrowings exclude accrued interest.

(b) Parent company only amounts are included in the medium- and long-term debt minimum payments above.

In addition to contractual obligations, other commercial commitments of the Corporation impact liquidity. These include unused commitments to extend credit, standby letters of credit and financial guarantees, and commercial letters of credit. The following table summarizes the Corporation's commercial commitments and expected expiration dates by period.

Commercial Commitments

<i>(in millions)</i> December 31, 2022	Expected Expiration Dates by Period				
	Total	Less than 1 Year	1-3 Years	4-5 Years	More than 5 Years
Unused commitments to extend credit	\$ 34,817	\$ 6,295	\$ 14,030	\$ 10,713	\$ 3,779
Standby letters of credit and financial guarantees	3,712	3,347	73	230	62
Commercial letters of credit	39	39	—	—	—
Total commercial commitments	\$ 38,568	\$ 9,681	\$ 14,103	\$ 10,943	\$ 3,841

Since many of these commitments expire without being fully drawn, and each customer must continue to meet the conditions established in the contract, the total amount of these commercial commitments does not necessarily represent the future cash requirements of the Corporation. Refer to Note 8 to the consolidated financial statements for a further discussion of these commercial commitments.

Other Market Risks

Market risk related to the Corporation's trading instruments is not significant, as trading activities are limited. Certain components of the Corporation's noninterest income, primarily fiduciary income, are at risk to fluctuations in the market values of underlying assets, particularly equity and debt securities. Other components of noninterest income, primarily brokerage fees, are at risk to changes in the volume of market activity.

Operational Risk

Operational risk represents the risk of loss resulting from inadequate or failed internal processes and people, or from external events, excluding in most cases those driven by technology (see Technology Risk below). The Corporation's definition of operational risk includes fraud; employment practice and workplace safety; clients, products and business practice; business continuity or disaster recovery; execution, delivery, and process management; third party and model risks. The definition does not include strategic or reputational risks. Although operational losses are experienced by all companies and are routinely incurred in business operations, the Corporation recognizes the need to identify and control operational losses and seeks to limit losses to a level deemed appropriate by management, as outlined in the Corporation's risk appetite statement. The appropriate risk level is determined through consideration of the nature of the Corporation's business and the environment in which it operates, in combination with the impact from, and the possible impact on, other risks faced by the Corporation. Operational risk is mitigated through a system of internal controls that are designed to keep operating risks at appropriate levels. The Operational Risk Management Committee monitors risk management techniques and systems. The Corporation has developed a framework that includes a centralized operational risk reporting function in the Enterprise Risk Division and business/support unit risk liaisons responsible for managing operational risk specific to the respective business lines.

Technology Risk

Technology risk represents the risk of loss or adverse outcomes arising from the people, processes, applications and infrastructure that support the technology environment. The Corporation's definition of technology risk includes technology delivery risk, technology investment risk, cybersecurity risk, information security risk and information management risk. Technology risk is inclusive of the risks associated with the execution of technology processes and activities by third-party contractors and suppliers to the Corporation. Other risk types may materialize in the event of a technology risk event, such as the risk of a financial reporting error or regulatory non-compliance, and the impact of such risks are highly interdependent with operational risk.

The Technology Risk Committee, comprising senior and executive business unit managers, as well as managers responsible for technology, cybersecurity, information security and enterprise risk management, oversees technology risk. The Technology Risk Committee also ensures that appropriate actions are implemented in business units to mitigate risk to an acceptable level.

Compliance Risk

Compliance risk represents the risk of sanctions or financial loss resulting from the Corporation's failure to comply with all applicable laws, regulations and standards of good banking practice. The impact of such risks is highly interdependent with strategic risk, as the reputational impact from compliance breaches can be severe. Activities which may expose the Corporation to compliance risk include, but are not limited to, those dealing with the prevention of money laundering, privacy and data protection, community reinvestment initiatives, fair lending, consumer protection, employment and tax matters, over-the-counter derivative activities and other regulated activities.

The Enterprise-Wide Compliance Committee, comprising senior and executive business unit managers, as well as managers responsible for compliance, audit and overall risk, oversees compliance risk. This enterprise-wide approach provides a consistent view of compliance across the organization. The Enterprise-Wide Compliance Committee also ensures that appropriate actions are implemented in business units to mitigate risk to an acceptable level.

Strategic Risk

Strategic risk represents the risk of inadequate returns or possible losses due to impairment of reputation, failure to fully develop and execute business plans, failure to assess current and new opportunities in business, markets and products, failure to determine appropriate consideration for risks accepted, and any other event not identified in the defined risk categories of credit, market and liquidity, operational, technology or compliance risks. Mitigation of the various risk elements that represent strategic risk is achieved through numerous metrics and initiatives to help the Corporation better understand, measure and report on such risks. The Executive Strategy and Pricing Committee, comprised of senior managers, oversees strategic risk and ensures that strategic risk is mitigated to appropriate levels.

CRITICAL ACCOUNTING ESTIMATES

The Corporation's consolidated financial statements are prepared based on the application of accounting policies, the most significant of which are described in Note 1. These policies require numerous estimates and strategic or economic assumptions, which may prove inaccurate or subject to variations. Changes in underlying factors, assumptions or estimates could have a material impact on the Corporation's future financial condition and results of operations. At December 31, 2022, the most critical of these estimates related to the allowance for credit losses, fair value measurement, pension plan accounting and income taxes. These estimates were reviewed with the Audit Committee of the Corporation's Board of Directors and are discussed more fully below.

ALLOWANCE FOR CREDIT LOSSES

In accordance with CECL, the allowance for credit losses, which includes both the allowance for loan losses and the allowance for credit losses on lending-related commitments, is calculated with the objective of maintaining a reserve for current expected credit losses over the remaining contractual life of the portfolio. The Corporation uses loss factors, based on estimated probability of default for internal risk ratings and loss given default, to determine the allowance for credit losses for the majority of its portfolio. Management applies loss factors to pools of loans and lending-related commitments with similar risk characteristics, calibrates these factors using economic forecasts and incorporates qualitative adjustments. For further discussion of the methodology used in the determination of the allowance for credit losses, refer to Note 1 to the consolidated financial statements. For further discussion on the economic forecast incorporated into the 2022 model, refer to the "Risk Management" section of this financial review.

Management's determination of the appropriateness of the allowance is based on periodic evaluations of the loan portfolio, lending-related commitments, current as well as forecasted economic factors and other relevant information. The calculation is inherently subjective and requires management to exercise significant judgment in developing assumptions for the estimate, the most significant of which are the loan risk rating process, development of economic forecasts and application of qualitative adjustments. Sensitivities are disclosed to demonstrate how changes in loan risk ratings and economic forecast scenarios may impact the allowance for credit losses. Sensitivities only consider changes to each specific assumption in isolation and their impact to the quantitative modeled results. They do not contemplate impacts to the qualitative framework.

Loan Risk Rating Process

Reserve factors are applied to pools of loans based on risk characteristics, including the Corporation's internal risk rating system; therefore, loss estimates are highly dependent on the accuracy of the risk rating assigned to each loan. The inherent imprecision in the risk rating system resulting from inaccuracy in assigning and/or entering risk ratings in the loan accounting system is monitored by the Corporation's asset quality review function. Changes to internal risk ratings, beyond the forecasted migration inherent in the credit models, would result in a different estimated allowance for credit losses. To illustrate, if 5 percent of the individual risk ratings were adjusted down by one rating across all pools, the allowance for loan losses as of December 31, 2022 would change by approximately \$3 million.

Forecasted Economic Variables

Management selects models through which historical reserve factor estimates are calibrated to economic forecasts over the reasonable and supportable forecast period based on the projected performance of specific economic variables that statistically correlate with the probability of default and loss given default pools. Loss estimates revert to historical loss experience for contractual lives beyond the forecast period. Management selects economic variables it believes to be most relevant based on the composition of the loan portfolio and customer base, including forecasted levels of employment, gross domestic product, corporate bond and treasury spreads, industrial production levels, consumer and commercial real estate price indices as well as housing statistics.

The allowance for credit losses is highly sensitive to the economic forecasts used to develop the estimate. Due to the high level of uncertainty regarding significant assumptions, the Corporation evaluated a range of economic scenarios, including a more severe economic forecast scenario, with varying responses to current economic risks. The following table summarizes the more severe forecast scenario for the economic variables that are most impactful.

Economic Variable	More Severe Forecast
Real GDP growth	Contracts through first quarter 2024, peaking at a decline of 6.6 percent annualized in second quarter 2023, subsequently improving to a 2 percent annual growth rate by the end of the forecast period.
Unemployment rate	Increases to almost 9 percent by fourth quarter 2024.
Corporate BBB bond to 10-year Treasury bond spreads	Spreads widen to a peak of over 5.5 percent before gradually narrowing to 2.5 percent by the end of the forecast period.
Oil Prices	Decline to \$39 per barrel by mid-2024 before improving to \$46 per barrel by fourth quarter 2024.

Selecting a different forecast in the current environment could result in a significantly different estimated allowance for credit losses. To illustrate, absent model overlays and other qualitative adjustments that are part of the quarterly reserving process, if the Corporation selected the more severe scenario to inform its models, the allowance for credit losses as of December 31, 2022 would increase by approximately \$308 million. However, factoring in model overlays and qualitative adjustments could result in a materially different estimate under a more severe scenario.

Qualitative Adjustments and Model Overlays

The Corporation includes qualitative adjustments, as appropriate, intended to capture the impact of uncertainties not reflected in the quantitative estimate, including foresight risk, model imprecisions and input imprecisions. Qualitative adjustments for foresight risk reflect the inherent imprecision in economic forecasts and may be included based on management's evaluation of different forecast scenarios, ranging from more benign to more severe, and known recent events impacting the Corporation's portfolio. Model imprecision adjustments and model overlays may be included to mitigate known limitations in the quantitative models. Input imprecision includes adjustments for portfolios where recent historical losses exceed expected losses or known recent events are expected to alter risk ratings once evidence is acquired, as well as a qualitative assessment of the lending environment, including underwriting standards, current economic and political conditions, and other factors affecting credit quality. Qualitative reserves at December 31, 2022 primarily included adjustments for uncertainties related to forecasted economic variables.

Other Considerations

To the extent actual outcomes differ from management estimates, additional provision for credit losses may be required that would adversely impact earnings in future periods. The allowance is assigned to business segments, and any earnings impact resulting from actual outcomes differing from management estimates would primarily affect the Commercial Bank segment.

FAIR VALUE MEASUREMENT

Investment securities available-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 impaired loans that have been measured based on the fair value of the underlying collateral, other real estate (primarily foreclosed property), nonmarketable equity securities and certain other assets and liabilities. Nonrecurring fair value adjustments typically involve write-downs of individual assets or application of lower of cost or fair value accounting.

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. Notes 1 and 2 to the consolidated financial statements include information about the fair value hierarchy, the extent to which fair value is used to measure assets and liabilities, as well as the valuation methodologies and key inputs used.

At December 31, 2022, assets and liabilities measured using observable inputs that are classified as Level 1 or Level 2 represented close to 100 percent and 99 percent 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 reflect estimates of assumptions market participants would use in pricing the asset or liability. The valuation of Level 3 assets and liabilities are considered critical accounting estimates.

PENSION PLAN ACCOUNTING

The Corporation has a qualified and a non-qualified defined benefit pension plan. Effective January 1, 2017, benefits are calculated using a cash balance formula based on years of service, age, compensation and an interest credit based on the 30-year Treasury rate. Participants under age 60 as of December 31, 2016 are eligible to receive a frozen final average pay benefit in addition to amounts earned under the cash balance formula. Participants age 60 or older as of December 31, 2016 continue to be eligible for a final average pay benefit. The Corporation makes assumptions concerning future events that will determine the amount and timing of required benefit payments, funding requirements and defined benefit pension expense. The major assumptions are the discount rate used in determining the current benefit obligation, the long-term rate of return expected on plan assets, mix of assets within the portfolio and the projected mortality rate.

The discount rate is determined by matching the expected cash flows of the pension plans to a portfolio of high quality corporate bonds as of the measurement date, December 31. The long-term rate of return expected on plan assets is set after considering both long-term returns in the general market and long-term returns experienced by the assets in the plan. The current target asset allocation model for the plans is provided in Note 17 to the consolidated financial statements. The expected returns on these various asset categories are blended to derive one long-term return assumption. The assets are primarily invested in certain collective investment funds, common stocks, U.S. Treasury and other U.S. government agency securities, as well as corporate and municipal bonds and notes. Mortality rate assumptions are based on mortality tables published by third-parties such as the Society of Actuaries, considering other available information including historical data as well as studies and publications from reputable sources.

The Corporation reviews its pension plan assumptions on an annual basis with its actuarial consultants to determine if the assumptions are reasonable and adjusts the assumptions to reflect changes in future expectations. The major assumptions used to calculate 2023 and 2022 defined benefit plan pension expense (benefit) were as follows:

	2023	2022
Discount rate	5.60 %	2.96 %
Long-term rate of return on plan assets	6.50 %	6.50 %
Mortality table:		
Base table (a)	Pri-2012	Pri-2012
Mortality improvement scale (a)	MP-2020	MP-2020

(a) Issued by the Society of Actuaries

Defined benefit plan benefit is expected to decrease \$64 million to approximately \$25 million in 2023, compared to a benefit of \$89 million in 2022. This includes service cost expense of \$34 million and a benefit from other components of \$59 million. Service costs are included in salaries and benefits expense, while the benefit from other components are included in other noninterest expenses on the Consolidated Statements of Income.

The Corporation's pension plan is most sensitive to changes in discount rate and long-term rate of return. A change to the discount rate implies a corresponding change in interest rates that affect the value of the plan's fixed income assets. An increase of 25 basis points to the discount rate, including the effect of higher interest rates on the plan's fixed income assets, would result in a net increase to pension expense of \$11 million, while a decrease of 25 basis points would reduce pension expense by \$11 million. Increasing the long-term rate of return by 25 basis points would reduce pension expense by \$6 million, while a decrease of 25 basis points would increase pension expense by \$6 million.

Due to the long-term nature of pension plan assumptions, actual results may differ significantly from the actuarial-based estimates. Differences resulting in actuarial gains or losses are required to be recorded in shareholders' equity as part of accumulated other comprehensive loss and amortized to defined benefit pension expense in future years. Refer to Note 17 to the consolidated financial statements for further information.

INCOME TAXES

The provision for income taxes is the sum of income taxes due for the current year and deferred taxes. Deferred taxes arise from temporary differences between the income tax basis and financial accounting basis of assets and liabilities. Accrued taxes represent the net estimated amount due to or to be received from taxing jurisdictions, currently or in the future, and are included in accrued income and other assets or accrued expenses and other liabilities on the Consolidated Balance Sheets.

Included in net deferred taxes are deferred tax assets. Deferred tax assets are evaluated for realization based on available evidence of projected future reversals of existing taxable temporary differences, assumptions made regarding future events and, when applicable, state loss carryback capacity. A valuation allowance is provided when it is more-likely-than-not that some portion of the deferred tax asset will not be realized. Determining whether deferred tax assets are realizable is subjective and requires the use of significant judgment.

The Corporation assesses the relative risks and merits of tax positions for various transactions after considering statutes, regulations, judicial precedent and other available information and maintains tax accruals consistent with these assessments. This assessment is complex and requires judgment. The Corporation is subject to audit by taxing authorities that could question and/or challenge the tax positions taken by the Corporation. Changes in the estimate of accrued taxes occur due to changes in tax law, interpretations of existing tax laws, new judicial or regulatory guidance, and the status of examinations conducted by taxing authorities that impact the relative risks and merits of tax positions taken by the Corporation. These changes, when they occur, impact the estimate of accrued taxes and could be significant to the operating results of the Corporation. For further information on tax accruals and related risks, see Note 18 to the consolidated financial statements.

SUPPLEMENTAL FINANCIAL DATA

The Corporation believes non-GAAP measures are meaningful because they reflect adjustments commonly made by management, investors, regulators and analysts to evaluate the adequacy of common equity and our performance trends.

Pre-tax, pre-provision net revenue (PPNR) is a measure that the Corporation uses to understand fundamental operating performance before credit-related and tax expenses.

Tangible common equity is used by the Corporation to measure the quality of capital and the return relative to balance sheet risk.

Common equity tier 1 capital ratio removes preferred stock from the Tier 1 capital ratio as defined by and calculated in conformity with bank regulations. The tangible common equity ratio removes the effect of intangible assets from capital and total assets. Tangible common equity per share of common stock removes the effect of intangible assets from common shareholders' equity per share of common stock. The Corporation believes that the presentation of tangible common equity adjusted for the impact of accumulated other comprehensive loss provides a greater understanding of ongoing operations and enhances comparability with prior periods.

The following table provides a reconciliation of non-GAAP financial measures and regulatory ratios used in this financial review with financial measures defined by GAAP.

(dollar amounts in millions)

December 31	2022	2021
Pre-tax, Pre-provision Net Revenue (PPNR):		
Net income	\$ 1,151	\$ 1,168
Add:		
Provision for income taxes	325	322
Provision for credit losses	60	(384)
PPNR	\$ 1,536	\$ 1,106
Common Equity Tier 1 Capital:		
Tier 1 capital	\$ 8,278	\$ 7,458
Less:		
Fixed-rate reset non-cumulative perpetual preferred stock	394	394
Common equity tier 1 capital	\$ 7,884	\$ 7,064
Risk-weighted assets	\$ 78,871	\$ 69,708
Tier 1 capital ratio	10.50 %	10.70 %
Common equity tier 1 capital ratio	10.00	10.13
Tangible Common Equity Ratio:		
Total shareholders' equity	\$ 5,181	\$ 7,897
Less:		
Fixed-rate reset non-cumulative perpetual preferred stock	394	394
Common shareholders' equity	\$ 4,787	\$ 7,503
Less:		
Goodwill	635	635
Other intangible assets	9	11
Tangible common equity	\$ 4,143	\$ 6,857
Total assets	\$ 85,406	\$ 94,616
Less:		
Goodwill	635	635
Other intangible assets	9	11
Tangible assets	\$ 84,762	\$ 93,970
Common equity ratio	5.60 %	7.93 %
Tangible common equity ratio	4.89	7.30
Tangible Common Equity per Share of Common Stock:		
Common shareholders' equity	\$ 4,787	\$ 7,503
Tangible common equity	4,143	6,857
Shares of common stock outstanding (in millions)	131	131
Common shareholders' equity per share of common stock	\$ 36.55	\$ 57.41
Tangible common equity per share of common stock	31.62	52.46
Impact of Accumulated Other Comprehensive Loss to Tangible Common Equity:		
Accumulated other comprehensive loss (AOCI)	(3,742)	(212)
Tangible common equity, excluding AOCI	7,885	7,069
Tangible common equity ratio, excluding AOCI	9.30 %	7.52 %
Tangible common equity per share of common stock, excluding AOCI	\$ 60.19	54.08

FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. In addition, the Corporation may make other written and oral communications from time to time that contain such statements. All statements regarding the Corporation's expected financial position, strategies and growth prospects as well as general economic conditions expected to exist in the future are forward-looking statements. The words, "anticipates," "believes," "contemplates," "feels," "expects," "estimates," "seeks," "strives," "plans," "intends," "outlook," "forecast," "position," "target," "mission," "assume," "achievable," "potential," "strategy," "goal," "aspiration," "opportunity," "initiative," "outcome," "continue," "remain," "maintain," "on track," "trend," "objective," "looks forward," "projects," "models" and variations of such words and similar expressions, or future or conditional verbs such as "will," "would," "should," "could," "might," "can," "may" or similar expressions, as they relate to the Corporation or its management, are intended to identify forward-looking statements. The Corporation cautions that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date the statement is made, and the Corporation does not undertake to update forward-looking statements to reflect facts, circumstances, assumptions or events that occur after the date the forward-looking statements are made. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

In addition to factors mentioned elsewhere in this report or previously disclosed in the Corporation's SEC reports (accessible on the SEC's website at www.sec.gov or on the Corporation's website at www.comerica.com), actual results could differ materially from forward-looking statements and future results could differ materially from historical performance due to a variety of reasons, including but not limited to, the following factors:

- changes in customer behavior may adversely impact the Corporation's business, financial condition and results of operations;
- unfavorable developments concerning credit quality could adversely affect the Corporation's financial results;
- declines in the businesses or industries of the Corporation's customers could cause increased credit losses or decreased loan balances, which could adversely affect the Corporation;
- governmental monetary and fiscal policies may adversely affect the financial services industry, and therefore impact the Corporation's financial condition and results of operations;
- fluctuations in interest rates and their impact on deposit pricing could adversely affect the Corporation's net interest income and balance sheet;
- developments impacting LIBOR and other interest rate benchmarks could adversely affect the Corporation;
- the Corporation must maintain adequate sources of funding and liquidity to meet regulatory expectations, support its operations and fund outstanding liabilities;
- reduction in the Corporation's credit ratings could adversely affect the Corporation and/or the holders of its securities;
- the soundness of other financial institutions could adversely affect the Corporation;
- security risks, including denial of service attacks, hacking, social engineering attacks targeting the Corporation's colleagues and customers, malware intrusion or data corruption attempts, and identity theft, could result in the disclosure of confidential information;
- cybersecurity and data privacy are areas of heightened legislative and regulatory focus;
- the Corporation's operational or security systems or infrastructure, or those of third parties, could fail or be breached;
- the Corporation relies on other companies to provide certain key components of its delivery systems, and certain failures could materially adversely affect operations;
- legal and regulatory proceedings and related financial services industry matters, including those directly involving the Corporation and its subsidiaries, could adversely affect the Corporation or the financial services industry in general;
- the Corporation may incur losses due to fraud;
- controls and procedures may fail to prevent or detect all errors or acts of fraud;
- changes in regulation or oversight, or changes in Comerica's status with respect to existing regulations or oversight, may have a material adverse impact on the Corporation's operations;
- compliance with more stringent capital requirements may adversely affect the Corporation;
- the impacts of future legislative, administrative or judicial changes or interpretations to tax regulations are unknown;
- damage to the Corporation's reputation could damage its businesses;
- the Corporation may not be able to utilize technology to develop, market and deliver new products and services to its customers;
- competitive product and pricing pressures within the Corporation's markets may change;
- the introduction, implementation, withdrawal, success and timing of business initiatives and strategies may be less successful or may be different than anticipated, which could adversely affect the Corporation's business;
- management's ability to maintain and expand customer relationships may differ from expectations;
- management's ability to retain key officers and employees may change;

- any future strategic acquisitions or divestitures may present certain risks to the Corporation's business and operations;
- general political, economic or industry conditions, either domestically or internationally, may be less favorable than expected;
- inflation could negatively impact the Corporation's business, profitability and stock price;
- methods of reducing risk exposures might not be effective;
- catastrophic events, including pandemics, may adversely affect the general economy, financial and capital markets, specific industries, and the Corporation;
- climate change manifesting as physical or transition risks could adversely affect the Corporation's operations, businesses and customers;
- changes in accounting standards could materially impact the Corporation's financial statements;
- the Corporation's accounting policies and processes are critical to the reporting of financial condition and results of operations and require management to make estimates about matters that are uncertain; and
- the Corporation's stock price can be volatile.

CONSOLIDATED BALANCE SHEETS Comerica Incorporated and Subsidiaries

(in millions, except share data)

December 31	2022	2021
ASSETS		
Cash and due from banks	\$ 1,758	\$ 1,236
Interest-bearing deposits with banks	4,524	21,443
Other short-term investments	157	197
Investment securities available-for-sale	19,012	16,986
Commercial loans	30,909	29,366
Real estate construction loans	3,105	2,948
Commercial mortgage loans	13,306	11,255
Lease financing	760	640
International loans	1,197	1,208
Residential mortgage loans	1,814	1,771
Consumer loans	2,311	2,097
Total loans	53,402	49,285
Allowance for loan losses	(610)	(588)
Net loans	52,792	48,697
Premises and equipment	400	454
Accrued income and other assets	6,763	5,603
Total assets	\$ 85,406	\$ 94,616
LIABILITIES AND SHAREHOLDERS' EQUITY		
Noninterest-bearing deposits	\$ 39,945	\$ 45,800
Money market and interest-bearing checking deposits	26,290	31,349
Savings deposits	3,225	3,167
Customer certificates of deposit	1,762	1,973
Other time deposits	124	—
Foreign office time deposits	51	50
Total interest-bearing deposits	31,452	36,539
Total deposits	71,397	82,339
Short-term borrowings	3,211	—
Accrued expenses and other liabilities	2,593	1,584
Medium- and long-term debt	3,024	2,796
Total liabilities	80,225	86,719
Fixed-rate reset non-cumulative perpetual preferred stock, series A, no par value, \$100,000 liquidation preference per share:		
Authorized - 4,000 shares		
Issued - 4,000 shares	394	394
Common stock - \$5 par value:		
Authorized - 325,000,000 shares		
Issued - 228,164,824 shares	1,141	1,141
Capital surplus	2,220	2,175
Accumulated other comprehensive loss	(3,742)	(212)
Retained earnings	11,258	10,494
Less cost of common stock in treasury - 97,197,962 shares at 12/31/2022 and 97,476,872 shares at 12/31/2021	(6,090)	(6,095)
Total shareholders' equity	5,181	7,897
Total liabilities and shareholders' equity	\$ 85,406	\$ 94,616

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF INCOME
Comerica Incorporated and Subsidiaries

(in millions, except per share data)

Years Ended December 31	2022	2021	2020
INTEREST INCOME			
Interest and fees on loans	\$ 2,153	\$ 1,594	\$ 1,773
Interest on investment securities	414	280	291
Interest on short-term investments	105	27	29
Total interest income	2,672	1,901	2,093
INTEREST EXPENSE			
Interest on deposits	102	22	101
Interest on short-term borrowings	17	—	1
Interest on medium- and long-term debt	87	35	80
Total interest expense	206	57	182
Net interest income	2,466	1,844	1,911
Provision for credit losses	60	(384)	537
Net interest income after provision for credit losses	2,406	2,228	1,374
NONINTEREST INCOME			
Card fees	273	298	270
Fiduciary income	233	231	209
Service charges on deposit accounts	195	195	185
Commercial lending fees	109	104	77
Derivative income	109	99	67
Bank-owned life insurance	47	43	44
Letter of credit fees	38	40	37
Brokerage fees	21	14	21
Other noninterest income	43	99	91
Total noninterest income	1,068	1,123	1,001
NONINTEREST EXPENSES			
Salaries and benefits expense	1,208	1,133	1,019
Outside processing fee expense	251	266	242
Occupancy expense	175	161	156
Software expense	161	155	154
Equipment expense	50	50	49
Advertising expense	38	35	35
FDIC insurance expense	31	22	33
Other noninterest expenses	84	39	66
Total noninterest expenses	1,998	1,861	1,754
Income before income taxes	1,476	1,490	621
Provision for income taxes	325	322	124
NET INCOME	1,151	1,168	497
Less:			
Income allocated to participating securities	6	5	2
Preferred stock dividends	23	23	13
Net income attributable to common shares	\$ 1,122	\$ 1,140	\$ 482
Earnings per common share:			
Basic	\$ 8.56	\$ 8.45	\$ 3.45
Diluted	8.47	8.35	3.43
Cash dividends declared on common stock	356	365	378
Cash dividends declared per common share	2.72	2.72	2.72

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Comerica Incorporated and Subsidiaries

(in millions)

Years Ended December 31	2022	2021	2020
NET INCOME	\$ 1,151	\$ 1,168	\$ 497
OTHER COMPREHENSIVE (LOSS) INCOME			
Unrealized (losses) gains on investment securities:			
Net unrealized holding (losses) gains arising during the period	(2,903)	(406)	191
Change in net unrealized (losses) gains before income taxes	(2,903)	(406)	191
Net (losses) gains on cash flow hedges:			
Net cash flow hedge (losses) gains arising during the period before income taxes	(1,329)	(35)	229
Less: Net cash flow hedge (losses) gains recognized in interest and fees on loans before taxes	(25)	95	70
Change in net cash flow hedge (losses) gains before income taxes	(1,304)	(130)	159
Defined benefit pension and other postretirement plans adjustment:			
Actuarial (loss) gain arising during the period	(415)	159	128
Prior service credit arising during the period	—	1	—
Adjustments for amounts recognized as components of net periodic benefit cost:			
Amortization of actuarial net loss	28	40	47
Amortization of prior service credit	(23)	(25)	(27)
Change in defined benefit pension and other postretirement plans adjustment before income taxes	(410)	175	148
Total other comprehensive (loss) income before income taxes	(4,617)	(361)	498
(Benefit) provision for income taxes	(1,087)	(85)	118
Total other comprehensive (loss) income, net of tax	(3,530)	(276)	380
COMPREHENSIVE (LOSS) INCOME	\$ (2,379)	\$ 892	\$ 877

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
Comerica Incorporated and Subsidiaries

<i>(in millions, except per share data)</i>	Nonredeemable Preferred Stock	Common Stock		Capital Surplus	Accumulated Other Comprehensive (Loss) Income	Retained Earnings	Treasury Stock	Total Shareholders' Equity
		Shares Outstanding	Amount					
BALANCE AT DECEMBER 31, 2019	\$ —	142.1	\$ 1,141	\$ 2,174	\$ (316)	\$ 9,619	\$ (5,291)	\$ 7,327
Cumulative effect of change in accounting principles	—	—	—	—	—	13	—	13
Net income	—	—	—	—	—	497	—	497
Other comprehensive income, net of tax	—	—	—	—	380	—	—	380
Cash dividends declared on common stock (\$2.72 per share)	—	—	—	—	—	(378)	—	(378)
Cash dividends declared on preferred stock	—	—	—	—	—	(13)	—	(13)
Purchase of common stock	—	(3.4)	—	—	—	—	(194)	(194)
Issuance of preferred stock	394	—	—	—	—	—	—	394
Net issuance of common stock under employee stock plans	—	0.5	—	(13)	—	(11)	24	—
Share-based compensation	—	—	—	24	—	—	—	24
BALANCE AT DECEMBER 31, 2020	\$ 394	139.2	\$ 1,141	\$ 2,185	\$ 64	\$ 9,727	\$ (5,461)	\$ 8,050
Net income	—	—	—	—	—	1,168	—	1,168
Other comprehensive loss, net of tax	—	—	—	—	(276)	—	—	(276)
Cash dividends declared on common stock (\$2.72 per share)	—	—	—	—	—	(365)	—	(365)
Cash dividends declared on preferred stock	—	—	—	—	—	(23)	—	(23)
Purchase of common stock	—	(9.5)	—	(24)	—	—	(699)	(723)
Net issuance of common stock under employee stock plans	—	1.0	—	(27)	—	(13)	65	25
Share-based compensation	—	—	—	41	—	—	—	41
BALANCE AT DECEMBER 31, 2021	\$ 394	130.7	\$ 1,141	\$ 2,175	\$ (212)	\$ 10,494	\$ (6,095)	\$ 7,897
Net income	—	—	—	—	—	1,151	—	1,151
Other comprehensive loss, net of tax	—	—	—	—	(3,530)	—	—	(3,530)
Cash dividends declared on common stock (\$2.72 per share)	—	—	—	—	—	(356)	—	(356)
Cash dividends declared on preferred stock	—	—	—	—	—	(23)	—	(23)
Purchase of common stock	—	(0.4)	—	—	—	—	(36)	(36)
Net issuance of common stock under employee stock plans	—	0.7	—	(15)	—	(8)	41	18
Share-based compensation	—	—	—	60	—	—	—	60
BALANCE AT DECEMBER 31, 2022	\$ 394	131.0	\$ 1,141	\$ 2,220	\$ (3,742)	\$ 11,258	\$ (6,090)	\$ 5,181

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
Comerica Incorporated and Subsidiaries

(in millions)

Years Ended December 31	2022	2021	2020
OPERATING ACTIVITIES			
Net income	\$ 1,151	\$ 1,168	\$ 497
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	60	(384)	537
(Benefit) provision for deferred income taxes	(27)	79	(82)
Depreciation and amortization	92	99	108
Net periodic defined benefit credit	(91)	(81)	(55)
Share-based compensation expense	60	41	24
Net amortization of securities	30	36	15
Net gains on sales of foreclosed property	(2)	—	(1)
Net change in:			
Accrued income receivable	(152)	13	25
Accrued expenses payable	131	132	(29)
Other, net	(614)	(469)	(111)
Net cash provided by operating activities	638	634	928
INVESTING ACTIVITIES			
Investment securities available-for-sale:			
Maturities and redemptions	2,511	5,536	3,350
Purchases	(7,470)	(7,936)	(5,804)
Net change in loans	(4,824)	4,067	(2,136)
Proceeds from sales of foreclosed property	3	8	5
Net increase in premises and equipment	(82)	(70)	(79)
Federal Home Loan Bank stock:			
Purchases	(131)	—	(51)
Redemptions	—	115	92
Proceeds from bank-owned life insurance settlements	39	16	20
Other, net	2	(13)	1
Net cash (used in) provided by investing activities	(9,952)	1,723	(4,602)
FINANCING ACTIVITIES			
Net change in:			
Deposits	(10,401)	8,438	15,554
Short-term borrowings	3,211	—	(71)
Medium- and long-term debt:			
Maturities and redemptions	—	(2,800)	(1,675)
Issuances and advances	500	—	—
Preferred stock:			
Issuance	—	—	394
Cash dividends paid	(23)	(23)	(8)
Common stock:			
Repurchases	(43)	(729)	(199)
Cash dividends paid	(353)	(369)	(375)
Issuances under employee stock plans	28	34	4
Other, net	(2)	4	(1)
Net cash (used in) provided by financing activities	(7,083)	4,555	13,623
Net (decrease) increase in cash and cash equivalents	(16,397)	6,912	9,949
Cash and cash equivalents at beginning of period	22,679	15,767	5,818
Cash and cash equivalents at end of period	\$ 6,282	\$ 22,679	\$ 15,767
Interest paid	\$ 130	\$ 57	\$ 203
Income taxes paid	277	157	141

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comerica Incorporated and Subsidiaries

NOTE 1 - BASIS OF PRESENTATION AND ACCOUNTING POLICIES

Organization

Comerica Incorporated (the Corporation) is a registered financial holding company headquartered in Dallas, Texas. The Corporation's major business segments are the Commercial Bank, the Retail Bank and Wealth Management. For further discussion of each business segment, refer to Note 22. The Corporation and its banking subsidiaries are regulated at both the state and federal levels.

The accounting and reporting policies of the Corporation conform to United States (U.S.) generally accepted accounting principles (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect reported amounts and disclosures. Actual results could differ from these estimates. Certain amounts in the financial statements for prior years have been reclassified to conform to the current financial statement presentation.

The following summarizes the significant accounting policies of the Corporation applied in the preparation of the accompanying consolidated financial statements.

Principles of Consolidation

The consolidated financial statements include the accounts of the Corporation and the accounts of those subsidiaries that are majority owned and in which the Corporation has a controlling financial interest. The Corporation consolidates entities not determined to be variable interest entities (VIEs) when it holds a controlling financial interest and applies the cost or equity method when it holds less than a controlling financial interest. In consolidation, all significant intercompany accounts and transactions are eliminated. The results of operations of companies acquired are included from the date of acquisition.

The Corporation holds investments in certain legal entities that are considered VIEs. In general, a VIE is an entity that either (1) has an insufficient amount of equity to carry out its principal activities without additional subordinated financial support, (2) has a group of equity owners that are unable to make significant decisions about its activities, or (3) has a group of equity owners that do not have the obligation to absorb losses or the right to receive returns generated by its operations. If any of these characteristics are present, the entity is subject to a variable interests consolidation model, and consolidation is based on variable interests, not on voting interests. Variable interests are defined as contractual ownership or other economic interests in an entity that change with fluctuations in the entity's net asset value. The primary beneficiary, which is required to consolidate the VIE, is defined as the party that has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could be significant to the VIE. The maximum potential exposure to losses relative to investments in VIEs is generally limited to the sum of the outstanding book basis and unfunded commitments for future investments.

The Corporation evaluates its investments in VIEs, both at inception and when there is a change in circumstances that requires reconsideration, to determine if the Corporation is the primary beneficiary and consolidation is required. The Corporation accounts for unconsolidated VIEs using either the proportional, cost or equity method. These investments comprise investments in community development projects which generate tax credits to their investors and are included in accrued income and other assets on the Consolidated Balance Sheets.

The proportional method is used for investments in affordable housing projects that qualify for the low-income housing tax credit (LIHTC). The equity method is used for other investments where the Corporation has the ability to exercise significant influence over the entity's operation and financial policies. Other unconsolidated equity investments that do not meet the criteria to be accounted for under the equity method are accounted for under the cost method. Amortization and other write-downs of LIHTC investments are presented on a net basis as a component of the provision for income taxes, while income, amortization and write-downs from cost and equity method investments are recorded in other noninterest income on the Consolidated Statements of Income.

Assets held in an agency or fiduciary capacity are not assets of the Corporation and are not included in the consolidated financial statements.

See Note 9 for additional information about the Corporation's involvement with VIEs.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comerica Incorporated and Subsidiaries

Fair Value Measurements

The Corporation utilizes fair value measurements to record fair value adjustments to certain assets and liabilities and to determine fair value disclosures. The determination of fair values of financial instruments often requires the use of estimates. In cases where quoted market values in an active market are not available, the Corporation uses present value techniques and other valuation methods to estimate the fair values of its financial instruments. These valuation methods require considerable judgment and the resulting estimates of fair value can be significantly affected by the assumptions made and methods used.

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. Fair value is based on the assumptions market participants would use when pricing an asset or liability.

Investment securities available-for-sale, derivatives, deferred compensation plans and equity securities with readily determinable fair values (primarily money market mutual funds) are recorded at fair value on a recurring basis. Additionally, from time to time, the Corporation may be required to record other assets and liabilities at fair value on a nonrecurring basis, such as impaired loans, other real estate (primarily foreclosed property), nonmarketable 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.

Fair value measurements and disclosures guidance establishes a three-level fair value hierarchy based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. The fair value hierarchy gives the highest priority to quoted prices in active markets and the lowest priority to unobservable data. Fair value measurements are separately disclosed by level within the fair value hierarchy. For assets and liabilities recorded at fair value, it is the Corporation's policy to maximize the use of observable inputs and minimize the use of unobservable inputs when developing fair value measurements.

- | | |
|---------|--|
| Level 1 | Valuation is based upon quoted prices for identical instruments traded in active markets. |
| Level 2 | Valuation is based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are less active, and model-based valuation techniques for which all significant assumptions are observable in the market. |
| Level 3 | Valuation is generated from model-based techniques that use at least one significant assumption not observable in the market. These unobservable assumptions reflect estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques include use of option pricing models, discounted cash flow models and similar techniques. |

The Corporation generally utilizes third-party pricing services to value Level 1 and Level 2 securities. Management reviews the methodologies and assumptions used by the third-party pricing services and evaluates the values provided, principally by comparison with other available market quotes for similar instruments and/or analysis based on internal models using available third-party market data. The Corporation may occasionally adjust certain values provided by the third-party pricing service when management believes, as the result of its review, that the adjusted price most appropriately reflects the fair value of the particular security.

Fair value measurements for assets and liabilities where limited or no observable market data exists are based primarily upon estimates, often calculated based on the economic and competitive environment, the characteristics of the asset or liability and other factors. Therefore, the results cannot be determined with precision and may not be realized in an actual sale or immediate settlement of the asset or liability. Additionally, there may be inherent weaknesses in any calculation technique so that changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the results of current or future values.

Following are descriptions of the valuation methodologies and key inputs used to measure financial assets and liabilities recorded at fair value, as well as a description of the methods and significant assumptions used to estimate fair value disclosures for financial instruments not recorded at fair value in their entirety on a recurring basis. The descriptions include an indication of the level of the fair value hierarchy in which the assets or liabilities are classified.

Cash and due from banks, federal funds sold and interest-bearing deposits with banks

Due to their short-term nature, the carrying amount of these instruments approximates the estimated fair value. As such, the Corporation classifies the estimated fair value of these instruments as Level 1.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comerica Incorporated and Subsidiaries

Deferred compensation plan assets and liabilities as well as equity securities with a readily determinable fair value

The Corporation holds a portfolio of securities that includes equity securities and assets held related to deferred compensation plans. Securities and associated deferred compensation plan liabilities are recorded at fair value on a recurring basis and included in other short-term investments and accrued expenses and other liabilities, respectively, on the Consolidated Balance Sheets. Level 1 securities include assets related to deferred compensation plans, which are invested in mutual funds, U.S. Treasury securities that are traded by dealers or brokers in active over-the-counter markets and other securities traded on an active exchange, such as the New York Stock Exchange. Level 2 securities include municipal bonds and mortgage-backed securities issued by U.S. government-sponsored entities and corporate debt securities. Deferred compensation plan liabilities represent the fair value of the obligation to the plan participant, which corresponds to the fair value of the invested assets. The methods used to value equity securities and deferred compensation plan assets are the same as the methods used to value investment securities, discussed below.

Investment securities

Investment securities available-for-sale are recorded at fair value on a recurring basis. Level 1 securities include those traded on an active exchange, such as the New York Stock Exchange, U.S. Treasury securities that are traded by dealers or brokers in active over-the-counter markets and money market funds. Level 2 securities include mortgage-backed securities issued by U.S. government agencies and U.S. government-sponsored entities, as well as corporate debt securities. The fair value of Level 2 securities is determined using quoted prices of securities with similar characteristics, or pricing models based on observable market data inputs, primarily interest rates, spreads and prepayment information.

Securities classified as Level 3 represent securities in less liquid markets requiring significant management assumptions when determining fair value.

Loans held-for-sale

Loans held-for-sale, included in other short-term investments on the Consolidated Balance Sheets, are recorded at the lower of cost or fair value. Loans held-for-sale may be carried at fair value on a nonrecurring basis when fair value is less than cost. The fair value is based on what secondary markets are currently offering for portfolios with similar characteristics. As such, the Corporation classifies both loans held-for-sale subjected to nonrecurring fair value adjustments and the estimated fair value of loans held-for sale as Level 2.

Loans

The Corporation does not record loans at fair value on a recurring basis. However, an individual allowance may be established for a loan that no longer shares risk characteristics with loan pools, typically collateral-dependent loans for which reserves are based on the fair value of the underlying collateral. Such loan values are reported as nonrecurring fair value measurements. Collateral values supporting individually evaluated loans are evaluated quarterly. When management determines that the fair value of the collateral requires additional adjustments, either as a result of non-current appraisal value or when there is no observable market price, the Corporation classifies the loan as Level 3.

The Corporation discloses fair value estimates for loans. The estimated fair value is determined based on characteristics such as loan category, repricing features and remaining maturity, and includes prepayment and credit loss estimates. Fair values are estimated using a discounted cash flow model that employs discount rates reflecting current pricing for loans with similar maturity and risk characteristics, including credit characteristics, and the cost of equity for the portfolio at the balance sheet date. The rates take into account the expected yield curve, as well as an adjustment for prepayment risk, when applicable. The Corporation classifies the estimated fair value of loans held for investment as Level 3.

Customers' liability on acceptances outstanding and acceptances outstanding

Customers' liability on acceptances outstanding is included in accrued income and other assets and acceptances outstanding are included in accrued expenses and other liabilities on the Consolidated Balance Sheets. Due to their short-term nature, the carrying amount of these instruments approximates the estimated fair value. As such, the Corporation classifies the estimated fair value of these instruments as Level 1.

Derivative assets and derivative liabilities

Derivative instruments held or issued for risk management or customer-initiated activities are traded in over-the-counter markets where quoted market prices are not readily available. Fair value for over-the-counter derivative instruments is measured on a recurring basis using internally developed models primarily based on market observable inputs, such as yield curves and option volatilities. The Corporation manages credit risk on its derivative positions based on whether the derivatives

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comerica Incorporated and Subsidiaries

are settled through a clearinghouse or bilaterally with each counterparty. For derivative positions settled on a counterparty-by-counterparty basis, the Corporation calculates credit valuation adjustments, included in the fair value of these instruments, on the basis of its relationships at the counterparty portfolio or master netting agreement level. These credit valuation adjustments are determined by applying a credit spread for the counterparty or the Corporation, as appropriate, to the total expected exposure of the derivative after considering collateral and other master netting arrangements. These adjustments, which are considered Level 3 inputs, are based on estimates of current credit spreads to evaluate the likelihood of default. When credit valuation adjustments are significant to the overall fair value of a derivative, the Corporation classifies the over-the-counter derivative valuation in Level 3 of the fair value hierarchy; otherwise, over-the-counter derivative valuations are classified in Level 2.

Nonmarketable equity securities

The Corporation has a portfolio of indirect (through funds) private equity and venture capital investments, included in accrued income and other assets on the Consolidated Balance Sheets. The investments are accounted for either on the cost or equity method and are individually reviewed for impairment on a quarterly basis by comparing the carrying value to the estimated fair value. These investments may be carried at fair value on a nonrecurring basis when they are deemed to be impaired and written down to fair value. Where there is not a readily determinable fair value, the Corporation estimates fair value for indirect private equity and venture capital investments based on the net asset value, as reported by the fund.

The Corporation also holds restricted equity investments, primarily Federal Reserve Bank (FRB) and Federal Home Loan Bank (FHLB) stock. Restricted equity securities are not readily marketable and are recorded at cost (par value) in accrued income and other assets on the Consolidated Balance Sheets and evaluated for impairment based on the ultimate recoverability of the par value. No significant observable market data for these instruments is available. The Corporation considers the profitability and asset quality of the issuer, dividend payment history and recent redemption experience and believes its investments in FRB and FHLB stock are ultimately recoverable at par. Therefore, the carrying amount for these restricted equity investments approximates fair value. The Corporation classifies the estimated fair value of such investments as Level 1. The Corporation's investment in FHLB stock totaled \$138 million and \$7 million at December 31, 2022 and 2021, and its investment in FRB stock totaled \$85 million at both December 31, 2022 and 2021.

Other real estate

Other real estate is included in accrued income and other assets on the Consolidated Balance Sheets and includes primarily foreclosed property. Foreclosed property is initially recorded at fair value, less costs to sell, at the date of legal title transfer to the Corporation, establishing a new cost basis. Subsequently, foreclosed property is carried at the lower of cost or fair value, less costs to sell. Other real estate may be carried at fair value on a nonrecurring basis when fair value is less than cost. Fair value is based upon independent market prices, appraised value or management's estimate of the value of the property. When management determines that the fair value of other real estate requires additional adjustments, either as a result of a non-current appraisal or when there is no observable market price, the Corporation classifies the other real estate as Level 3.

Deposit liabilities

The estimated fair value of checking, savings and certain money market deposit accounts is represented by the amounts payable on demand. The estimated fair value of term deposits is calculated by discounting the scheduled cash flows using the period-end rates offered on these instruments. As such, the Corporation classifies the estimated fair value of deposit liabilities as Level 2.

Short-term borrowings

The carrying amount of federal funds purchased, securities sold under agreements to repurchase and other short-term borrowings approximates the estimated fair value. As such, the Corporation classifies the estimated fair value of short-term borrowings as Level 1.

Medium- and long-term debt

The estimated fair value of the Corporation's medium- and long-term debt is based on quoted market values when available. If quoted market values are not available, the estimated fair value is based on the market values of debt with similar characteristics. The Corporation classifies the estimated fair value of medium- and long-term debt as Level 2.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comerica Incorporated and Subsidiaries

Credit-related financial instruments

Credit-related financial instruments include unused commitments to extend credit and letters of credit. These instruments generate ongoing fees which are recognized over the term of the commitment. The carrying value of the deferred fees, which approximates fair value of these instruments, is included in accrued expenses and other liabilities on the Consolidated Balance Sheets. The Corporation classifies the estimated fair value of credit-related financial instruments as Level 3.

For further information about fair value measurements refer to Note 2.

Other Short-Term Investments

Other short-term investments include deferred compensation plan assets, certificates of deposits, equity securities with a readily determinable fair value and loans held-for-sale.

Deferred compensation plan assets and equity securities are carried at fair value. Realized and unrealized gains or losses are included in other noninterest income on the Consolidated Statements of Income.

Loans held-for-sale, typically residential mortgages originated with the intent to sell and occasionally including other loans transferred to held-for-sale, are carried at the lower of cost or fair value. Fair value is determined in the aggregate for each portfolio. Changes in fair value and gains or losses upon sale are included in other noninterest income on the Consolidated Statements of Income.

Investment Securities

Debt securities are classified as trading, available-for-sale (AFS) or held-to-maturity. Trading securities are recorded at fair value, with unrealized gains and losses included in noninterest income on the Consolidated Statements of Income. AFS securities are recorded at fair value, with unrealized gains and losses, net of income taxes, reported as a separate component of other comprehensive income (OCI). Securities for which management has the intent and ability to hold to maturity are classified as held-to-maturity and recorded at amortized cost. Interest income is recognized using the interest method. All of the Corporation's investment securities are classified as AFS at December 31, 2022 and 2021.

An AFS security is impaired if its fair value is less than amortized cost. Credit-related impairment is recognized as an allowance to investment securities available-for-sale on the Consolidated Balance Sheets with a corresponding adjustment to provision for credit losses on the Consolidated Statements of Income. Non-credit-related impairment is recognized as a component of OCI. If the Corporation intends to sell an impaired AFS security or more likely than not will be required to sell that security before recovering its amortized cost basis, the entire impairment amount is recognized in earnings with corresponding adjustment to the security's amortized cost basis.

For certain types of AFS securities, such as U.S. Treasuries and other securities with government guarantees, the Corporation generally expects zero credit losses. The zero-loss expectation applies to all the Corporation's securities and no allowance for credit losses was recorded on its AFS securities portfolio at December 31, 2022.

Gains or losses on the sale of securities are computed based on the adjusted cost of the specific security sold.

For further information on investment securities, refer to Note 3.

Loans

Loans and leases originated and held for investment are recorded at the principal balance outstanding, net of unearned income, charge-offs and unamortized deferred fees and costs. Interest income is recognized on loans and leases using the interest method.

The Corporation assesses all loan modifications to determine whether a restructuring constitutes a troubled debt restructuring (TDR). A restructuring is considered a TDR when a borrower is experiencing financial difficulty and the Corporation grants a concession to the borrower. TDRs on accrual status at the original contractual rate of interest are considered performing. Nonperforming TDRs include TDRs on nonaccrual status and loans which have been renegotiated to less than the original contractual rates (reduced-rate loans).

Certain types of modifications related to COVID-19 that were granted during 2020 and 2021 were excluded from TDR accounting. See Note 1 in the 2021 10-K for additional information.

Effective January 1, 2020, the Corporation adopted Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2020-04 "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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Reform on Financial Reporting," (ASU 2020-04). Typically, entities must evaluate whether a loan contract modification results in a modified loan or a new loan for accounting purposes. Topic 848 allows entities to bypass this evaluation for qualifying modifications related to reference rate reform. The Corporation will apply the relief provided by Topic 848 to qualifying contract modifications. The FASB included a sunset provision within Topic 848 of December 31, 2022, based on the United Kingdom's Financial Conduct Authority (FCA) announcement that it would no longer need to persuade or compel banks to submit to LIBOR after December 31, 2021. In March 2021, the FCA extended the intended cessation date of most tenors of LIBOR in the United States to June 30, 2023. In response, the FASB issued ASU 2022-06 "Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848," (ASU 2022-06) in December 2022, which defers the expiration date of ASC Topic 848 to December 31, 2024. The Corporation adopted ASU 2022-06 immediately upon issuance.

Loan Origination Fees and Costs

Substantially all loan origination fees and costs are deferred and amortized to net interest income over the life of the related loan or over the commitment period as a yield adjustment. Net deferred income on originated loans, including unearned income and unamortized costs, fees, premiums and discounts, totaled \$118 million and \$102 million at December 31, 2022 and 2021, respectively.

Loan fees on unused commitments and net origination fees related to loans sold are recognized in noninterest income.

Allowance for Credit Losses

The allowance for credit losses includes both the allowance for loan losses and the allowance for credit losses on lending-related commitments.

The Corporation disaggregates the loan portfolio into segments for purposes of determining the allowance for credit losses. These segments are based on the level at which the Corporation develops, documents and applies a systematic methodology to determine the allowance for credit losses. The Corporation's portfolio segments are business loans and retail loans. Business loans include the commercial, real estate construction, commercial mortgage, lease financing and international loan portfolios. Retail loans consist of residential mortgage and consumer loans, including home equity loans.

Current expected credit losses are estimated over the contractual life of the loan portfolio, considering all available relevant information, including historical and current conditions as well as reasonable and supportable forecasts of future events.

Allowance for Loan Losses

The allowance for loan losses is estimated on a quarterly basis and represents management's estimates of current expected credit losses in the Corporation's loan portfolio. Pools of loans with similar risk characteristics are collectively evaluated while loans that no longer share risk characteristics with loan pools are evaluated individually.

Collective loss estimates are determined by applying loss factors, designed to estimate current expected credit losses, to amortized cost balances over the remaining contractual life of the collectively evaluated portfolio. Loans with similar risk characteristics are aggregated into homogeneous pools. Business loans are assigned to pools based primarily on business line and the Corporation's internal risk rating system. For retail loans, pools are based on loan type, past due status and credit scores. Loss factors are based on estimated probability of default for each pool, set to a default horizon based on contractual life, and loss given default. Historical estimates are calibrated to economic forecasts over the reasonable and supportable forecast period based on the projected performance of specific economic variables that statistically correlate with each of the probability of default and loss given default pools. At least annually, management considers different models when estimating credit losses, selecting ones that most reasonably forecast credit losses in the relevant economic environment.

The calculation of current expected credit losses is inherently subjective, as it requires management to exercise judgment in determining appropriate factors used to determine the allowance. Some of the most significant factors in the quantitative allowance estimate are assigning internal risk ratings to loans, selecting the economic forecasts used to calibrate the reserve factors and determining the reasonable and supportable forecast period.

- **Internal Risk Ratings:** Loss factors are dependent on loan risk ratings for business loans. Risk ratings are assigned at origination, based on inherent credit risk, and updated based on new information that becomes available, periodic reviews of credit quality, a change in borrower performance or modifications to lending agreements.
- **Economic Forecasts:** Management selects economic variables it believes to be most relevant based on the composition of the loan portfolio and customer base, including forecasted levels of employment, gross domestic product, corporate bond and treasury spreads, industrial production levels, consumer and commercial real estate price indices as well as housing

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Comerica Incorporated and Subsidiaries

statistics. Different economic forecast scenarios ranging from more benign to more severe are evaluated each reporting period to forecast losses over the contractual life of the loan portfolio.

- **Forecast Period:** Economic forecasts are applied over the period management believes it can estimate reasonable and supportable forecasts. Forecast periods may be adjusted in response to changes in the economic environment. To estimate losses for contractual periods that extend beyond the forecast horizon, the Corporation reverts to an average historical loss experience. The Corporation typically forecasts economic variables over a two-year horizon, followed by an immediate reversion to an average historical loss experience that generally incorporates a full economic cycle. Management reviews this methodology on at least an annual basis.

The allowance for loan losses also includes qualitative adjustments to bring the allowance to the level management believes is appropriate based on factors that have not otherwise been fully accounted for, including adjustments for foresight risk, input imprecision and model imprecision. Foresight risk reflects the inherent imprecision in forecasting economic variables, including determining the depth and duration of economic cycles and their impact to relevant economic variables. The Corporation may make qualitative adjustments based on its evaluation of different forecast scenarios and known recent events impacting relevant economic variables. Input imprecision factors address the risk that certain model inputs may not reflect all available information including (i) risk factors that have not been fully addressed in internal risk ratings, (ii) changes in lending policies and procedures, (iii) changes in the level and quality of experience held by lending management, (iv) imprecision in the risk rating system and (v) limitations in data available for certain loan portfolios. Model imprecision considers known model limitations and model updates not yet fully reflected in the quantitative estimate.

The determination of the appropriate qualitative adjustment is based on management's analysis of current and expected economic conditions and their impact to the portfolio, as well as internal credit risk movements and a qualitative assessment of the lending environment, including underwriting standards. Management recognizes the sensitivity of various assumptions made in the quantitative modeling of expected losses and may adjust reserves depending upon the level of uncertainty that currently exists in one or more assumptions.

Credit losses for loans that no longer share risk characteristics with the loan pools are estimated on an individual basis. Individual credit loss estimates are typically performed for nonaccrual loans and modified loans classified as TDRs and are based on one of several methods, including the estimated fair value of the underlying collateral, observable market value of similar debt or the present value of expected cash flows. The Corporation considers certain loans to be collateral-dependent if the borrower is experiencing financial difficulty and management expects repayment for the loan to be substantially through the operation or sale of the collateral. For collateral-dependent loans, loss estimates are based on the fair value of collateral, less estimated cost to sell (if applicable). Collateral values supporting individually evaluated loans are assessed quarterly and appraisals are typically obtained at least annually.

The total allowance for loan losses is sufficient to absorb expected credit losses over the contractual life of the portfolio. Unanticipated events impacting the economy, including political instability or global events affecting the U.S. economy, could cause changes to expectations for current conditions and economic forecasts that result in an unanticipated increase in the allowance. Significant increases in current portfolio exposures or changes in credit characteristics could also increase the amount of the allowance. Such events, or others of similar nature, may result in the need for additional provision for credit losses in order to maintain an allowance that complies with credit risk and accounting policies.

Loans deemed uncollectible are charged off and deducted from the allowance. Recoveries on loans previously charged off are added to the allowance.

Credit losses are not estimated for accrued interest receivable as interest that is deemed uncollectible is written off through interest income.

Allowance for Credit Losses on Lending-Related Commitments

The allowance for credit losses on lending-related commitments estimates current expected credit losses on collective pools of letters of credit and unused commitments to extend credit based on reserve factors, determined in a manner similar to business loans, multiplied by a probability of draw estimate, based on historical experience and credit risk, applied to commitment amounts. The allowance for credit losses on lending-related commitments is included in accrued expenses and other liabilities on the Consolidated Balance Sheets, with the corresponding charge included in the provision for credit losses on the Consolidated Statements of Comprehensive Income.

Nonperforming Assets

Nonperforming assets consist of nonaccrual loans, reduced-rate loans and foreclosed property.

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A loan is considered past due when the contractually required principal or interest payment is not received by the specified due date or, for certain loans, when a scheduled monthly payment is past due and unpaid for 30 days or more. Business loans are generally placed on nonaccrual status when management determines full collection of principal or interest is unlikely or when principal or interest payments are 90 days past due, unless the loan is fully collateralized and in the process of collection. The past-due status of a business loan is one of many indicative factors considered in determining the collectibility of the credit. The primary driver of when the principal amount of a business loan should be fully or partially charged-off is based on a qualitative assessment of the recoverability of the principal amount from collateral and other cash flow sources. Residential mortgage and home equity loans are generally placed on nonaccrual status once they become 90 days past due and are charged off to current appraised values less costs to sell no later than 180 days past due. In addition, junior lien home equity loans less than 90 days past due are placed on nonaccrual status if they have underlying risk characteristics that place full collection of the loan in doubt, such as when the related senior lien position is identified as seriously delinquent. Residential mortgage and consumer loans in bankruptcy for which the court has discharged the borrower's obligation and the borrower has not reaffirmed the debt are placed on nonaccrual status and written down to estimated collateral value, without regard to the actual payment status of the loan, and are classified as TDRs. All other consumer loans are generally placed on nonaccrual status at 90 days past due and are charged off at no later than 120 days past due, or earlier if deemed uncollectible.

At the time a loan is placed on nonaccrual status, interest previously accrued but not collected is charged against current income. Principal and interest payments received on such loans are generally first applied as a reduction of principal. Income on nonaccrual loans is then recognized only to the extent that cash is received after principal has been fully repaid or future collection of principal is probable. Generally, a loan may be returned to accrual status when all delinquent principal and interest have been received and the Corporation expects repayment of the remaining contractual principal and interest, or when the loan or debt security is both well secured and in the process of collection.

Foreclosed property (primarily real estate) is initially recorded at fair value, less costs to sell, at the date of legal title transfer to the Corporation and subsequently carried at the lower of cost or fair value, less estimated costs to sell. Loans are reclassified to foreclosed property upon obtaining legal title to the collateral. Independent appraisals are obtained to substantiate the fair value of foreclosed property at the time of foreclosure and updated at least annually or upon evidence of deterioration in the property's value. At the time of foreclosure, the adjustment for the difference between the related loan balance and fair value (less estimated costs to sell) of the property acquired is charged or credited to the allowance for loan losses. Subsequent write-downs, operating expenses and losses upon sale, if any, are charged to noninterest expenses. Foreclosed property is included in accrued income and other assets on the Consolidated Balance Sheets.

Premises and Equipment

Premises and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation, computed using the straight-line method, is charged to occupancy expenses in the Consolidated Statements of Income over the estimated useful lives of the assets. Estimated useful lives are generally 3 years to 33 years for premises that the Corporation owns and 3 years to 8 years for furniture and equipment. Leasehold improvements are generally amortized over the terms of their respective leases or 10 years, whichever is shorter.

Operating Leases

Operating leases with a term greater than one year are recognized as lease liabilities, measured as the present value of unpaid lease payments for operating leases where the Corporation is the lessee, and corresponding right-of-use (ROU) assets for the right to use the leased properties. Operating lease liabilities, recorded in accrued expenses and other liabilities, reflect the Corporation's obligation to make future lease payments, primarily for real estate locations. Lease terms typically comprise contractual terms but may include extension options reasonably certain of being exercised at lease inception for certain strategic locations such as regional headquarters. Payments are discounted using the Corporation's incremental borrowing rate, or the rate it would pay to borrow amounts equal to the lease payments over the lease term. The Corporation does not separate lease and non-lease components for contracts in which it is the lessee. ROU assets, recorded in accrued income and other assets, are measured based on lease liabilities adjusted for incentives as well as accrued and prepaid rent. Operating lease expense is recognized on a straight-line basis over the lease term, while variable lease payments are recognized as incurred. Common area maintenance and other executory costs are the main components of variable lease payments. Operating and variable lease expenses are recorded in net occupancy expense on the Consolidated Statements of Income.

Software

Capitalized software, stated at cost less accumulated amortization, includes purchased software and capitalizable application development costs associated with internally developed software and cloud computing arrangements, including capitalizable implementation costs associated with hosting arrangements that are service contracts. Cloud computing

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arrangements include software as a service (SaaS), platform as a service (PaaS), infrastructure as a service (IaaS) and other similar hosting arrangements. The Corporation primarily utilizes SaaS and IaaS arrangements. Capitalized implementation costs of hosting arrangements that are service contracts were \$32 million at December 31, 2022, which included accumulated depreciation related to these costs of \$3 million. Capitalized implementation costs of hosting arrangements that are service contracts were \$21 million at December 31, 2021, which included accumulated depreciation related to these costs of \$3 million.

Capitalized software is included in accrued income and other assets on the Consolidated Balance Sheets. Amortization expense, generally computed on the straight-line method, is charged to software expense in the Consolidated Statements of Income over the estimated useful life of the software, generally five years, or the term of the hosting arrangement for implementation costs related to service contracts.

Goodwill and Core Deposit Intangibles

Goodwill, included in accrued income and other assets on the Consolidated Balance Sheets, is initially recorded as the excess of the purchase price over the fair value of net assets acquired in a business combination and is subsequently evaluated at least annually for impairment. Goodwill impairment testing is performed at the reporting unit level, equivalent to a business segment or one level below. The Corporation has three reporting units: the Commercial Bank, the Retail Bank and Wealth Management.

The Corporation performs its annual evaluation of goodwill impairment in the third quarter of each year and may elect to perform a quantitative impairment analysis or first conduct a qualitative analysis to determine if a quantitative analysis is necessary. Additionally, the Corporation evaluates goodwill impairment on an interim basis if events or changes in circumstances between annual tests indicate additional testing may be warranted to determine if goodwill might be impaired. Factors considered in the assessment of the likelihood of impairment include macroeconomic conditions, industry and market considerations, stock performance of the Corporation and its peers, financial performance of the reporting units, and previous results of goodwill impairment tests, amongst other factors. Based on the results of the qualitative analysis, the Corporation determines whether a quantitative test is necessary. The quantitative test compares the estimated fair value of identified reporting units with their carrying amount, including goodwill. If the estimated fair value of the reporting unit is less than the carrying value, an impairment charge would be recorded for the excess, not to exceed the amount of goodwill allocated to the reporting unit.

Core deposit intangibles are amortized on an accelerated basis, based on the estimated period the economic benefits are expected to be received. Core deposit intangibles are reviewed for impairment when events or changes in circumstances indicate that their carrying amounts may not be recoverable. Impairment for a finite-lived intangible asset exists if its carrying value exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset.

Additional information regarding goodwill and core deposit intangibles can be found in Note 7.

Nonmarketable Equity Securities

The Corporation has certain investments that are not readily marketable. These investments include a portfolio of investments in indirect private equity and venture capital funds and restricted equity investments, which are securities the Corporation is required to hold for various reasons, primarily Federal Home Loan Bank of Dallas (FHLB) and Federal Reserve Bank (FRB) stock. These investments are accounted for on the cost or equity method and are included in accrued income and other assets on the Consolidated Balance Sheets. The investments are individually reviewed for impairment on a quarterly basis. Indirect private equity and venture capital funds are evaluated for impairment by comparing the carrying value to the estimated fair value. Impairment is charged to current earnings and the carrying value of the investment is written down accordingly. FHLB and FRB stock are recorded at cost (par value) and evaluated for impairment based on the ultimate recoverability of the par value. If the Corporation does not expect to recover the full par value, the amount by which the par value exceeds the ultimately recoverable value would be charged to current earnings and the carrying value of the investment would be written down accordingly.

Derivative Instruments and Hedging Activities

Derivative instruments are carried at fair value in either accrued income and other assets or accrued expenses and other liabilities on the Consolidated Balance Sheets. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument is determined by whether it has been designated and qualifies as part of a hedging relationship and, further, by the type of hedging relationship. The Corporation presents derivative instruments at fair value on the Consolidated Balance Sheets on a net basis when a right of offset exists, based on transactions with a single counterparty and any cash collateral paid to and/or received from that counterparty for derivative contracts that are subject to legally enforceable master netting arrangements.

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For derivative instruments designated and qualifying as fair value hedges (i.e., hedging the exposure to changes in the fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk), the gain or loss on the derivative instrument, as well as the offsetting loss or gain on the hedged item attributable to the hedged risk, are recognized in the same consolidated statement of income line that is used to present the earnings effect of the hedged item during the period of the change in fair values. For derivative instruments that are designated and qualify as cash flow hedges (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same consolidated statement of income line item as the earnings effect of the hedged item in the same period or periods during which the hedged transaction affects earnings. For derivative instruments not designated as hedging instruments, the gain or loss is recognized in current earnings during the period of change.

To qualify for the use of hedge accounting, a derivative must be effective at inception and expected to be continuously effective in offsetting the risk being hedged. For derivatives designated as hedging instruments at inception, the Corporation uses either the short-cut method or applies statistical regression analysis to assess effectiveness. The short-cut method is used for \$2.6 billion of notional of fair value hedges of medium- and long-term debt. This method allows for the assumption of perfect effectiveness and eliminates the requirement to further assess hedge effectiveness on these transactions. For hedge relationships to which the Corporation does not apply the short-cut method, statistical regression analysis is used at inception to assess whether the derivative used is expected to be highly effective in offsetting changes in the fair value or cash flows of the hedged item. A statistical regression or qualitative analysis is performed at each reporting period thereafter to evaluate hedge effectiveness.

Topic 848 provided optional provisions to minimize the impact of reference rate reform to qualifying fair value and cash flow hedging relationships by allowing certain hedge accounting requirements to be suspended during the transition period. The Corporation has elected various provisions to transition its hedging relationships away from LIBOR. For further information on Topic 848, refer to the "Loans" policy in this Note.

Further information on the Corporation's derivative instruments and hedging activities is included in Note 8.

Short-Term Borrowings

Securities sold under agreements to repurchase are treated as collateralized borrowings and are recorded at amounts equal to the cash received. The contractual terms of the agreements to repurchase may require the Corporation to provide additional collateral if the fair value of the securities underlying the borrowings declines during the term of the agreement.

Financial Guarantees

Certain guarantee contracts or indemnification agreements that contingently require the Corporation, as guarantor, to make payments to the guaranteed party are initially measured at fair value and included in accrued expenses and other liabilities on the Consolidated Balance Sheets. The subsequent accounting for the liability depends on the nature of the underlying guarantee. The release from risk is accounted for under a particular guarantee when the guarantee expires or is settled, or by a systematic and rational amortization method.

Further information on the Corporation's obligations under guarantees is included in Note 8.

Share-Based Compensation

The Corporation recognizes share-based compensation expense using the straight-line method over the requisite service period for all stock awards, including those with graded vesting. The requisite service period is the period an employee is required to provide service in order to vest in the award, which cannot extend beyond the date at which the employee is no longer required to perform any service to receive the share-based compensation (i.e., the retirement-eligible date). Forfeiture of stock awards and dividend equivalents are accounted for as they occur.

Certain awards are contingent upon performance and/or market conditions, which affect the number of shares ultimately issued. The Corporation periodically evaluates the probable outcome of the performance conditions and makes cumulative adjustments to compensation expense as appropriate. Market conditions are included in the determination of the fair value of the award on the date of grant. Subsequent to the grant date, market conditions have no impact on the amount of compensation expense the Corporation will recognize over the life of the award.

Further information on the Corporation's share-based compensation plans is included in Note 16.

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Revenue Recognition

Revenue from contracts with customers comprises the noninterest income earned by the Corporation in exchange for services provided to customers and is recognized when services are completed or as they are rendered, although contracts are generally short-term by nature. Services provided over a period of time are typically transferred to customers evenly over the term of the contracts and revenue is recognized accordingly over the period services are provided. Contract receivables are included in accrued income and other assets on the Consolidated Balance Sheets. Payment terms vary by services offered, and the time between completion of performance obligations and payment is typically not significant.

Card Fees

Card fees comprise interchange and other fee income earned on government card, commercial card, debit/automated teller machine card and merchant payment processing programs. Card fees are presented net of network costs, as performance obligations for card services are limited to transaction processing and settlement with the card network on behalf of the customers. Fees for these services are primarily based on interchange rates set by the network and transaction volume. The Corporation also provides ongoing card program support services, for which fees are based on contractually agreed-upon prices and customer demand for services.

Service Charges on Deposit Accounts

Service charges on deposit accounts comprise charges on retail and business accounts, including fees for treasury management services. Treasury management services include transaction-based services related to payment processing, overdrafts, non-sufficient funds and other deposit account activity, as well as account management services that are provided over time. Business customers can earn credits depending on deposit balances maintained with the Corporation, which may be used to offset fees. Fees and credits are based on predetermined, agreed-upon rates.

Fiduciary Income

Fiduciary income includes fees and commissions from asset management, custody, recordkeeping, investment advisory and other services provided primarily to personal and institutional trust customers. Revenue is recognized as the services are performed and is based either on the market value of the assets managed or the services provided, as well as agreed-upon rates.

Commercial Lending Fees

Commercial lending fees include both revenue from contracts with customers (primarily loan servicing fees) and other sources of revenue. Commercial loan servicing fees are based on contractually agreed-upon prices and when the services are provided. Other sources of revenue in commercial lending fees primarily include fees assessed on the unused portion of commercial lines of credit (unused commitment fees) and syndication arrangements.

Brokerage Fees

Brokerage fees are commissions earned for facilitating securities transactions for customers, as well as other brokerage services provided. Revenue is recognized when services are completed and is based on the type of services provided and agreed-upon rates. The Corporation pays commissions based on brokerage fee revenue. These are typically recognized when incurred because the amortization period is one year or less and are included in salaries and benefits expense on the Consolidated Statements of Income.

Other Revenues

Other revenues, consisting primarily of other retail fees, investment banking fees and insurance commissions, are typically recognized when services or transactions are completed and are based on the type of services provided and agreed-upon rates.

Except as discussed above, commissions and other incentives paid to employees are generally based on several internal and external metrics and, as a result, are not solely dependent on revenue generating activities.

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Defined Benefit Pension and Other Postretirement Costs

Defined benefit pension costs are funded consistent with the requirements of federal laws and regulations. Inherent in the determination of defined benefit pension costs are assumptions concerning future events that will affect the amount and timing of required benefit payments under the plans. These include demographic assumptions such as retirement age and mortality, a compensation rate increase, a discount rate used to determine the current benefit obligation, form of payment election and a long-term expected rate of return on plan assets. Net periodic defined benefit pension expense includes service cost, interest cost based on the assumed discount rate, an expected return on plan assets based on an actuarially derived market-related value of assets (MRVA), amortization of prior service cost or credit and amortization of net actuarial gains or losses. The MRVA for fixed income securities and private placement assets is based on the fair value of plan assets, whereas the MRVA for other plan assets is determined by amortizing the current year's investment gains and losses (the actual investment return net of the expected investment return) over 5 years. The amortization adjustment cannot exceed 10 percent of the fair value of assets. Prior service costs or credits include the impact of plan amendments on the liabilities and are amortized over the future service periods of active employees expected to receive benefits under the plan. Actuarial gains and losses result from experience different from that assumed and from changes in assumptions (excluding asset gains and losses not yet reflected in market-related value). Amortization of actuarial gains and losses is included as a component of net periodic defined benefit pension cost for a year if the actuarial net gain or loss exceeds 10 percent of the greater of the projected benefit obligation or the market-related value of plan assets. If amortization is required, the excess is amortized over the average remaining service period of participating employees expected to receive benefits under the plan. Service costs are included in salaries and benefits expense, while the other components of net periodic defined benefit pension expense are included in other noninterest expenses on the Consolidated Statements of Income.

Postretirement benefit costs includes service cost, interest cost based on the assumed discount rate, an expected return on plan assets based on an actuarially derived MRVA, amortization of prior service cost or credit and amortization of net actuarial gains or losses. The components of postretirement benefit costs follow similar policies and methodologies as defined benefit pensions costs. Postretirement benefits are recognized in other noninterest expenses on the Consolidated Statements of Income.

See Note 17 for further information regarding the Corporation's defined benefit pension and other postretirement plans.

Income Taxes

The provision for income taxes is the sum of income taxes due for the current year and deferred taxes. The Corporation classifies interest and penalties on income tax liabilities and excess tax benefits and deficiencies resulting from employee stock awards in the provision for income taxes on the Consolidated Statements of Income.

Deferred taxes arise from temporary differences between the income tax basis and financial accounting basis of assets and liabilities. Deferred tax assets are evaluated for realization based on available evidence of projected future reversals of existing taxable temporary differences, foreign tax credit limitations, assumptions made regarding future events and, when applicable, state loss carryback capacity. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax asset will not be realized.

Earnings Per Share

Basic net income per common share is calculated using the two-class method. The two-class method is an earnings allocation formula that determines earnings per share for each share of common stock and participating securities according to dividends declared (distributed earnings) and participation rights in undistributed earnings. Distributed and undistributed earnings are allocated between common and participating security shareholders based on their respective rights to receive dividends. Nonvested share-based payment awards that contain nonforfeitable rights to dividends or dividend equivalents are considered participating securities (e.g., certain service-based restricted stock units). Undistributed net losses are not allocated to nonvested restricted shareholders, as these shareholders do not have a contractual obligation to fund the losses incurred by the Corporation. Net income attributable to common shares is then divided by the weighted-average number of common shares outstanding during the period.

Diluted net income per common share is calculated using the more dilutive of either the treasury method or the two-class method. The dilutive calculation considers common stock issuable under the assumed exercise of stock options and warrants, as well as service- and performance-based restricted stock units granted under the Corporation's stock plans using the treasury stock method, if dilutive. Net income attributable to common shares is then divided by the total of weighted-average number of common shares and common stock equivalents outstanding during the period.

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Statements of Cash Flows

Cash and cash equivalents are defined as those amounts included in cash and due from banks and interest-bearing deposits with banks on the Consolidated Balance Sheets.

Comprehensive (Loss) Income

The Corporation presents on an annual basis the components of net income and other comprehensive income in two separate, but consecutive statements and presents on an interim basis the components of net income and a total for comprehensive income in one continuous consolidated statement of comprehensive income.

Pending Accounting Pronouncements

In March 2022, the FASB issued ASU No. 2022-02, "Financial Instruments - Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures" (ASU 2022-02), which eliminates the accounting for troubled debt restructurings (TDR) while expanding modification and vintage disclosure requirements. The update requires additional disclosures on the nature, magnitude and subsequent performance of certain types of modifications with borrowers experiencing financial difficulties. ASU 2022-02 further included a requirement to disclose gross charge-offs incurred by year of origination of the related loan or lease. The standard update is effective for the Corporation on January 1, 2023, and must be applied prospectively, except that the recognition and measurement of TDRs may be applied using a modified retrospective approach. Early adoption is permitted. The Corporation adopted ASU 2022-02 prospectively on January 1, 2023 and will update its disclosures in the first quarter of 2023. The update is not expected to have a material impact to the Corporation's financial condition or results of operations upon adoption.

NOTE 2 – FAIR VALUE MEASUREMENTS

Note 1 contains information about the fair value hierarchy, descriptions of the valuation methodologies and key inputs used to measure financial assets and liabilities recorded at fair value, as well as a description of the methods and significant assumptions used to estimate fair value disclosures for financial instruments not recorded at fair value in their entirety on a recurring basis.

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Assets and Liabilities Recorded at Fair Value on a Recurring Basis

The following tables present the recorded amount of assets and liabilities measured at fair value on a recurring basis as of December 31, 2022 and 2021.

<i>(in millions)</i>	Total	Level 1	Level 2	Level 3
December 31, 2022				
Deferred compensation plan assets	\$ 92	\$ 92	\$ —	\$ —
Equity securities	44	44	—	—
Investment securities available-for-sale:				
U.S. Treasury securities	2,664	2,664	—	—
Residential mortgage-backed securities (a)	11,655	—	11,655	—
Commercial mortgage-backed securities (a)	4,693	—	4,693	—
Total investment securities available-for-sale	19,012	2,664	16,348	—
Derivative assets:				
Interest rate contracts	206	—	206	—
Energy contracts	1,020	—	1,020	—
Foreign exchange contracts	53	—	53	—
Total derivative assets	1,279	—	1,279	—
Total assets at fair value	\$ 20,427	\$ 2,800	\$ 17,627	\$ —
Derivative liabilities:				
Interest rate contracts	\$ 644	\$ —	\$ 644	\$ —
Energy contracts	1,006	—	1,006	—
Foreign exchange contracts	45	—	45	—
Other financial derivative	12	—	—	12
Total derivative liabilities	1,707	—	1,695	12
Deferred compensation plan liabilities	92	92	—	—
Total liabilities at fair value	\$ 1,799	\$ 92	\$ 1,695	\$ 12
December 31, 2021				
Deferred compensation plan assets	\$ 113	\$ 113	\$ —	\$ —
Equity securities	62	62	—	—
Investment securities available-for-sale:				
U.S. Treasury securities	2,993	2,993	—	—
Residential mortgage-backed securities (a)	13,288	—	13,288	—
Commercial mortgage-backed securities (a)	705	—	705	—
Total investment securities available-for-sale	16,986	2,993	13,993	—
Derivative assets:				
Interest rate contracts	239	—	213	26
Energy contracts	670	—	670	—
Foreign exchange contracts	19	—	19	—
Total derivative assets	928	—	902	26
Total assets at fair value	\$ 18,089	\$ 3,168	\$ 14,895	\$ 26
Derivative liabilities:				
Interest rate contracts	\$ 69	\$ —	\$ 69	\$ —
Energy contracts	662	—	662	—
Foreign exchange contracts	16	—	16	—
Other financial derivative	13	—	—	13
Total derivative liabilities	760	—	747	13
Deferred compensation plan liabilities	113	113	—	—
Total liabilities at fair value	\$ 873	\$ 113	\$ 747	\$ 13

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

There were no transfers of assets or liabilities recorded at fair value on a recurring basis into or out of Level 3 fair value measurements during the years ended December 31, 2022 and 2021.

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The following table summarizes the changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the years ended December 31, 2022 and 2021.

<i>(in millions)</i>	Balance at Beginning of Period	Net Realized/Unrealized Gains (Losses) (Pretax) Recorded in Earnings (a)		Settlements	Balance at End of Period
		Realized	Unrealized		
Year Ended December 31, 2022					
Derivative assets:					
Interest rate contracts	\$ 26	\$ —	\$ —	\$ (26)	\$ —
Derivative liabilities:					
Other financial derivative	(13)	—	1	—	(12)
Year Ended December 31, 2021					
Derivative assets:					
Interest rate contracts	\$ 39	—	\$ (13)	—	\$ 26
Derivative liabilities:					
Other financial derivative	(11)	—	(2)	—	(13)

(a) Realized and unrealized gains and losses due to changes in fair value recorded in other noninterest income on the Consolidated Statements of Income.

Assets and Liabilities Recorded at Fair Value on a Nonrecurring Basis

The Corporation may be required to record certain assets and liabilities at fair value on a nonrecurring basis. These include assets that are recorded at the lower of cost or fair value, and were recognized at fair value since it was less than cost at the end of the period.

The following table presents assets recorded at fair value on a nonrecurring basis at December 31, 2022 and 2021. No liabilities were recorded at fair value on a nonrecurring basis at December 31, 2022 and 2021.

<i>(in millions)</i>	Level 3
December 31, 2022	
Loans:	
Commercial	\$ 53
Real estate construction	2
Commercial mortgage	11
Total loans	\$ 66
Other real estate	9
Total assets at fair value	\$ 75
December 31, 2021	
Loans:	
Commercial	\$ 125
Real estate construction	4
Commercial mortgage	17
International	4
Total assets at fair value	\$ 150

Level 3 assets recorded at fair value on a nonrecurring basis at December 31, 2022 and 2021 included both nonaccrual loans and TDRs for which a specific allowance was established based on the fair value of collateral as well as bank property held for sale. The unobservable inputs were the additional adjustments applied by management to the appraised values to reflect such factors as non-current appraisals and revisions to estimated time to sell. These adjustments are determined based on qualitative judgments made by management on a case-by-case basis and are not observable inputs, although they are used in the determination of fair value.

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Estimated Fair Values of Financial Instruments Not Recorded at Fair Value on a Recurring Basis

The Corporation typically holds the majority of its financial instruments until maturity and thus does not expect to realize many of the estimated fair value amounts disclosed. The disclosures also do not include estimated fair value amounts for items that are not defined as financial instruments, but which have significant value. These include such items as the future earnings potential of significant customer relationships and the value of trust operations and other fee generating businesses. The Corporation believes the imprecision of an estimate could be significant.

The carrying amount and estimated fair value of financial instruments not recorded at fair value in their entirety on a recurring basis on the Corporation's Consolidated Balance Sheets are as follows:

<i>(in millions)</i>	Carrying Amount	Estimated Fair Value			
		Total	Level 1	Level 2	Level 3
December 31, 2022					
Assets					
Cash and due from banks	\$ 1,758	\$ 1,758	\$ 1,758	\$ —	\$ —
Interest-bearing deposits with banks	4,524	4,524	4,524	—	—
Other short-term investments	19	19	19	—	—
Loans held-for-sale	2	2	—	2	—
Total loans, net of allowance for loan losses (a)	52,792	50,964	—	—	50,964
Customers' liability on acceptances outstanding	3	3	3	—	—
Restricted equity investments	223	223	223	—	—
Nonmarketable equity securities (b)	5	12	—	—	—
Liabilities					
Demand deposits (noninterest-bearing)	39,945	39,945	—	39,945	—
Interest-bearing deposits	29,566	29,566	—	29,566	—
Customer certificates of deposit	1,762	1,719	—	1,719	—
Other time deposits	124	124	—	124	—
Total deposits	71,397	71,354	—	71,354	—
Short-term borrowings	3,211	3,211	3,211	—	—
Acceptances outstanding	3	3	3	—	—
Medium- and long-term debt	3,024	3,071	—	3,071	—
Credit-related financial instruments	(79)	(79)	—	—	(79)
December 31, 2021					
Assets					
Cash and due from banks	\$ 1,236	\$ 1,236	\$ 1,236	\$ —	\$ —
Interest-bearing deposits with banks	21,443	21,443	21,443	—	—
Other short-term investments	16	16	16	—	—
Loans held-for-sale	6	6	—	6	—
Total loans, net of allowance for loan losses (a)	48,697	49,127	—	—	49,127
Customers' liability on acceptances outstanding	5	5	5	—	—
Restricted equity investments	92	92	92	—	—
Nonmarketable equity securities (b)	5	10	—	—	—
Liabilities					
Demand deposits (noninterest-bearing)	45,800	45,800	—	45,800	—
Interest-bearing deposits	34,566	34,566	—	34,566	—
Customer certificates of deposit	1,973	1,968	—	1,968	—
Total deposits	82,339	82,334	—	82,334	—
Acceptances outstanding	5	5	5	—	—
Medium- and long-term debt	2,796	2,854	—	2,854	—
Credit-related financial instruments	(59)	(59)	—	—	(59)

(a) Included \$66 million and \$150 million of loans recorded at fair value on a nonrecurring basis at December 31, 2022 and 2021, respectively.

(b) Certain investments that are measured at fair value using the net asset value have not been classified in the fair value hierarchy. The fair value amounts presented in the table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the Consolidated Balance Sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

NOTE 3 - INVESTMENT SECURITIES

A summary of the Corporation's investment securities follows:

<i>(in millions)</i>	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2022				
Investment securities available-for-sale:				
U.S. Treasury securities	\$ 2,810	\$ —	\$ 146	\$ 2,664
Residential mortgage-backed securities (a)	13,983	—	2,328	11,655
Commercial mortgage-backed securities (a)	5,252	—	559	4,693
Total investment securities available-for-sale	\$ 22,045	\$ —	\$ 3,033	\$ 19,012
December 31, 2021				
Investment securities available-for-sale:				
U.S. Treasury securities	\$ 3,010	\$ 22	\$ 39	\$ 2,993
Residential mortgage-backed securities (a)	13,397	67	176	13,288
Commercial mortgage-backed securities (a)	709	2	6	705
Total investment securities available-for-sale	\$ 17,116	\$ 91	\$ 221	\$ 16,986

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

A summary of the Corporation's investment securities in an unrealized loss position as of December 31, 2022 and 2021 follows:

<i>(in millions)</i>	Less than 12 Months		12 Months or more		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
December 31, 2022						
U.S. Treasury securities	\$ 996	\$ 5	\$ 1,668	\$ 141	\$ 2,664	\$ 146
Residential mortgage-backed securities (a)	3,500	361	8,153	1,967	11,653	2,328
Commercial mortgage-backed securities (a)	4,008	405	685	154	4,693	559
Total temporarily impaired securities	\$8,504	\$ 771	\$10,506	\$ 2,262	\$19,010	\$ 3,033
December 31, 2021						
U.S. Treasury securities	\$ 465	\$ 6	\$ 1,334	\$ 33	\$ 1,799	\$ 39
Residential mortgage-backed securities (a)	7,197	128	1,128	48	8,325	176
Commercial mortgage-backed securities (a)	346	6	—	—	346	6
Total temporarily impaired securities	\$8,008	\$ 140	\$ 2,462	\$ 81	\$10,470	\$ 221

(a) Issued and/or guaranteed by U.S. government agencies or U.S. government-sponsored enterprises.

Unrealized losses on investment securities resulted from changes in market interest rates. The Corporation's portfolio is comprised of securities issued or guaranteed by the U.S. government or government-sponsored enterprises. As such, it is expected that the securities would not be settled at a price less than the amortized cost of the investments. Further, the Corporation does not intend to sell the investments, and it is not more-likely-than-not that it will be required to sell the investments before recovery of amortized costs. At December 31, 2022, the Corporation had 1,289 securities in an unrealized loss position with no allowance for credit losses, comprised of 27 U.S. Treasury securities, 1,008 residential mortgage-backed securities and 254 commercial mortgage-backed securities.

Interest receivable on investment securities totaled \$49 million and \$36 million at December 31, 2022 and 2021 and was included in accrued income and other assets on the Consolidated Balance Sheets.

Sales, calls and write-downs of investment securities available-for-sale, computed based on the adjusted cost of the specific security, resulted in no gains or losses during the years ended December 31, 2022 and 2021. During the year ended December 31, 2020, a \$1 million gain was offset by a \$1 million loss, recorded in noninterest income.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

The following table summarizes the amortized cost and fair values of investment securities by contractual maturity. Securities with multiple maturity dates are classified in the period of final maturity. The actual cash flows of mortgage-backed securities may differ as borrowers of the underlying loans may exercise prepayment options. Expected maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

(in millions)

December 31, 2022	Amortized Cost	Fair Value
Contractual maturity		
Within one year	\$ 1,103	\$ 1,093
After one year through five years	1,943	1,797
After five years through ten years	5,518	4,946
After ten years	13,481	11,176
Total investment securities	\$ 22,045	\$ 19,012

At December 31, 2022, investment securities with a carrying value of \$3.2 billion were pledged where permitted or required by law, including \$1.0 billion pledged to the Federal Home Loan Bank (FHLB) as collateral for potential future borrowings and \$2.2 billion to secure \$1.0 billion of liabilities, primarily public and other deposits of state and local government agencies as well as derivative instruments. For information on FHLB borrowings, refer to Note 12.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

NOTE 4 – CREDIT QUALITY AND ALLOWANCE FOR CREDIT LOSSES

The following table presents an aging analysis of the amortized cost basis of loans.

<i>(in millions)</i>	Loans Past Due and Still Accruing				Nonaccrual Loans	Current Loans (a)	Total Loans
	30-59 Days	60-89 Days	90 Days or More	Total			
December 31, 2022							
Business loans:							
Commercial	\$ 238	\$ 13	\$ 20	\$ 271	\$ 142	\$ 30,496	\$ 30,909
Real estate construction:							
Commercial Real Estate business line (b)	—	—	—	—	—	2,505	2,505
Other business lines (c)	2	—	—	2	3	595	600
Total real estate construction	2	—	—	2	3	3,100	3,105
Commercial mortgage:							
Commercial Real Estate business line (b)	—	6	—	6	1	4,674	4,681
Other business lines (c)	64	5	3	72	22	8,531	8,625
Total commercial mortgage	64	11	3	78	23	13,205	13,306
Lease financing	6	—	—	6	—	754	760
International	—	9	—	9	3	1,185	1,197
Total business loans	310	33	23	366	171	48,740	49,277
Retail loans:							
Residential mortgage	22	—	—	22	53	1,739	1,814
Consumer:							
Home equity	4	3	—	7	15	1,754	1,776
Other consumer	5	1	—	6	1	528	535
Total consumer	9	4	—	13	16	2,282	2,311
Total retail loans	31	4	—	35	69	4,021	4,125
Total loans	\$ 341	\$ 37	\$ 23	\$ 401	\$ 240	\$ 52,761	\$ 53,402
December 31, 2021							
Business loans:							
Commercial	\$ 35	\$ 18	\$ 6	\$ 59	\$ 173	\$ 29,134	\$ 29,366
Real estate construction:							
Commercial Real Estate business line (b)	—	—	—	—	—	2,391	2,391
Other business lines (c)	15	1	—	16	6	535	557
Total real estate construction	15	1	—	16	6	2,926	2,948
Commercial mortgage:							
Commercial Real Estate business line (b)	—	—	—	—	1	3,337	3,338
Other business lines (c)	18	4	16	38	31	7,848	7,917
Total commercial mortgage	18	4	16	38	32	11,185	11,255
Lease financing	5	—	—	5	—	635	640
International	5	8	1	14	5	1,189	1,208
Total business loans	78	31	23	132	216	45,069	45,417
Retail loans:							
Residential mortgage	4	—	—	4	36	1,731	1,771
Consumer:							
Home equity	4	3	—	7	12	1,514	1,533
Other consumer	32	1	4	37	—	527	564
Total consumer	36	4	4	44	12	2,041	2,097
Total retail loans	40	4	4	48	48	3,772	3,868
Total loans	\$ 118	\$ 35	\$ 27	\$ 180	\$ 264	\$ 48,841	\$ 49,285

(a) Includes \$22 million of loans with deferred payments not considered past due in accordance with the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) at December 31, 2021.

(b) Primarily loans to real estate developers.

(c) Primarily loans secured by owner-occupied real estate.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

The following table presents loans by credit quality indicator (CQI) and vintage year. CQI is based on internal risk ratings assigned to each business loan at the time of approval and subjected to subsequent reviews, generally at least annually, and to pools of retail loans with similar risk characteristics. Vintage year is the year of origination or major modification.

<i>(in millions)</i>	December 31, 2022						Revolvers	Revolvers Converted to Term	Total
	Vintage Year								
	2022	2021	2020	2019	2018	Prior			
Business loans:									
Commercial:									
Pass (a)	\$ 3,946	(b) \$ 3,509	(b) \$ 917	(b) \$ 1,041	\$ 598	\$ 1,030	\$ 18,604	\$ 9	\$29,654
Criticized (c)	75	274	81	69	45	78	632	1	1,255
Total commercial	4,021	3,783	998	1,110	643	1,108	19,236	10	30,909
Real estate construction									
Pass (a)	836	1,134	633	162	102	28	207	—	3,102
Criticized (c)	—	—	3	—	—	—	—	—	3
Total real estate construction	836	1,134	636	162	102	28	207	—	3,105
Commercial mortgage									
Pass (a)	3,349	2,501	1,825	1,394	1,050	2,182	838	—	13,139
Criticized (c)	7	5	7	32	31	75	10	—	167
Total commercial mortgage	3,356	2,506	1,832	1,426	1,081	2,257	848	—	13,306
Lease financing									
Pass (a)	316	140	64	47	37	130	—	—	734
Criticized (c)	10	—	2	8	5	1	—	—	26
Total lease financing	326	140	66	55	42	131	—	—	760
International									
Pass (a)	317	161	55	88	19	14	498	—	1,152
Criticized (c)	12	—	3	—	3	10	17	—	45
Total international	329	161	58	88	22	24	515	—	1,197
Total business loans	8,868	7,724	3,590	2,841	1,890	3,548	20,806	10	49,277
Retail loans:									
Residential mortgage									
Pass (a)	327	398	480	133	68	355	—	—	1,761
Criticized (c)	4	—	—	9	1	39	—	—	53
Total residential mortgage	331	398	480	142	69	394	—	—	1,814
Consumer:									
Home equity									
Pass (a)	—	—	—	—	—	9	1,708	40	1,757
Criticized (c)	—	—	—	—	—	—	17	2	19
Total home equity	—	—	—	—	—	9	1,725	42	1,776
Other consumer									
Pass (a)	69	38	50	8	1	10	355	—	531
Criticized (c)	—	—	—	1	—	—	3	—	4
Total other consumer	69	38	50	9	1	10	358	—	535
Total consumer	69	38	50	9	1	19	2,083	42	2,311
Total retail loans	400	436	530	151	70	413	2,083	42	4,125
Total loans	\$ 9,268	\$ 8,160	\$ 4,120	\$ 2,992	\$ 1,960	\$ 3,961	\$ 22,889	\$ 52	\$53,402

Table continues on the following page.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

December 31, 2021

	Vintage Year						Revolvers	Revolvers Converted to Term	Total
	2021	2020	2019	2018	2017	Prior			
Business loans:									
Commercial:									
Pass (a)	\$ 5,270	(b) \$ 1,740	(b) \$ 1,528	\$ 947	\$ 713	\$ 763	\$ 17,241	\$ 10	\$28,212
Criticized (c)	101	120	105	86	26	94	620	2	1,154
Total commercial	5,371	1,860	1,633	1,033	739	857	17,861	12	29,366
Real estate construction:									
Pass (a)	458	858	849	424	158	34	132	—	2,913
Criticized (c)	—	3	—	13	8	8	3	—	35
Total real estate construction	458	861	849	437	166	42	135	—	2,948
Commercial mortgage:									
Pass (a)	2,491	1,932	1,444	1,343	1,018	2,298	481	—	11,007
Criticized (c)	17	44	50	22	23	87	5	—	248
Total commercial mortgage	2,508	1,976	1,494	1,365	1,041	2,385	486	—	11,255
Lease financing									
Pass (a)	166	88	97	50	38	179	—	—	618
Criticized (c)	—	2	10	8	1	1	—	—	22
Total lease financing	166	90	107	58	39	180	—	—	640
International									
Pass (a)	381	141	103	29	1	16	480	—	1,151
Criticized (c)	20	10	3	5	4	8	7	—	57
Total international	401	151	106	34	5	24	487	—	1,208
Total business loans	8,904	4,938	4,189	2,927	1,990	3,488	18,969	12	45,417
Retail loans:									
Residential mortgage									
Pass (a)	443	527	164	83	111	407	—	—	1,735
Criticized (c)	5	—	1	2	7	21	—	—	36
Total residential mortgage	448	527	165	85	118	428	—	—	1,771
Consumer:									
Home equity									
Pass (a)	—	—	—	—	—	11	1,460	45	1,516
Criticized (c)	—	—	—	—	—	1	12	4	17
Total home equity	—	—	—	—	—	12	1,472	49	1,533
Other consumer									
Pass (a)	101	68	13	9	1	31	337	—	560
Criticized (c)	—	—	—	—	—	—	4	—	4
Total other consumer	101	68	13	9	1	31	341	—	564
Total consumer	101	68	13	9	1	43	1,813	49	2,097
Total retail loans	549	595	178	94	119	471	1,813	49	3,868
Total loans	\$ 9,453	\$ 5,533	\$ 4,367	\$ 3,021	\$ 2,109	\$ 3,959	\$ 20,782	\$ 61	\$49,285

(a) Includes all loans not included in the categories of special mention, substandard or nonaccrual.

(b) Includes Small Business Administration Paycheck Protection Program (PPP) loans of \$35 million and \$459 million at December 31, 2022 and 2021, respectively.

(c) Includes loans with an internal rating of special mention, substandard loans for which the accrual of interest has not been discontinued and nonaccrual loans. Special mention loans have potential credit weaknesses that deserve management's close attention, such as loans to borrowers who may be experiencing financial difficulties that may result in deterioration of repayment prospects from the borrower at some future date. Accruing substandard loans have a well-defined weakness, or weaknesses, such as loans to borrowers who may be experiencing losses from operations or inadequate liquidity of a degree and duration that jeopardizes the orderly repayment of the loan. Substandard loans are also distinguished by the distinct possibility of loss in the future if these weaknesses are not corrected. Nonaccrual loans are loans for which the accrual of interest has been discontinued. For further information regarding nonaccrual loans, refer to the Nonperforming Assets subheading in Note 1 - Basis of Presentation and Accounting Policies. These categories are generally consistent with the "special mention" and "substandard" categories as defined by regulatory authorities. A minority of nonaccrual loans are consistent with the "doubtful" category.

Loan interest receivable totaled \$261 million and \$120 million at December 31, 2022 and 2021, respectively, and was included in accrued income and other assets on the Consolidated Balance Sheets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

Allowance for Credit Losses

The following table details the changes in the allowance for credit losses.

<i>(in millions)</i>	2022			2021			2020		
	Business Loans	Retail Loans	Total	Business Loans	Retail Loans	Total	Business Loans	Retail Loans	Total
Years Ended December 31,									
Balance at beginning of period:									
Allowance for loan losses	\$ 531	\$ 57	\$ 588	\$ 895	\$ 53	\$ 948	\$ 601	\$ 36	\$ 637
Allowance for credit losses on lending-related commitments	24	6	30	35	9	44	28	3	31
Allowance for credit losses	555	63	618	930	62	992	629	39	668
Cumulative effect of change in accounting principle	—	—	—	—	—	—	(42)	25	(17)
Loan charge-offs	(65)	(3)	(68)	(67)	(3)	(70)	(233)	(5)	(238)
Recoveries on loans previously charged-off	47	4	51	76	4	80	38	4	42
Net loan (charge-offs) recoveries	(18)	1	(17)	9	1	10	(195)	(1)	(196)
Provision for credit losses:									
Provision for loan losses	28	11	39	(373)	3	(370)	531	(7)	524
Provision for credit losses on lending-related commitments	16	5	21	(11)	(3)	(14)	7	6	13
Provision for credit losses	44	16	60	(384)	—	(384)	538	(1)	537
Balance at end of period:									
Allowance for loan losses	541	69	610	531	57	588	895	53	948
Allowance for credit losses on lending-related commitments	40	11	51	24	6	30	35	9	44
Allowance for credit losses	\$ 581	\$ 80	\$ 661	\$ 555	\$ 63	\$ 618	\$ 930	\$ 62	\$ 992
Allowance for loan losses as a percentage of total loans	1.10%	1.67%	1.14%	1.17%	1.47%	1.19%	1.85%	1.32%	1.81%
Allowance for credit losses as a percentage of total loans	1.18	1.96	1.24	1.22	1.63	1.26	1.93	1.55	1.90

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

Nonaccrual Loans

The following table presents additional information regarding nonaccrual loans. Interest income of \$12 million, \$11 million and \$7 million was recognized on nonaccrual loans for the years ended December 31, 2022, 2021 and 2020, respectively.

<i>(in millions)</i>	Nonaccrual Loans with No Related Allowance	Nonaccrual Loans with Related Allowance	Total Nonaccrual Loans
December 31, 2022			
Business loans:			
Commercial	\$ 64	\$ 78	\$ 142
Real estate construction:			
Other business lines (a)	—	3	3
Commercial mortgage:			
Commercial Real Estate business line (b)	—	1	1
Other business lines (a)	4	18	22
Total commercial mortgage	4	19	23
International	3	—	3
Total business loans	71	100	171
Retail loans:			
Residential mortgage	53	—	53
Consumer:			
Home equity	15	—	15
Other consumer	1	—	1
Total consumer	16	—	16
Total retail loans	69	—	69
Total nonaccrual loans	\$ 140	\$ 100	\$ 240
December 31, 2021			
Business loans:			
Commercial	\$ 8	\$ 165	\$ 173
Real estate construction:			
Other business lines (a)	—	6	6
Commercial mortgage:			
Commercial Real Estate business line (b)	—	1	1
Other business lines (a)	4	27	31
Total commercial mortgage	4	28	32
International	—	5	5
Total business loans	12	204	216
Retail loans:			
Residential mortgage	36	—	36
Consumer:			
Home equity	12	—	12
Total retail loans	48	—	48
Total nonaccrual loans	\$ 60	\$ 204	\$ 264

(a) Primarily loans secured by owner-occupied real estate.
(b) Primarily loans to real estate developers.

Foreclosed Properties

Foreclosed properties were insignificant at December 31, 2022, compared to \$1 million at December 31, 2021. Retail loans secured by residential real estate properties in process of foreclosure included in nonaccrual loans were insignificant at December 31, 2022 compared to none at December 31, 2021.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

Troubled Debt Restructurings

The following table details the amortized cost basis at December 31, 2022 and 2021 of loans considered to be TDRs that were restructured during the years ended December 31, 2022 and 2021, by type of modification. In cases of loans with more than one type of modification, the loans were categorized based on the most significant modification.

<i>(in millions)</i>	2022			2021 (a)		
	Type of Modification			Type of Modification		
	Principal Deferrals (b)	Interest Rate Reductions	Total Modifications	Principal Deferrals (b)	Interest Rate Reductions	Total Modifications
Years Ended December 31,						
Business loans:						
Commercial	\$ 26	\$ —	\$ 26	\$ 8	\$ —	\$ 8
Real estate construction:						
Other business lines (c)	3	—	3	—	—	—
Commercial mortgage:						
Other business lines (c)	14	—	14	—	—	—
Total business loans	43	—	43	8	—	8
Retail loans:						
Residential mortgage	—	27	27	—	—	—
Consumer:						
Home equity (d)	1	1	2	—	2	2
Other consumer	—	1	1	—	—	—
Total consumer	1	2	3	—	2	2
Total retail loans	1	29	30	—	2	2
Total loans	\$ 44	\$ 29	\$ 73	\$ 8	\$ 2	\$ 10

- (a) Under the provisions of the CARES Act, qualifying COVID-19-related modifications, primarily principal deferrals, were not considered TDRs during the year ended December 31, 2021.
- (b) Primarily represents loan balances where terms were extended by more than an insignificant time period, typically more than 180 days, at or above contractual interest rates. Also includes commercial loans restructured in bankruptcy.
- (c) Primarily loans secured by owner-occupied real estate.
- (d) Includes bankruptcy loans for which the court has discharged the borrower's obligation and the borrower has not reaffirmed the debt.

The Corporation charges interest on principal balances outstanding during deferral periods. Additionally, none of the modifications involved forgiveness of principal. There were no significant commitments to lend additional funds to borrowers whose terms have been modified in TDRs at December 31, 2022 and 2021. On an ongoing basis, the Corporation monitors the performance of modified loans to their restructured terms. The allowance for loan losses continues to be reassessed on the basis of an individual evaluation of the loan.

For principal deferrals, incremental deterioration in the credit quality of the loan, represented by a downgrade in the risk rating of the loan, for example, due to missed interest payments or a reduction of collateral value, is considered a subsequent default. For interest rate reductions, a subsequent payment default is defined in terms of delinquency, when a principal or interest payment is 90 days past due. Of the TDRs modified during the years ended December 31, 2022 and 2021, there were \$6 million of subsequent defaults of principal deferrals and no interest rate reductions for the year ended December 31, 2022, compared to no principal deferrals or interest rate reductions for the comparable period in 2021.

NOTE 5 - SIGNIFICANT GROUP CONCENTRATIONS OF CREDIT RISK

Concentrations of credit risk may exist when a number of borrowers are engaged in similar activities, or activities in the same geographic region, and have similar economic characteristics that would cause them to be similarly impacted by changes in economic or other conditions. Concentrations of both on-balance sheet and off-balance sheet credit risk are controlled and monitored as part of credit policies. The Corporation is a regional financial services holding company with a geographic concentration of its on-balance-sheet and off-balance-sheet activities in Michigan, California and Texas.

At December 31, 2022, the Corporation's concentration of credit risk with the commercial real estate industry, which includes a portfolio of real estate construction and commercial mortgage loans, represented 31 percent of total loans. The following table summarizes the Corporation's commercial real estate loan portfolio by loan category.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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(in millions)

December 31	2022	2021
Real estate construction loans:		
Commercial Real Estate business line (a)	\$ 2,505	\$ 2,391
Other business lines (b)	600	557
Total real estate construction loans	3,105	2,948
Commercial mortgage loans:		
Commercial Real Estate business line (a)	4,681	3,338
Other business lines (b)	8,625	7,917
Total commercial mortgage loans	13,306	11,255
Total commercial real estate loans	\$ 16,411	\$ 14,203
Total unused commitments on commercial real estate loans	\$ 6,602	\$ 4,030

(a) Primarily loans to real estate developers.

(b) Primarily loans secured by owner-occupied real estate.

The Corporation also has a concentration of credit risk with the automotive industry, which represented 12 percent of total loans at December 31, 2022. Outstanding loans, included in commercial loans on the Consolidated Balance Sheets, and total exposure (outstanding loans, unused commitments and standby letters of credit) to companies related to the automotive industry were as follows:

(in millions)

December 31	2022	2021
Automotive loans:		
Production	\$ 1,068	\$ 1,112 (a)
Dealer	5,367	4,162
Total automotive loans	\$ 6,435	\$ 5,274
Total automotive exposure:		
Production	\$ 2,028	\$ 2,041 (a)
Dealer	10,910	10,665
Total automotive exposure	\$ 12,938	\$ 12,706

(a) Excludes PPP loans.

NOTE 6 - PREMISES AND EQUIPMENT

A summary of premises and equipment by major category follows:

(in millions)

December 31	2022	2021
Land	\$ 81	\$ 85
Buildings and improvements	737	852
Furniture and equipment	518	516
Total cost	1,336	1,453
Less: Accumulated depreciation and amortization	(936)	(999)
Net book value	\$ 400	\$ 454

The Corporation conducts a portion of its business from leased facilities and leases certain equipment. Refer to Note 25 for more information on leased facilities and equipment.

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NOTE 7 - GOODWILL AND CORE DEPOSIT INTANGIBLES

The following table summarizes the carrying value of goodwill by reporting unit for the years ended December 31, 2022 and 2021.

(in millions)

December 31	2022	2021
Commercial Bank	\$ 473	\$ 473
Retail Bank	101	101
Wealth Management	61	61
Total	\$ 635	\$ 635

The Corporation performs its annual evaluation of goodwill impairment in the third quarter of each year and may elect to perform a quantitative impairment analysis or first conduct a qualitative analysis to determine if a quantitative analysis is necessary. In addition, the Corporation evaluates goodwill impairment on an interim basis if events or changes in circumstances between annual tests indicate additional testing may be warranted to determine if goodwill might be impaired.

In 2022 and 2021, the annual test of goodwill impairment was performed as of the beginning of the third quarter, and in both periods, a qualitative assessment resulted in the Corporation determining goodwill was not impaired, as it was more likely than not that the fair value of each reporting unit exceeded its carrying value.

The Corporation recorded amortization expense related to the core deposit intangible of \$1 million for both the years ended December 31, 2021 and 2020. The core deposit intangible was fully amortized at December 31, 2021.

NOTE 8 - DERIVATIVE AND CREDIT-RELATED FINANCIAL INSTRUMENTS

In the normal course of business, the Corporation enters into various transactions involving derivative and credit-related financial instruments to manage exposure to fluctuations in interest rate, foreign currency and other market risks and to meet the financing needs of customers (customer-initiated derivatives). These financial instruments involve, to varying degrees, elements of market and credit risk. Market and credit risk are included in the determination of fair value.

Market risk is the potential loss that may result from movements in interest rates, foreign currency exchange rates or energy commodity prices that cause an unfavorable change in the value of a financial instrument. The Corporation manages this risk by establishing monetary exposure limits and monitoring compliance with those limits. Market risk inherent in interest rate and energy contracts entered into on behalf of customers is mitigated by taking offsetting positions, except in those circumstances when the amount, tenor and/or contract rate level results in negligible economic risk, whereby the cost of purchasing an offsetting contract is not economically justifiable. The Corporation mitigates most of the inherent market risk in foreign exchange contracts entered into on behalf of customers by taking offsetting positions and manages the remainder through individual foreign currency position limits and aggregate value-at-risk limits. These limits are established annually and positions are monitored quarterly. Market risk inherent in derivative instruments held or issued for risk management purposes is typically offset by changes in the fair value of the assets or liabilities being hedged.

Credit risk is the possible loss that may occur in the event of nonperformance by the counterparty to a financial instrument. The Corporation attempts to minimize credit risk arising from customer-initiated derivatives by evaluating the creditworthiness of each customer, adhering to the same credit approval process used for traditional lending activities and obtaining collateral as deemed necessary. Derivatives with dealer counterparties are either cleared through a clearinghouse or settled directly with a single counterparty. For derivatives settled directly with dealer counterparties, the Corporation utilizes counterparty risk limits and monitoring procedures as well as master netting arrangements and bilateral collateral agreements to facilitate the management of credit risk.

Included in the fair value of derivative instruments are credit valuation adjustments reflecting counterparty credit risk. These adjustments are determined by applying a credit spread for the counterparty or the Corporation, as appropriate, to the total expected exposure of the derivative. Master netting arrangements effectively reduce credit valuation adjustments by permitting settlement of positive and negative positions and offset cash collateral held with the same counterparty on a net basis. Bilateral collateral agreements require daily exchange of cash or highly rated securities issued by the U.S. Treasury or other U.S. government entities to collateralize amounts due to either party. At December 31, 2022, counterparties with bilateral collateral agreements deposited \$185 million of cash with the Corporation to secure the fair value of contracts in an unrealized gain position, and the Corporation had pledged \$202 million of marketable investment securities and posted \$4 million of cash as collateral for contracts in an unrealized loss position. For those counterparties not covered under bilateral collateral agreements, collateral is obtained, if deemed necessary, based on the results of management's credit evaluation of the counterparty. Collateral varies, but may include cash, investment securities, accounts receivable, equipment or real estate.

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Derivative Instruments

Derivative instruments utilized by the Corporation are negotiated over-the-counter and primarily include swaps, caps and floors, forward contracts and options, each of which may relate to interest rates, energy commodity prices or foreign currency exchange rates. Swaps are agreements in which two parties periodically exchange cash payments based on specified indices applied to a specified notional amount until a stated maturity. Caps and floors are agreements which entitle the buyer to receive cash payments based on the difference between a specified reference rate or price and an agreed strike rate or price, applied to a specified notional amount until a stated maturity. Forward contracts are over-the-counter agreements to buy or sell an asset at a specified future date and price. Options are similar to forward contracts except the purchaser has the right, but not the obligation, to buy or sell the asset during a specified period or at a specified future date.

Over-the-counter contracts are tailored to meet the needs of the counterparties involved and, therefore, contain a greater degree of credit risk and liquidity risk than exchange-traded contracts, which have standardized terms and readily available price information. The Corporation reduces exposure to market and liquidity risks from over-the-counter derivative instruments entered into for risk management purposes, and transactions entered into to mitigate the market risk associated with customer-initiated transactions, by taking offsetting positions with investment grade domestic and foreign financial institutions and subjecting counterparties to credit approvals, limits and collateral monitoring procedures similar to those used in making other extensions of credit. In addition, certain derivative contracts executed bilaterally with a dealer counterparty in the over-the-counter market are cleared through a clearinghouse, whereby the clearinghouse becomes the counterparty to the transaction.

The following table presents the composition of the Corporation's derivative instruments held or issued for risk management purposes or in connection with customer-initiated and other activities at December 31, 2022 and 2021. The table excludes a derivative related to the Corporation's 2008 sale of its remaining ownership of Visa shares and includes accrued interest receivable and payable.

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<i>(in millions)</i>	December 31, 2022			December 31, 2021		
	Notional/ Contract Amount (a)	Fair Value		Notional/ Contract Amount (a)	Fair Value	
		Gross Derivative Assets	Gross Derivative Liabilities		Gross Derivative Assets	Gross Derivative Liabilities
Risk management purposes						
Derivatives designated as hedging instruments						
Interest rate contracts:						
Fair value swaps - receive fixed/ pay floating	\$ 3,150	\$ —	\$ —	\$ 2,650	\$ —	\$ —
Cash flow swaps - receive fixed/ pay floating (b)	26,600	—	50	8,050	—	—
Derivatives used as economic hedges						
Foreign exchange contracts:						
Spot, forwards and swaps	392	1	3	452	—	2
Total risk management purposes	30,142	1	53	11,152	—	2
Customer-initiated and other activities						
Interest rate contracts:						
Caps and floors written	924	—	25	809	—	3
Caps and floors purchased	924	25	—	809	3	—
Swaps	18,450	181	569	19,382	236	66
Total interest rate contracts	20,298	206	594	21,000	239	69
Energy contracts:						
Caps and floors written	4,051	—	430	1,779	—	203
Caps and floors purchased	4,051	431	—	1,779	204	—
Swaps	6,419	589	576	4,212	466	459
Total energy contracts	14,521	1,020	1,006	7,770	670	662
Foreign exchange contracts:						
Spot, forwards, options and swaps	2,704	52	42	1,716	19	14
Total customer-initiated and other activities	37,523	1,278	1,642	30,486	928	745
Total gross derivatives	\$ 67,665	1,279	1,695	\$ 41,638	928	747
Amounts offset in the Consolidated Balance Sheets:						
Netting adjustment - Offsetting derivative assets/liabilities		(644)	(644)		(187)	(187)
Netting adjustment - Cash collateral received/posted		(180)	(4)		(15)	(452)
Net derivatives included in the Consolidated Balance Sheets (c)		455	1,047		726	108
Amounts not offset in the Consolidated Balance Sheets:						
Marketable securities pledged under bilateral collateral agreements		(70)	(202)		—	(52)
Net derivatives after deducting amounts not offset in the Consolidated Balance Sheets		\$ 385	\$ 845		\$ 726	\$ 56

(a) Notional or contractual amounts, which represent the extent of involvement in the derivatives market, are used to determine the contractual cash flows required in accordance with the terms of the agreement. These amounts are typically not exchanged, significantly exceed amounts subject to credit or market risk and are not reflected on the Consolidated Balance Sheets.

(b) December 31, 2022 included \$4.6 billion of forward starting swaps that will become effective on their contractual start dates in 2023 and 2024.

(c) Net derivative assets are included in accrued income and other assets and net derivative liabilities are included in accrued expenses and other liabilities on the Consolidated Balance Sheets. Included in the fair value of net derivative assets and net derivative liabilities are credit valuation adjustments reflecting counterparty credit risk and credit risk of the Corporation. The fair value of net derivative assets included credit valuation adjustments for counterparty credit risk of \$2 million and \$9 million at December 31, 2022 and 2021, respectively.

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Risk Management

The Corporation's derivative instruments used for managing interest rate risk include cash flow hedging strategies that convert variable-rate loans to fixed rates and fair value hedging strategies that convert fixed-rate medium-and long-term debt to variable rates. Interest and fees on loans included \$(25) million, \$95 million and \$70 million of cash flow hedge (loss) income for the years ended December 31, 2022, 2021 and 2020, respectively.

The following table details the effects of fair value hedging on the Consolidated Statements of Comprehensive Income.

<i>(in millions)</i> Years Ended December 31	Interest on Medium- and Long-Term Debt					
	2022		2021		2020	
Total interest on medium-and long-term debt (a)	\$	87	\$	35	\$	80
Fair value hedging relationships:						
Interest rate contracts:						
Hedged items		112		102		109
Derivatives designated as hedging instruments		(25)		(68)		(51)

(a) Includes the effects of hedging.

Centrally-cleared derivative positions are settled daily based on derivative fair values and the party receiving net settlement amounts pays price alignment, based on an earning rate, to the party making settlement payments. Accordingly, the Corporation may recognize risk management hedging income consisting of price alignment income or expense depending on the fair value of its positions. Price alignment income was reported in other noninterest income on the Consolidated Statements of Income and totaled \$8 million for the year ending December 31, 2022 and was insignificant for the years ending December 31, 2021 and 2020.

For information on accumulated net (losses) gains on cash flow hedges, refer to Note 14.

The following tables summarize the expected weighted average remaining maturity of the notional amount of risk management interest rate swaps, the weighted average interest rates associated with amounts expected to be received or paid on interest rate swap agreements, and for fair value swaps, the carrying amount of the related hedged items, as of December 31, 2022 and 2021.

Cash flow swaps - receive fixed/pay floating rate on variable-rate loans

<i>(dollar amounts in millions)</i>	December 31, 2022	December 31, 2021
Weighted average:		
Time to maturity (in years)	4.6	2.4
Receive rate (a)	2.35 %	1.84 %
Pay rate (a), (b)	4.07	0.10

(a) Excludes forward starting swaps not effective as of the period shown. December 31, 2022 excluded \$4.6 billion of forward starting swaps. December 31, 2021 excluded \$3.0 billion of forward starting swaps.

(b) Variable rates paid on receive fixed swaps designated as cash flow hedges are based on one-month LIBOR, BSBY or Secured Overnight Financing Rate (SOFR) rates in effect at December 31, 2022 and 2021. Derivative contracts with maturity dates beyond the LIBOR cessation date will fall back to the daily SOFR with a spread adjustment.

Fair value swaps - receive fixed/pay floating rate on medium- and long-term debt

<i>(dollar amounts in millions)</i>	December 31, 2022	December 31, 2021
Carrying value of hedged items (a)	3,024	2,796
Weighted average:		
Time to maturity (in years)	3.9	3.6
Receive rate	3.52 %	3.68 %
Pay rate (b)	4.90	1.08

(a) Included \$(124) million and \$145 million of cumulative hedging adjustments at December 31, 2022 and 2021, respectively, which included \$4 million and \$5 million, respectively, of hedging adjustment on a discontinued hedging relationship.

(b) Floating rates paid on receive fixed swaps designated as fair value hedges are based on one-month LIBOR rates in effect at December 31, 2022 and 2021. Derivative contracts with maturity dates beyond the LIBOR cessation date will fall back to the daily SOFR with a spread adjustment.

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Customer-Initiated and Other

The Corporation enters into derivative transactions at the request of customers and generally takes offsetting positions with dealer counterparties to mitigate the inherent market risk. Income primarily results from the spread between the customer derivative and the offsetting dealer position.

For customer-initiated foreign exchange contracts where offsetting positions have not been taken, the Corporation manages the remaining inherent market risk through individual foreign currency position limits and aggregate value-at-risk limits. These limits are established annually and reviewed quarterly. For those customer-initiated derivative contracts which were not offset or where the Corporation holds a position within the limits described above, the Corporation recognized no net gains and losses in other noninterest income on the Consolidated Statements of Income for the years ending December 31, 2022, 2021 and 2020, respectively.

Fair values of customer-initiated and other derivative instruments represent the net unrealized gains or losses on such contracts and are recorded on the Consolidated Balance Sheets. Changes in fair value are recognized on the Consolidated Statements of Income. The net gains recognized in income on customer-initiated derivative instruments, net of the impact of offsetting positions included in derivative income, were as follows:

<i>(in millions)</i>	Years Ended December 31,		
	2022	2021	2020
Interest rate contracts	\$ 34	\$ 36	\$ 26
Energy contracts	28	18	1
Foreign exchange contracts	47	45	40
Total	\$ 109	\$ 99	\$ 67

Credit-Related Financial Instruments

The Corporation issues off-balance sheet financial instruments in connection with commercial and consumer lending activities. The Corporation's credit risk associated with these instruments is represented by the contractual amounts indicated in the following table.

<i>(in millions)</i>	December 31	
	2022	2021
Unused commitments to extend credit:		
Commercial and other	\$ 30,800	\$ 25,910
Bankcard, revolving credit and home equity loan commitments	4,017	3,554
Total unused commitments to extend credit	\$ 34,817	\$ 29,464
Standby letters of credit	\$ 3,712	\$ 3,378
Commercial letters of credit	39	44

The Corporation maintains an allowance to cover current expected credit losses inherent in lending-related commitments, including unused commitments to extend credit, letters of credit and financial guarantees. The allowance for credit losses on lending-related commitments, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, was \$51 million and \$30 million at December 31, 2022 and 2021, respectively.

Unused Commitments to Extend Credit

Commitments to extend credit are legally binding agreements to lend to a customer, provided there is no violation of any condition established in the contract. These commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since many commitments expire without being drawn upon, the total contractual amount of commitments does not necessarily represent future cash requirements of the Corporation. Commercial and other unused commitments are primarily variable rate commitments. The allowance for credit losses on lending-related commitments included \$44 million and \$27 million at December 31, 2022 and 2021, respectively, for expected credit losses inherent in the Corporation's unused commitments to extend credit.

Standby and Commercial Letters of Credit

Standby letters of credit represent conditional obligations of the Corporation which guarantee the performance of a customer to a third party. Standby letters of credit are primarily issued to support public and private borrowing arrangements, including commercial paper, bond financing and similar transactions. Commercial letters of credit are issued to finance foreign or domestic trade transactions. These contracts expire in decreasing amounts through the year 2029. The Corporation may enter

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into participation arrangements with third parties that effectively reduce the maximum amount of future payments which may be required under standby and commercial letters of credit. These risk participations covered \$107 million and \$98 million at December 31, 2022 and 2021, respectively, of the \$3.8 billion and \$3.4 billion of standby and commercial letters of credit outstanding at December 31, 2022 and 2021, respectively.

The carrying value of the Corporation's standby and commercial letters of credit, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, totaled \$35 million at December 31, 2022, including \$28 million in deferred fees and \$7 million in the allowance for credit losses on lending-related commitments. At December 31, 2021, the comparable amounts were \$32 million, \$29 million and \$3 million, respectively.

The following table presents a summary of criticized standby and commercial letters of credit at December 31, 2022 and 2021. The Corporation's criticized list is consistent with the Special Mention, Substandard and Doubtful categories defined by regulatory authorities. The Corporation manages credit risk through underwriting, periodically reviewing and approving its credit exposures using Board committee approved credit policies and guidelines.

<i>(dollar amounts in millions)</i>	December 31, 2022	December 31, 2021
Total criticized standby and commercial letters of credit	\$ 37	\$ 37
As a percentage of total outstanding standby and commercial letters of credit	1.0 %	1.1 %

Other Credit-Related Financial Instruments

The Corporation enters into credit risk participation agreements, under which the Corporation assumes credit exposure associated with a borrower's performance related to certain interest rate derivative contracts. The Corporation is not a party to the interest rate derivative contracts and only enters into these credit risk participation agreements in instances in which the Corporation is also a party to the related loan participation agreement for such borrowers. The Corporation manages its credit risk on the credit risk participation agreements by monitoring the creditworthiness of the borrowers, which is based on the normal credit review process as if the Corporation had entered into the derivative instruments directly with the borrower. The notional amount of such credit risk participation agreements reflects the pro-rata share of the derivative instrument, consistent with its share of the related participated loan. The total notional amount of the credit risk participation agreements was approximately \$951 million and \$1.1 billion at December 31, 2022 and 2021, respectively, and the fair value was insignificant at December 31, 2022 and \$1 million at December 31, 2021. The maximum estimated exposure to these agreements, as measured by projecting a maximum value of the guaranteed derivative instruments, assuming 100 percent default by all obligors on the maximum values, was insignificant at December 31, 2022 and \$30 million at December 31, 2021. In the event of default, the lead bank has the ability to liquidate the assets of the borrower, in which case the lead bank would be required to return a percentage of the recouped assets to the participating banks. As of December 31, 2022, the weighted average remaining maturity of outstanding credit risk participation agreements was 3.8 years.

In 2008, the Corporation sold its remaining ownership of Visa Class B shares and entered into a derivative contract. Under the terms of the derivative contract, the Corporation will compensate the counterparty primarily for dilutive adjustments made to the conversion factor of the Visa Class B shares to Class A shares based on the ultimate outcome of litigation involving Visa. Conversely, the Corporation will be compensated by the counterparty for any increase in the conversion factor from anti-dilutive adjustments. The notional amount of the derivative contract was equivalent to approximately 780,000 Visa Class B Shares. The fair value of the derivative liability, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, was \$12 million and \$13 million at December 31, 2022 and December 31, 2021, respectively.

NOTE 9 - VARIABLE INTEREST ENTITIES (VIEs)

The Corporation evaluates its interest in certain entities to determine if these entities meet the definition of a VIE and whether the Corporation is the primary beneficiary and should consolidate the entity based on the variable interests it held both at inception and when there is a change in circumstances that requires a reconsideration.

The Corporation holds ownership interests in funds in the form of limited partnerships or limited liability companies (LLCs) investing in affordable housing projects that qualify for the low-income housing tax credit (LIHTC). The Corporation also directly invests in limited partnerships and LLCs which invest in community development projects, which generate similar tax credits to investors (other tax credit entities). As an investor, the Corporation obtains income tax credits and deductions from the operating losses of these tax credit entities. These tax credit entities meet the definition of a VIE; however, the Corporation is not the primary beneficiary of the entities, as the general partner or the managing member has both the power to direct the activities that most significantly impact the economic performance of the entities and the obligation to absorb losses or the right to receive benefits that could be significant to the entities.

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The Corporation accounts for its interests in LIHTC entities using the proportional amortization method. Ownership interests in other tax credit entities are accounted for under either the cost or equity method. Exposure to loss as a result of the Corporation's involvement in LIHTC entities and other tax credit entities at December 31, 2022 was limited to \$475 million and \$31 million, respectively.

Investment balances, including all legally binding commitments to fund future investments, are included in accrued income and other assets on the Consolidated Balance Sheets. A liability is recognized in accrued expenses and other liabilities on the Consolidated Balance Sheets for all legally binding unfunded commitments to fund tax credit entities (\$208 million at December 31, 2022). Amortization and other write-downs of LIHTC investments are presented on a net basis as a component of the provision for income taxes on the Consolidated Statements of Income, while amortization and write-downs of other tax credit investments are recorded in other noninterest income. The income tax credits and deductions are recorded as a reduction of income tax expense and a reduction of federal income taxes payable.

The Corporation provided no financial or other support that was not contractually required to any of the above VIEs during the years ended December 31, 2022, 2021 and 2020.

The following table summarizes the impact of these tax credit entities on the Corporation's Consolidated Statements of Income.

(in millions)

Years Ended December 31	2022	2021	2020
Other noninterest income:			
Amortization of other tax credit investments	\$ —	\$ 1	\$ 1
Provision for income taxes:			
Amortization of LIHTC Investments	72	71	67
Low income housing tax credits	(68)	(68)	(63)
Other tax benefits related to tax credit entities	(18)	(17)	(16)
Total provision for income taxes	\$ (14)	\$ (14)	\$ (12)

For further information on the Corporation's consolidation policy, see Note 1.

NOTE 10 - DEPOSITS

At December 31, 2022, the scheduled maturities of certificates of deposit and other deposits with a stated maturity were as follows:

(in millions)

Years Ending December 31		
2023	\$	1,789
2024		88
2025		24
2026		18
2027		13
Thereafter		5
Total	\$	1,937

A maturity distribution of domestic certificates of deposit of \$100,000 and over follows:

(in millions)

December 31	2022	2021
Three months or less	\$ 220	\$ 436
Over three months to six months	136	314
Over six months to twelve months	590	319
Over twelve months	49	74
Total	\$ 995	\$ 1,143

The aggregate amount of domestic certificates of deposit that meet or exceed the current FDIC insurance limit of \$250,000 was \$478 million and \$627 million at December 31, 2022 and 2021, respectively. All foreign office time deposits were in denominations of \$250,000 or more and totaled \$51 million and \$50 million at December 31, 2022 and 2021, respectively.

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NOTE 11 - SHORT-TERM BORROWINGS

Federal funds purchased and securities sold under agreements to repurchase generally mature within one to four days from the transaction date. Other short-term borrowings, which may consist of borrowed securities and short-term notes, generally mature within one to 120 days from the transaction date. At December 31, 2022, other short-term borrowings consisted of advances from the Federal Home Loan Bank (FHLB) of Dallas, Texas, which provides short- and long-term funding to its members through advances collateralized by real estate-related loans, certain government agency-backed securities and other eligible assets. Actual borrowing capacity is contingent on the amount of collateral pledged to the FHLB. At December 31, 2022, \$9.5 billion of real estate-related loans and \$1.0 billion of investment securities were pledged to the FHLB as collateral for the short-term advances and provided an additional \$7.2 billion for potential future borrowings.

At December 31, 2022, Comerica Bank (the Bank), a wholly-owned subsidiary of the Corporation, had pledged loans totaling \$24.5 billion, which provided for up to \$19.6 billion of available collateralized borrowing with the FRB.

The following table provides a summary of short-term borrowings.

<i>(dollar amounts in millions)</i>	Federal Funds Purchased and Securities Sold Under Agreements to Repurchase		Other Short-term Borrowings	
December 31, 2022				
Amount outstanding at year-end	\$	11	\$	3,200
Weighted average interest rate at year-end		4.32 %		4.54 %
Maximum month-end balance during the year	\$	1,106	\$	3,200
Average balance outstanding during the year		82		354
Weighted average interest rate during the year		3.28 %		4.08 %
December 31, 2021				
Amount outstanding at year-end	\$	—	\$	—
Weighted average interest rate at year-end		— %		— %
Maximum month-end balance during the year	\$	2	\$	—
Average balance outstanding during the year		2		—
Weighted average interest rate during the year		0.06 %		— %
December 31, 2020				
Amount outstanding at year-end	\$	—	\$	—
Weighted average interest rate at year-end		— %		— %
Maximum month-end balance during the year	\$	1,513	\$	1,250
Average balance outstanding during the year		30		284
Weighted average interest rate during the year		0.97 %		0.25 %

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NOTE 12 - MEDIUM- AND LONG-TERM DEBT

Medium- and long-term debt is summarized as follows:

<i>(in millions)</i>	2022	2021
December 31		
Parent company		
Subordinated notes:		
3.80% subordinated notes due 2026 (a)	\$ 237	\$ 265
Medium- and long-term notes:		
3.70% notes due 2023 (a)	841	877
4.00% notes due 2029 (a)	515	594
Total medium- and long-term notes	1,356	1,471
Total parent company	1,593	1,736
Subsidiaries		
Subordinated notes:		
4.00% subordinated notes due 2025 (a)	331	363
7.875% subordinated notes due 2026 (a)	165	190
5.332% subordinated notes due 2033 (a)	459	—
Total subordinated notes	955	553
Medium- and long-term notes:		
2.50% notes due 2024 (a)	476	507
Total subsidiaries	1,431	1,060
Total medium- and long-term debt	\$ 3,024	\$ 2,796

(a) *The fixed interest rates on these notes have been swapped to a variable rate and designated in a hedging relationship. Accordingly, carrying value has been adjusted to reflect the change in the fair value of the debt as a result of changes in the benchmark rate.*

Subordinated notes with remaining maturities greater than one year qualify as Tier 2 capital.

Comerica Bank (the Bank), a wholly-owned subsidiary of the Corporation, is a member of the FHLB, which provides short- and long-term funding to its members through advances collateralized by real estate-related assets. The Bank held no outstanding long-term advances at both December 31, 2022 and 2021.

In third quarter 2022, the Bank issued \$500 million of fixed-to-floating rate subordinated notes due in 2033, with a rate of 5.332% for the first ten years. The rate on the subordinated notes will reset on August 25, 2032 to Secured Overnight Financing Rate (SOFR) plus 261 basis points until called or matured. Additionally, the Bank entered into a fair value fixed-to-floating rate swap in which the Bank received a fixed rate of 2.67% and will pay a floating rate based on the SOFR for the first 10 years.

Unamortized debt issuance costs deducted from the carrying amount of medium- and long-term debt totaled \$9 million and \$7 million at December 31, 2022 and 2021, respectively.

At December 31, 2022, the principal maturities of medium- and long-term debt were as follows:

<i>(in millions)</i>	
Years Ending December 31	
2023	\$ 850
2024	500
2025	350
2026	400
2027	—
Thereafter	1,050
Total	\$ 3,150

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NOTE 13 - SHAREHOLDERS' EQUITY

In March 2020, as the economic climate grew increasingly uncertain, the Corporation temporarily suspended its share repurchase program, initially authorized in 2010 by the Board of Directors of the Corporation, with a focus on deploying capital to meet customers' growing financial requirements. In the second quarter 2021, share repurchases were resumed under the share repurchase program, including an Accelerated Share Repurchase transaction (ASR). On April 27, 2021, the Corporation's Board of Directors approved the authorization to repurchase up to an additional 10 million shares of its outstanding common stock, including the ASR.

Repurchases of common stock under the share repurchase program totaled 377 thousand shares at an average price paid of \$92.61 in 2022, 9.5 million shares at an average price paid of \$75.82 per share in 2021 and 3.2 million shares at an average price paid of \$58.55 per share in 2020. There is no expiration date for the share repurchase program. During the year ended December 31, 2022, the Corporation repurchased \$35 million under the share repurchase program.

At December 31, 2022, the Corporation had 4.2 million shares of common stock reserved for stock option exercises and restricted stock unit vesting.

In May 2020, the Corporation issued and sold 400,000 depositary shares, each representing a 1/100th ownership interest in a share of 5.625% Fixed-Rate Reset Non-Cumulative Perpetual Preferred Stock, Series A, without par value, with a liquidation preference of \$100,000 per share (equivalent of 1,000 per depositary share). Holders of the depositary shares will be entitled to all proportional rights and preferences of the Series A preferred stock (including dividend, voting, redemption and liquidation rights). The \$400 million issuance yielded \$394 million in proceeds net of underwriting discounts and offering expenses. Dividends on the Series A preferred stock accrue on a non-cumulative basis and are payable in arrears when, as and if authorized by the Corporation's Board of Directors or a duly authorized committee of the Board and declared by the Corporation, on the first day of January, April, July and October of each year, and commenced on October 1, 2020. Under the terms of the Series A preferred stock, the ability of the Corporation to pay dividends on, make distributions with respect to, or to repurchase, redeem or acquire its common stock or any other stock ranking on parity with or junior to the Series A preferred stock, is subject to restrictions in the event that the Corporation does not declare and either pay or set aside a sum sufficient for payment of dividends on the Series A preferred stock for the immediately preceding dividend period. The Series A preferred stock is perpetual and has no maturity date, but is redeemable by the Corporation at specified times subject to regulatory considerations.

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NOTE 14 - ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

The following table presents a reconciliation of the changes in the components of accumulated other comprehensive (loss) income and details the components of other comprehensive (loss) income for the years ended December 31, 2022, 2021 and 2020, including the amount of income tax (benefit) expense allocated to each component of other comprehensive (loss) income.

(in millions)

Years Ended December 31	2022	2021	2020
Accumulated net unrealized losses on investment securities:			
Balance at beginning of period, net of tax	\$ (99)	\$ 211	\$ 65
Net unrealized (losses) gains arising during the period	(2,903)	(406)	191
Less: (Benefit) provision for income taxes	(683)	(96)	45
Change in net unrealized (losses) gains on investment securities, net of tax	(2,220)	(310)	146
Balance at end of period, net of tax	\$ (2,319)	\$ (99)	\$ 211
Accumulated net (losses) gains on cash flow hedges:			
Balance at beginning of period, net of tax	\$ 55	\$ 155	\$ 34
Net cash flow hedge (losses) gains arising during the period	(1,329)	(35)	229
Less: (Benefit) provision for income taxes	(313)	(8)	56
Change in net cash flow hedge (losses) gains arising during the period, net of tax	(1,016)	(27)	173
Less:			
Net cash flow (losses) gains included in interest and fees on loans	(25)	95	70
Less: (Benefit) provision for income taxes	(6)	22	18
Reclassification adjustment for net cash flow hedge (losses) gains included in net income, net of tax	(19)	73	52
Change in net cash flow hedge (losses) gains, net of tax	(997)	(100)	121
Balance at end of period, net of tax (a)	\$ (942)	\$ 55	\$ 155
Accumulated defined benefit pension and other postretirement plans adjustment:			
Balance at beginning of period, net of tax	\$ (168)	\$ (302)	\$ (415)
Actuarial (loss) gain arising during the period	(415)	159	128
Prior service credit arising during the period	—	1	—
Net defined benefit pension and other postretirement plans adjustment arising during the period	(415)	160	128
Less: (Benefit) provision for income taxes	(98)	38	31
Net defined benefit pension and other postretirement plans adjustment arising during the period, net of tax	(317)	122	97
Amounts recognized in other noninterest expenses:			
Amortization of actuarial net loss	28	40	47
Amortization of prior service credit	(23)	(25)	(27)
Total amounts recognized in other noninterest expenses	5	15	20
Less: Provision for income taxes	1	3	4
Adjustment for amounts recognized as components of net periodic benefit credit during the period, net of tax	4	12	16
Change in defined benefit pension and other postretirement plans adjustment, net of tax	(313)	134	113
Balance at end of period, net of tax	\$ (481)	\$ (168)	\$ (302)
Total accumulated other comprehensive (loss) income at end of period, net of tax	\$ (3,742)	\$ (212)	\$ 64

(a) The Corporation expects to reclassify \$428 million of losses, net of tax, from accumulated other comprehensive loss to earnings over the next twelve months if interest yield curves and notional amounts remain at December 31, 2022 levels.

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NOTE 15 - NET INCOME PER COMMON SHARE

Basic and diluted net income per common share are presented in the following table.

(in millions, except per share data)

Years Ended December 31	2022	2021	2020
Basic and diluted			
Net income	\$ 1,151	\$ 1,168	\$ 497
Less:			
Income allocated to participating securities	6	5	2
Preferred stock dividends	23	23	13
Net income attributable to common shares	\$ 1,122	\$ 1,140	\$ 482
Basic average common shares	131	135	139
Basic net income per common share	\$ 8.56	\$ 8.45	\$ 3.45
Basic average common shares	131	135	139
Dilutive common stock equivalents:			
Net effect of the assumed exercise of stock awards	2	2	1
Diluted average common shares	133	137	140
Diluted net income per common share	\$ 8.47	\$ 8.35	\$ 3.43

Declared dividends on preferred stock are excluded from net income attributable to common shares. Refer to Note 13 for further information on preferred stock.

The following average shares related to outstanding options to purchase shares of common stock were not included in the computation of diluted net income per common share because the options were anti-dilutive for the period.

(average outstanding options in thousands)

Years Ended December 31	2022	2021	2020
Average outstanding options	543	438	1,498
Range of exercise prices	\$70.18 - \$95.25	\$79.01 - \$95.25	\$49.20 - \$95.25

NOTE 16 - SHARE-BASED COMPENSATION

Share-based compensation expense is charged to salaries and benefits expense on the Consolidated Statements of Income. The components of share-based compensation expense for all share-based compensation plans and related tax benefits are as follows:

(in millions)

Years Ended December 31	2022	2021	2020
Total share-based compensation expense	\$ 60	\$ 41	\$ 24
Related tax benefits recognized in net income	\$ 14	\$ 10	\$ 6

The following table summarizes unrecognized compensation expense for all share-based plans.

(dollar amounts in millions)

	December 31, 2022
Total unrecognized share-based compensation expense	\$ 38
Weighted-average expected recognition period (in years)	2.1

The Corporation has share-based compensation plans under which it awards shares of restricted stock units to executive officers, directors and key personnel and stock options to executive officers and key personnel of the Corporation and its subsidiaries. Restricted stock units fully vest after a period ranging from three years to five years, and stock options fully vest after four years. A majority of share-based compensation awards include a retirement eligibility clause where qualified employees are exempt from the service requirements of the award. This generally results in the recognition of compensation expense at the grant date for retirement eligible employees. The maturity of each option is determined at the date of grant; however, no options may be exercised later than ten years from the date of grant. The options may have restrictions regarding exercisability. The plans provide for a grant of up to 7.7 million common shares, plus shares under certain plans that are

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forfeited, expire or are canceled, which become available for re-grant. At December 31, 2022, over 4.5 million shares were available for grant.

The Corporation used a binomial model to value stock options granted in the periods presented. Option valuation models require several inputs, including the expected stock price volatility, and changes in input assumptions can materially affect the fair value estimates. The model used may not necessarily provide a reliable single measure of the fair value of stock options. The risk-free interest rate assumption used in the binomial option-pricing model as outlined in the table below was based on the federal ten-year treasury interest rate. The expected dividend yield was based on the historical and projected long-term dividend yield patterns of the Corporation's common shares. Expected volatility assumptions considered both the historical volatility of the Corporation's common stock over a ten-year period and implied volatility based on actively traded options on the Corporation's common stock with pricing terms and trade dates similar to the stock options granted. Expected option life was based on historical exercise activity over the contractual term of the option grant (ten years), excluding certain forced transactions.

The estimated weighted-average grant-date fair value per option and the underlying binomial option-pricing model assumptions are summarized in the following table:

Years Ended December 31	2022	2021	2020
Weighted-average grant-date fair value per option	\$ 25.31	\$ 18.36	\$ 13.03
Weighted-average assumptions:			
Risk-free interest rates	1.78 %	1.05 %	1.65 %
Expected dividend yield	4.00	4.00	4.14
Volatility	34	39	27
Expected option life (in years)	8.0	7.8	8.4

A summary of the Corporation's stock option activity and related information for the year ended December 31, 2022 follows:

	Number of Options (in thousands)	Weighted-Average		Aggregate Intrinsic Value (in millions)
		Exercise Price per Share	Remaining Contractual Term (in years)	
Outstanding-January 1, 2022	2,244	\$ 57.50		
Granted	183	92.58		
Forfeited or expired	(32)	76.55		
Exercised	(387)	50.64		
Outstanding-December 31, 2022	2,008	61.71	5.1	\$ 22
Exercisable-December 31, 2022	1,379	\$ 57.20	3.9	\$ 20

The aggregate intrinsic value of outstanding options shown in the table above represents the total pretax intrinsic value at December 31, 2022, based on the Corporation's closing stock price of \$66.85 at December 31, 2022.

The total intrinsic value of stock options exercised was \$17 million, \$29 million and \$6 million for the years ended December 31, 2022, 2021 and 2020, respectively.

A summary of the Corporation's restricted stock activity and related information for the year ended December 31, 2022 follows:

	Number of Shares (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding-January 1, 2022	41	61.64
Forfeited	—	—
Vested	(41)	67.69
Outstanding-December 31, 2022	—	\$ —

The total fair value of restricted stock awards that fully vested was \$4 million, \$8 million and \$17 million for the years ended December 31, 2022, 2021 and 2020, respectively.

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A summary of the Corporation's restricted stock unit activity and related information for the year ended December 31, 2022 follows:

	Service-Based Units		Performance-Based Units	
	Number of Units (in thousands)	Weighted-Average Grant-Date Fair Value per Share	Number of Units (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Outstanding-January 1, 2022	1,346	\$ 59.18	816	\$ 63.12
Granted	361	84.14	182	87.45
Forfeited	(70)	65.24	(34)	70.40
Vested (a)	(232)	65.36	(220)	79.13
Outstanding-December 31, 2022	1,405	64.27	744	64.01

(a) Includes performance-based units valued at zero, as they did not meet the minimum performance threshold.

The total fair value of restricted stock units that fully vested was \$19 million, \$21 million and \$12 million for the years ended December 31, 2022, 2021 and 2020, respectively.

The Corporation expects to satisfy the exercise of stock options, the vesting of restricted stock units and future grants of restricted stock by issuing shares of common stock out of treasury. At December 31, 2022, the Corporation held 97 million shares in treasury.

For further information on the Corporation's share-based compensation plans, refer to Note 1.

NOTE 17 - EMPLOYEE BENEFIT PLANS

Defined Benefit Pension and Postretirement Benefit Plans

The Corporation has a qualified and non-qualified defined benefit pension plan. In October 2016, the Corporation modified its defined benefit pension plans to freeze final average pay benefits as of December 31, 2016, other than for participants who were age 60 or older as of December 31, 2016, and added a cash balance plan provision effective January 1, 2017. Active pension plan participants 60 years or older as of December 31, 2016 receive the greater of the final average pay formula or the frozen final average pay benefit as of December 31, 2016 plus the cash balance benefit earned after January 1, 2017. Employees participating in the retirement account plan as of December 31, 2016 were eligible to participate in the cash balance pension plan effective January 1, 2017. Benefits earned under the cash balance pension formula, in the form of an account balance, include contribution credits based on eligible pay earned each month, age and years of service and monthly interest credits based on the 30-year Treasury rate.

The Corporation's postretirement benefit plan provides postretirement health care and life insurance benefits for retirees as of December 31, 1992. The plan also provides certain postretirement health care and life insurance benefits for a limited number of retirees who retired prior to January 1, 2000. For all other employees hired prior to January 1, 2000, a nominal benefit is provided. Employees hired on or after January 1, 2000 and prior to January 1, 2007 are eligible to participate in the plan on a full contributory basis until Medicare-eligible based on age and service. Employees hired on or after January 1, 2007 are not eligible to participate in the plan. The Corporation funds the pre-1992 retiree plan benefits with bank-owned life insurance. Effective January 1, 2022, the plan moved from a self-insured plan to the Medicare and pre-65 individual marketplace with a funded Health Reimbursement Arrangement account for those with subsidized coverage. This change did not have a material impact on the Corporation's consolidated financial condition, results of operations or cash flow.

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The following table sets forth reconciliations of plan assets and the projected benefit obligation, the weighted-average assumptions used to determine year-end benefit obligations, and the amounts recognized in accumulated other comprehensive (loss) income for the Corporation's defined benefit pension plans and postretirement benefit plan at December 31, 2022 and 2021. The Corporation used a measurement date of December 31, 2022 for these plans.

<i>(dollar amounts in millions)</i>	Defined Benefit Pension Plans				Postretirement Benefit Plan	
	Qualified		Non-Qualified			
	2022	2021	2022	2021	2022	2021
Change in fair value of plan assets:						
Fair value of plan assets at January 1	\$ 3,462	\$ 3,350	\$ —	\$ —	\$ 53	\$ 57
Actual return on plan assets	(777)	291	—	—	(4)	(1)
Plan participants' contributions	—	—	—	—	—	1
Benefits paid	(177)	(179)	—	—	(3)	(4)
Fair value of plan assets at December 31	\$ 2,508	\$ 3,462	\$ —	\$ —	\$ 46	\$ 53
Change in projected benefit obligation:						
Projected benefit obligation at January 1	\$ 2,214	\$ 2,327	\$ 207	\$ 252	\$ 31	\$ 35
Service cost	37	38	2	2	—	—
Interest cost	62	61	6	7	1	1
Actuarial gain	(525)	(69)	(37)	(3)	(8)	(1)
Plan participants' contributions	—	—	—	—	—	1
Benefits paid	(177)	(179)	(15)	(15)	(3)	(4)
Plan amendments (a)	—	36	—	(36)	—	(1)
Projected benefit obligation at December 31	\$ 1,611	\$ 2,214	\$ 163	\$ 207	\$ 21	\$ 31
Accumulated benefit obligation	\$ 1,598	\$ 2,199	\$ 161	\$ 204	\$ 21	\$ 31
Funded status at December 31 (b) (c)	\$ 897	\$ 1,248	\$ (163)	\$ (207)	\$ 25	\$ 22
Weighted-average assumptions used:						
Discount rate	5.60 %	2.96 %	5.60 %	2.96 %	5.71 %	2.79 %
Rate of compensation increase	4.25	4.00	4.25	4.00	n/a	n/a
Interest crediting rate	3.99 - 5.25	3.79 - 5.00	3.99 - 5.25	3.79 - 5.00	n/a	n/a
Amounts recognized in accumulated other comprehensive (loss) income before income taxes:						
Net actuarial loss	\$ (638)	\$ (205)	\$ (46)	\$ (92)	\$ (10)	\$ (11)
Prior service credit	33	48	38	47	2	2
Balance at December 31	\$ (605)	\$ (157)	\$ (8)	\$ (45)	\$ (8)	\$ (9)

(a) The qualified defined benefit pension plan was amended in 2021 to include a flat dollar benefit for specified participants that would otherwise have been payable from the non-qualified defined benefit pension plan, resulting in a shift in projected benefit obligation from the non-qualified plan to the qualified plan.

(b) Based on projected benefit obligation for defined benefit pension plans and accumulated benefit obligation for postretirement benefit plan.

(c) The Corporation recognizes the overfunded and underfunded status of the plans in accrued income and other assets and accrued expenses and other liabilities, respectively, on the Consolidated Balance Sheets.

n/a - not applicable

Because the non-qualified defined benefit pension plan has no assets, the accumulated benefit obligation exceeded the fair value of plan assets at December 31, 2022 and December 31, 2021.

The following table details the changes in plan assets and benefit obligations recognized in other comprehensive loss for the year ended December 31, 2022.

<i>(in millions)</i>	Defined Benefit Pension Plans			Postretirement Benefit Plan	Total
	Qualified	Non-Qualified			
Actuarial gain (loss) arising during the period	\$ (453)	\$ 37	\$ 1	\$ (415)	
Amortization of net actuarial loss	19	9	—	28	
Amortization of prior service credit	(14)	(9)	—	(23)	
Total recognized in other comprehensive loss	\$ (448)	\$ 37	\$ 1	\$ (410)	

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Components of net periodic defined benefit (credit) cost and postretirement benefit credit, the actual return on plan assets and the weighted-average assumptions used were as follows:

<i>(dollar amounts in millions)</i> Years Ended December 31	Defined Benefit Pension Plans					
	Qualified			Non-Qualified		
	2022	2021	2020	2022	2021	2020
Service cost (a)	\$ 37	\$ 38	\$ 32	\$ 2	\$ 2	\$ 1
Other components of net benefit (credit) cost:						
Interest cost	62	61	70	6	7	8
Expected return on plan assets	(201)	(202)	(185)	—	—	—
Amortization of prior service credit	(14)	(19)	(19)	(9)	(6)	(8)
Amortization of actuarial net loss	19	29	38	9	11	9
Total other components of net benefit (credit) cost (b)	(134)	(131)	(96)	6	12	9
Net periodic defined benefit (credit) cost	\$ (97)	\$ (93)	\$ (64)	\$ 8	\$ 14	\$ 10
Actual return on plan assets	\$ (777)	\$ 291	\$ 537	n/a	n/a	n/a
Actual rate of return on plan assets	(23.02)%	8.92 %	18.72 %	n/a	n/a	n/a
Weighted-average assumptions used:						
Discount rate	2.96 %	2.71 %	3.43 %	2.96 %	2.71 %	3.43 %
Expected long-term return on plan assets	6.50	6.50	6.50	n/a	n/a	n/a
Rate of compensation increase	4.00	4.00	4.00	4.00	4.00	4.00

(a) Included in salaries and benefits expense on the Consolidated Statements of Income.

(b) Included in other noninterest expenses on the Consolidated Statements of Income.

n/a - not applicable

<i>(dollar amounts in millions)</i> Years Ended December 31	Postretirement Benefit Plan		
	2022	2021	2020
Other components of net benefit credit:			
Interest cost	\$ 1	\$ 1	\$ 1
Expected return on plan assets	(3)	(3)	(2)
Net periodic postretirement benefit credit	\$ (2)	\$ (2)	\$ (1)
Actual return on plan assets	\$ (4)	\$ (1)	\$ 3
Actual rate of return on plan assets	(8.24%)	(2.25%)	6.00%
Weighted-average assumptions used:			
Discount rate	2.79%	2.43%	3.26%
Expected long-term return on plan assets	5.00	5.00	5.00
Healthcare cost trend rate (a):			
Cost trend rate assumed	n/a	6.00	6.25
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	n/a	4.50	4.50
Year that the rate reaches the ultimate trend rate	n/a	2027	2027

(a) Beginning January 1, 2022, the healthcare cost trend assumption is no longer a relevant assumption due to the change from a self-insured plan to the Medicare and pre-65 individual marketplace with a funded Health Reimbursement Arrangement account.

n/a - not applicable

The expected long-term rate of return of plan assets is the average rate of return expected to be realized on funds invested or expected to be invested over the life of the plan, which has an estimated duration of approximately 9 years as of December 31, 2022. The expected long-term rate of return on plan assets is set after considering both long-term returns in the general market and long-term returns experienced by the assets in the plan. The returns on the various asset categories are blended to derive an equity and a fixed income long-term rate of return. The Corporation reviews its pension plan assumptions on an annual basis with its actuarial consultants to determine if assumptions are reasonable and adjusts the assumptions to reflect changes in future expectations.

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Plan Assets

The Corporation's overall investment goals for the qualified defined benefit pension plan are to maintain a portfolio of assets of appropriate liquidity and diversification; to generate investment returns (net of all operating costs) that are reasonably anticipated to maintain the plan's fully funded status or to reduce a funding deficit, after taking into account various factors, including reasonably anticipated future contributions, expense and the interest rate sensitivity of the plan's assets relative to that of the plan's liabilities; and to generate investment returns (net of all operating costs) that meet or exceed a customized benchmark as defined in the plan's investment policy. Derivative instruments are permissible for hedging and transactional efficiency, but only to the extent that the derivative use enhances the efficient execution of the plan's investment policy. The plan does not directly invest in securities issued by the Corporation and its subsidiaries. The Corporation's target allocations for plan investments are 40 percent to 50 percent for equity securities and 50 percent to 60 percent for fixed income, including cash. Equity securities include collective investment and mutual funds and common stock. Fixed income securities include U.S. Treasury and other U.S. government agency securities, mortgage-backed securities, corporate bonds and notes, municipal bonds, collateralized mortgage obligations and money market funds.

Fair Value Measurements

The Corporation's qualified defined benefit pension plan utilizes fair value measurements to record fair value adjustments and to determine fair value disclosures. The Corporation's qualified benefit pension plan categorizes investments recorded at fair value into a three-level hierarchy, based on the markets in which the investment are traded and the reliability of the assumptions used to determine fair value. Refer to Note 1 for a description of the three-level hierarchy.

Following is a description of the valuation methodologies and key inputs used to measure the fair value of the Corporation's qualified defined benefit pension plan investments, including an indication of the level of the fair value hierarchy in which the investments are classified.

Mutual funds

Fair value measurement is based upon the net asset value (NAV) provided by the administrator of the fund. Mutual fund NAVs are quoted in an active market exchange, such as the New York Stock Exchange, and are included in Level 1 of the fair value hierarchy.

Common stock

Fair value measurement is based upon the closing price quoted in an active market exchange, such as the New York Stock Exchange. Level 1 common stock includes domestic and foreign stock and real estate investment trusts.

U.S. Treasury and other U.S. government agency securities

Level 1 securities include U.S. Treasury securities that are traded by dealers or brokers in active over-the-counter markets. Fair value measurement is based upon quoted prices in an active market exchange, such as the New York Stock Exchange. Level 2 securities include debt securities issued by U.S. government agencies and U.S. government-sponsored entities. The fair value of Level 2 securities is determined using quoted prices of securities with similar characteristics, or pricing models based on observable market data inputs, primarily interest rates and spreads.

Corporate and municipal bonds and notes

Fair value measurement is based upon quoted prices of securities with similar characteristics or pricing models based on observable market data inputs, primarily interest rates, spreads and prepayment information. Level 2 securities include corporate bonds, municipal bonds, foreign bonds and foreign notes.

Mortgage-backed securities

Fair value measurement is based upon independent pricing models or other model-based valuation techniques such as the present value of future cash flows, adjusted for the security's credit rating, prepayment assumptions and other factors, such as credit loss and liquidity assumptions, and are included in Level 2 of the fair value hierarchy.

Private placements

Fair value is measured using the NAV provided by fund management as quoted prices in active markets are not available. Management considers additional discounts to the provided NAV for market and credit risk. Private placements are included in Level 3 of the fair value hierarchy.

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Collective investment funds

Fair value measurement is based upon the NAV provided by the administrator of the fund as a practical expedient to estimate fair value. There are no unfunded commitments or redemption restrictions on the collective investment funds. The investments are redeemable daily.

Fair Values

The fair values of the Corporation's qualified defined benefit pension plan investments measured at fair value on a recurring basis at December 31, 2022 and 2021, by asset category and level within the fair value hierarchy, are detailed in the table below.

<i>(in millions)</i>	Total	Level 1	Level 2	Level 3
December 31, 2022				
Fixed income securities:				
U.S. Treasury and other U.S. government agency securities	\$ 534	\$ 531	\$ 3	\$ —
Corporate and municipal bonds and notes	676	—	676	—
Mortgage-backed securities	20	—	20	—
Private placements	39	—	—	39
Total investments in the fair value hierarchy	\$ 1,269	\$ 531	\$ 699	\$ 39
Investments measured at net asset value:				
Collective investment funds	1,230			
Total investments at fair value	\$ 2,499			
December 31, 2021				
Fixed income securities:				
U.S. Treasury and other U.S. government agency securities	\$ 599	\$ 595	\$ 4	\$ —
Corporate and municipal bonds and notes	893	—	893	—
Mortgage-backed securities	27	—	27	—
Private placements	50	—	—	50
Total investments in the fair value hierarchy	\$ 1,569	\$ 595	\$ 924	\$ 50
Investments measured at net asset value:				
Collective investment funds	1,885			
Total investments at fair value	\$ 3,454			

The table below provides a summary of changes in the Corporation's qualified defined benefit pension plan's Level 3 investments measured at fair value on a recurring basis for the years ended December 31, 2022 and 2021.

<i>(in millions)</i>	Balance at Beginning of Period	Net Gains (Losses)		Purchases	Sales	Balance at End of Period
		Realized	Unrealized			
Year Ended December 31, 2022						
Private placements	\$ 50	\$ (3)	\$ (12)	\$ 38	\$ (34)	\$ 39
Year Ended December 31, 2021						
Private placements	\$ 58	\$ 2	\$ (4)	\$ 44	\$ (50)	\$ 50

There were no assets in the non-qualified defined benefit pension plan at December 31, 2022 and 2021. The postretirement benefit plan is fully invested in bank-owned life insurance policies. The fair value of bank-owned life insurance policies is based on the cash surrender values of the policies as reported by the insurance companies and is classified in Level 2 of the fair value hierarchy.

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Cash Flows

The Corporation currently expects to make no employer contributions to the qualified and non-qualified defined benefit pension plans and postretirement benefit plan for the year ended December 31, 2023.

<i>(in millions)</i>	Estimated Future Benefit Payments		
	Qualified Defined Benefit Pension Plan	Non-Qualified Defined Benefit Pension Plan	Postretirement Benefit Plan (a)
Years Ended December 31			
2023	\$ 168	\$ 14	\$ 3
2024	140	15	3
2025	139	15	3
2026	143	15	2
2027	140	14	2
2028 - 2032	663	70	8

(a) Estimated benefit payments in the postretirement benefit plan are net of estimated Medicare subsidies.

Defined Contribution Plans

Substantially all of the Corporation's employees are eligible to participate in the Corporation's principal defined contribution plan (a 401(k) plan). Under this plan, the Corporation makes core matching cash contributions of 100 percent of the first 4 percent of qualified earnings contributed by employees (up to the current IRS compensation limit), invested based on employee investment elections. Employee benefits expense included expense for the plan of \$24 million for the each of the years ended December 31, 2022, 2021 and 2020.

Deferred Compensation Plans

The Corporation offers optional deferred compensation plans under which certain employees and non-employee directors (participants) may make an irrevocable election to defer incentive compensation and/or a portion of base salary until retirement or separation from the Corporation. The participant may direct deferred compensation into one or more deemed investment options. Although not required to do so, the Corporation invests actual funds into the deemed investments as directed by participants, resulting in a deferred compensation asset, recorded in other short-term investments on the Consolidated Balance Sheets that offsets the liability to participants under the plan, recorded in accrued expenses and other liabilities. The earnings from the deferred compensation asset are recorded in interest on short-term investments and other noninterest income and the related change in the liability to participants under the plan is recorded in salaries and benefits expense on the Consolidated Statements of Income.

NOTE 18 - INCOME TAXES AND TAX-RELATED ITEMS

The provision for income taxes is calculated as the sum of income taxes due for the current year and deferred taxes. Income taxes due for the current year are computed by applying federal and state tax statutes to current year taxable income. Deferred taxes arise from temporary differences between the income tax basis and financial accounting basis of assets and liabilities. Tax-related interest and penalties and foreign taxes are then added to the tax provision.

The current and deferred components of the provision for income taxes were as follows:

<i>(in millions)</i>			
December 31	2022	2021	2020
Current:			
Federal	\$ 296	\$ 212	\$ 171
Foreign	6	5	5
State and local	50	26	30
Total current	352	243	206
Deferred:			
Federal	(24)	62	(73)
State and local	(3)	17	(9)
Total deferred	(27)	79	(82)
Total	\$ 325	\$ 322	\$ 124

Income before income taxes of \$1.5 billion for the year ended December 31, 2022 included \$48 million of foreign taxable income.

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The provision for income taxes does not reflect the tax effects of unrealized gains and losses on investment securities available-for-sale, hedging transactions or the change in defined benefit pension and other postretirement plans adjustment included in accumulated other comprehensive (loss) income. Refer to Note 14 for additional information on accumulated other comprehensive (loss) income.

A reconciliation of expected income tax expense at the federal statutory rate to the Corporation's provision for income taxes and effective tax rate follows:

<i>(dollar amounts in millions)</i> Years Ended December 31	2022		2021		2020	
	Amount	Rate	Amount	Rate	Amount	Rate
Tax based on federal statutory rate	\$ 310	21.0 %	\$ 313	21.0 %	\$ 130	21.0 %
State income taxes	36	2.5	35	2.4	18	2.9
Affordable housing and historic credits	(13)	(0.9)	(13)	(0.9)	(12)	(1.9)
Bank-owned life insurance	(10)	(0.7)	(10)	(0.6)	(10)	(1.6)
FDIC insurance expense	6	0.4	5	0.3	7	1.1
Employee stock transactions	(3)	(0.2)	(3)	(0.2)	(1)	(0.2)
Tax-related interest and penalties	—	—	—	—	(2)	(0.3)
Other	(1)	(0.1)	(5)	(0.4)	(6)	(1.0)
Provision for income taxes	\$ 325	22.0 %	\$ 322	21.6 %	\$ 124	20.0 %

The liability for tax-related interest and penalties, included in accrued expenses and other liabilities on the Consolidated Balance Sheets, was \$5 million and \$6 million at December 31, 2022 and 2021, respectively.

In the ordinary course of business, the Corporation enters into certain transactions that have tax consequences. From time to time, the Internal Revenue Service (IRS) may review and/or challenge specific interpretive tax positions taken by the Corporation with respect to those transactions. The Corporation believes that its tax returns were filed based upon applicable statutes, regulations and case law in effect at the time of the transactions. The IRS or other tax jurisdictions, an administrative authority or a court, if presented with the transactions, could disagree with the Corporation's interpretation of the tax law.

A reconciliation of the beginning and ending amount of net unrecognized tax benefits follows:

<i>(in millions)</i>	2022	2021	2020
Balance at January 1	\$ 18	\$ 19	\$ 17
(Decrease) increase as a result of tax positions taken during a prior period	(2)	1	1
Increase as a result of tax positions taken during the current period	3	3	2
Decreases related to settlements with tax authorities	(3)	(3)	(1)
Reduction as a result of expiration of statute of limitations	—	(2)	—
Balance at December 31	\$ 16	\$ 18	\$ 19

After consideration of the effect of the federal tax benefit available on unrecognized state tax benefits, the total amount of unrecognized tax benefits which, if recognized, would affect the Corporation's effective tax rate was approximately \$13 million and \$14 million at December 31, 2022 and 2021, respectively.

The following tax years for significant jurisdictions remain subject to examination as of December 31, 2022:

Jurisdiction	Tax Years
Federal	2019-2021
New York	2018-2021
California	2006-2007, 2018-2021

The Corporation expects to enter into a settlement agreement with the California Franchise Tax Board related to open years 2006 and 2007 that will result in a change in net unrecognized tax benefits within the next twelve months. As a result of the agreement, the Corporation anticipates a favorable change of approximately \$4 million in tax and \$3 million in interest and penalties.

Based on current knowledge and probability assessment of various potential outcomes, the Corporation believes current tax reserves are adequate, and the amount of any potential incremental liability arising is not expected to have a material adverse effect on the Corporation's consolidated financial condition or results of operations. Probabilities and outcomes are reviewed as events unfold, and adjustments to the reserves are made when necessary.

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During 2022, the Corporation received a favorable ruling from the Michigan Supreme Court in its petition to the state for its tax credit transfer regarding tax years 2008 through 2011. The Corporation has recorded a non-income tax benefit of \$4 million, with the expectation of another \$7 million to be recognized in the following year (amounts are not inclusive of interest.)

The principal components of deferred tax assets and liabilities were as follows:

(in millions)

December 31	2022	2021
Deferred tax assets:		
Allowance for depreciation	\$ —	\$ 7
Allowance for loan losses	128	124
Deferred compensation	84	71
Deferred loan origination fees and costs	12	17
Net hedging losses	290	—
Net unrealized losses on investment securities available-for-sale	713	30
Operating lease liabilities	85	74
Other temporary differences, net	42	21
Total deferred tax assets before valuation allowance	1,354	344
Valuation allowance	(5)	(5)
Total deferred tax assets	1,349	339
Deferred tax liabilities:		
Lease financing transactions	(31)	(49)
Defined benefit plans	(123)	(198)
Allowance for depreciation	(4)	—
Net hedging gains	—	(17)
Leasing Right of Use assets	(71)	(66)
Total deferred tax liabilities	(229)	(330)
Net deferred tax assets	\$ 1,120	\$ 9

Deferred tax assets included \$4 million and \$3 million of federal foreign tax credit carryforwards at December 31, 2022 and 2021, respectively, expiring between 2028 and 2031. In addition, there were \$2 million and \$3 million of state net operating loss (NOL) carryforwards at December 31, 2022 and 2021, respectively, expiring between 2023 and 2041. The Corporation believes it is more likely than not that the benefit from federal foreign tax credits and certain state NOL carryforwards will not be realized and, accordingly, maintains a federal valuation allowance of \$4 million and a state valuation allowance of \$1 million at December 31, 2022, compared to a federal valuation of \$3 million and a state valuation allowance of \$2 million in the comparable period in 2021. For further information on the Corporation's valuation policy for deferred tax assets, refer to Note 1.

NOTE 19 - TRANSACTIONS WITH RELATED PARTIES

The Corporation's banking subsidiaries had, and expect to have in the future, transactions with the Corporation's directors and executive officers, companies with which these individuals are associated and certain related individuals. Such transactions were made in the ordinary course of business and included extensions of credit, leases and professional services. With respect to extensions of credit, all were made on substantially the same terms, including interest rates and collateral, as those prevailing at the same time for comparable transactions with other customers and did not, in management's opinion, involve more than normal risk of collectibility or present other unfavorable features. The aggregate amount of loans attributable to persons who were related parties at December 31, 2022 totaled \$74 million at the beginning of 2022 and \$57 million at the end of 2022. During 2022, new loans to related parties aggregated \$270 million and repayments totaled \$287 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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NOTE 20 - REGULATORY CAPITAL

Banking regulations limit the transfer of assets in the form of dividends, loans or advances from the bank subsidiaries to the parent company. Under the most restrictive of these regulations, the aggregate amount of dividends which can be paid to the parent company, with prior approval from bank regulatory agencies, approximated \$506 million at January 1, 2023, plus 2023 net profits. Substantially all the assets of the Corporation's banking subsidiaries are restricted from transfer to the parent company of the Corporation in the form of loans or advances.

The Corporation's subsidiary banks declared dividends of \$1.0 billion, \$852 million and \$498 million in 2022, 2021 and 2020, respectively.

The Corporation and its U.S. banking subsidiaries are subject to various regulatory capital requirements administered by federal and state banking agencies under the Basel III regulatory framework (Basel III). This regulatory framework establishes comprehensive methodologies for calculating regulatory capital and risk-weighted assets (RWA). Basel III also set minimum capital ratios as well as overall capital adequacy standards.

Under Basel III, regulatory capital comprises Common Equity Tier 1 (CET1) capital, additional Tier 1 capital and Tier 2 capital. CET1 capital predominantly includes common shareholders' equity, less certain deductions for goodwill, intangible assets and deferred tax assets that arise from net operating losses and tax credit carry-forwards. Additionally, the Corporation has elected to permanently exclude capital in accumulated other comprehensive income (AOCI) related to debt and equity securities classified as available-for-sale as well as for cash flow hedges and defined benefit postretirement plans from CET1, an option available to standardized approach entities under Basel III. Tier 1 capital incrementally includes noncumulative perpetual preferred stock. Tier 2 capital includes Tier 1 capital as well as subordinated debt qualifying as Tier 2 and qualifying allowance for credit losses. In addition to the minimum risk-based capital requirements, the Corporation and its Bank subsidiaries are required to maintain a minimum capital conservation buffer, in the form of common equity, of 2.5 percent in order to avoid restrictions on capital distributions and discretionary bonuses.

The Corporation computes RWA using the standardized approach. Under the standardized approach, RWA is generally based on supervisory risk-weightings which vary by counterparty type and asset class. Under the Basel III standardized approach, capital is required for credit risk RWA, to cover the risk of unexpected losses due to failure of a customer or counterparty to meet its financial obligations in accordance with contractual terms; and if trading assets and liabilities exceed certain thresholds, capital is also required for market risk RWA, to cover the risk of losses due to adverse market movements or from position-specific factors.

Quantitative measures established by regulation to ensure capital adequacy require the maintenance of minimum amounts and ratios of CET1, Tier 1 and total capital (as defined in the regulations) to average and/or risk-weighted assets. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Corporation's financial statements. At December 31, 2022 and 2021, the Corporation and its U.S. banking subsidiaries exceeded the ratios required for an institution to be considered "well capitalized". For U.S. banking subsidiaries, those requirements were total risk-based capital, Tier 1 risk-based capital, CET1 risk-based capital and leverage ratios greater than 10 percent, 8 percent, 6.5 percent and 5 percent, respectively, at December 31, 2022 and 2021. For the Corporation, requirements to be considered "well capitalized" were total risk-based capital and Tier 1 risk-based capital ratios greater than 10 percent and 6 percent, respectively, at December 31, 2022 and 2021. There have been no conditions or events since December 31, 2022 that management believes have changed the capital adequacy classification of the Corporation or its U.S. banking subsidiaries.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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The following is a summary of the capital position of the Corporation and Comerica Bank, its principal banking subsidiary.

<i>(dollar amounts in millions)</i>	Comerica Incorporated (Consolidated)	Comerica Bank
December 31, 2022		
CET1 capital (minimum \$3.5 billion (Consolidated))	\$ 7,884	\$ 7,801
Tier 1 capital (minimum \$4.7 billion (Consolidated))	8,278	7,801
Total capital (minimum \$6.3 billion (Consolidated))	9,817	9,190
Risk-weighted assets	78,871	78,781
Average assets (fourth quarter)	86,726	86,608
CET1 capital to risk-weighted assets (minimum-4.5%)	10.00 %	9.90 %
Tier 1 capital to risk-weighted assets (minimum-6.0%)	10.50	9.90
Total capital to risk-weighted assets (minimum-8.0%)	12.45	11.67
Tier 1 capital to average assets (minimum-4.0%)	9.55	9.01
Capital conservation buffer (minimum-2.5%)	4.45	3.67
December 31, 2021		
CET1 capital (minimum \$3.1 billion (Consolidated))	\$ 7,064	\$ 7,634
Tier 1 capital (minimum \$4.2 billion (Consolidated))	7,458	7,634
Total capital (minimum \$5.6 billion (Consolidated))	8,608	8,584
Risk-weighted assets	69,708	69,542
Average assets (fourth quarter)	96,417	96,216
CET1 capital to risk-weighted assets (minimum-4.5%)	10.13 %	10.98 %
Tier 1 capital to risk-weighted assets (minimum-6.0%)	10.70	10.98
Total capital to risk-weighted assets (minimum-8.0%)	12.35	12.34
Tier 1 capital to average assets (minimum-4.0%)	7.74	7.93
Capital conservation buffer (minimum-2.5%)	4.35	4.34

NOTE 21 - CONTINGENT LIABILITIES

Legal Proceedings and Regulatory Matters

The Corporation and certain of its subsidiaries are subject to various other pending or threatened legal proceedings arising out of the normal course of business or operations. The Corporation believes it has meritorious defenses to the claims asserted against it in its other currently outstanding legal proceedings and, with respect to such legal proceedings, intends to continue to defend itself vigorously, litigating or settling cases according to management's judgment as to what is in the best interests of the Corporation and its shareholders. Settlement may result from the Corporation's determination that it may be more prudent financially to settle, rather than litigate, and should not be regarded as an admission of liability.

Further, from time to time, the Corporation is also subject to examinations, inquiries and investigations by regulatory authorities in areas including, but not limited to, compliance, risk management and consumer protection, which could lead to administrative or legal proceedings or settlements. For example, the Consumer Financial Protection Bureau ("CFPB") is investigating certain of the Corporation's practices, and the Corporation has responded and continues to respond to the CFPB. We are unable to predict the outcome of these discussions at this time. Remedies in these proceedings or settlements may include fines, penalties, restitution or alterations in the Corporation's business practices and may result in increased operating expenses or decreased revenues.

On at least a quarterly basis, the Corporation assesses its potential liabilities and contingencies in connection with outstanding legal proceedings and regulatory matters utilizing the latest information available. On a case-by-case basis, accruals are established for those legal claims and regulatory matters for which it is probable that a loss will be incurred and the amount of such loss can be reasonably estimated. The actual costs of resolving these claims and regulatory matters may be substantially higher or lower than the amounts accrued. Based on current knowledge, and after consultation with legal counsel, management believes current accruals are adequate, and the amount of any incremental liability arising from these matters is not expected to have a material adverse effect on the Corporation's consolidated financial condition, results of operations or cash flows. Legal fees of \$17 million, \$14 million and \$17 million for the years ended December 31, 2022, 2021 and 2020, respectively, were included in other noninterest expenses on the Consolidated Statements of Income.

For matters where a loss is not probable, the Corporation has not established an accrual. The Corporation believes the estimate of the aggregate range of reasonably possible losses, in excess of established accruals, for all legal proceedings and

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Comerica Incorporated and Subsidiaries

regulatory matters in which it is involved is from zero to approximately \$80 million at December 31, 2022. This estimated aggregate range of reasonably possible losses is based upon currently available information for those legal proceedings and regulatory matters in which the Corporation is involved, taking into account the Corporation's best estimate of such losses for those legal cases and regulatory matters for which such estimate can be made. For certain legal cases and regulatory matters, the Corporation does not believe that an estimate can currently be made. The Corporation's estimate involves significant judgment, given the varying stages of the legal proceedings and regulatory matters (including the fact many are currently in preliminary stages), the existence in certain legal proceedings of multiple defendants (including the Corporation) whose share of liability has yet to be determined, the numerous yet-unresolved issues in many of the legal proceedings and regulatory matters (including issues regarding class certification and the scope of many of the claims) and the attendant uncertainty of the various potential outcomes of such legal proceedings and regulatory matters. Accordingly, the Corporation's estimate will change from time to time, and actual losses may be more or less than the current estimate.

In the event of unexpected future developments, it is possible that the ultimate resolution of these matters, if unfavorable, may be material to the Corporation's consolidated financial condition, results of operations or cash flows.

For information regarding income tax contingencies, refer to Note 18.

NOTE 22 - STRATEGIC LINES OF BUSINESS

The Corporation has strategically aligned its operations into three major business segments: the Commercial Bank, the Retail Bank and Wealth Management. These business segments are differentiated based on the type of customer and the related products and services provided. In addition to the three major business segments, the Finance Division is also reported as a segment. Business segment results are produced by the Corporation's internal management accounting system. This system measures financial results based on the internal business unit structure of the Corporation. The performance of the business segments is not comparable with the Corporation's consolidated results and is not necessarily comparable with similar information for any other financial institution. Additionally, because of the interrelationships of the various segments, the information presented is not indicative of how the segments would perform if they operated as independent entities. The management accounting system assigns balance sheet and income statement items to each business segment using certain methodologies, which are regularly reviewed and refined. From time to time, the Corporation may make reclassifications among the segments to more appropriately reflect management's current view of the segments, and methodologies may be modified as the management accounting system is enhanced and changes occur in the organizational structure and/or product lines. For comparability purposes, amounts in all periods are based on business unit structure and methodologies in effect at December 31, 2022.

Net interest income for each segment reflects the interest income generated by earning assets less interest expense on interest-bearing liabilities plus the net impact from associated internal funds transfer pricing (FTP) funding credits and charges. The FTP methodology allocates credits to each business segment for deposits and other funds provided as well as charges for loans and other assets being funded. This credit or charge is based on matching stated or implied maturities for these assets and liabilities. The FTP crediting rates on deposits and other funds provided reflect the long-term value of deposits and other funding sources based on their implied maturity. Due to the longer-term nature of implied maturities, FTP crediting rates are generally less volatile than changes in interest rates observed in the market. FTP charge rates for funding loans and other assets reflect a matched cost of funds based on the pricing and duration characteristics of the assets. As a result of applying matched funding, interest revenue for each segment resulting from loans and other assets is generally not impacted by changes in interest rates. Therefore, net interest income for each segment primarily reflects the volume of loans and other earning assets at the spread over the matched cost of funds, as well as the volume of deposits at the associated FTP crediting rates. Generally, in periods of rising interest rates, FTP charge rates for funding loans and FTP crediting rates on deposits will increase, with FTP crediting rates for deposits typically repricing at a slower pace than FTP charge rates for funding loans.

For acquired loans and deposits, matched maturity funding is determined based on origination date. Accordingly, the FTP process reflects the transfer of interest rate risk exposures to the Corporate Treasury department within the Finance segment, where such exposures are centrally managed. The allowance for credit losses is allocated to the business segments based on the methodology used to estimate the consolidated allowance for credit losses described in Note 1. The related provision for credit losses is assigned based on the amount necessary to maintain an allowance for credit losses appropriate for each business segment. Noninterest income and expenses directly attributable to a line of business are assigned to that business segment. Direct expenses incurred by areas whose services support the overall Corporation are allocated to the business segments as follows: product processing expenditures are allocated based on standard unit costs applied to actual volume measurements; administrative expenses are allocated based on estimated time expended; and corporate overhead is assigned 50 percent based on the ratio of the business segment's noninterest expenses to total noninterest expenses incurred by all business

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segments and 50 percent based on the ratio of the business segment's attributed equity to total attributed equity of all business segments. Equity is attributed based on credit, operational and interest rate risks. Most of the equity attributed relates to credit risk, which is determined based on the credit score and expected remaining life of each loan, letter of credit and unused commitment recorded in the business segments. Operational risk is allocated based on loans and letters of credit, deposit balances, non-earning assets, trust assets under management, certain noninterest income items, and the nature and extent of expenses incurred by business units. Virtually all interest rate risk is assigned to Finance, as are the Corporation's hedging activities.

The following discussion provides information about the activities of each business segment. A discussion of the financial results and the factors impacting 2022 performance can be found in "Strategic Lines of Business" section of the financial review.

The Commercial Bank meets the needs of small and middle market businesses, multinational corporations and governmental entities by offering various products and services including commercial loans and lines of credit, deposits, cash management, payment solutions, card services, capital market products, international trade finance, letters of credit, foreign exchange management services and loan syndication services.

The Retail Bank includes a full range of personal financial services, consisting of consumer lending, consumer deposit gathering and mortgage loan origination. This business segment offers a variety of consumer products, including deposit accounts, installment loans, credit cards, student loans, home equity lines of credit and residential mortgage loans. In addition, this business segment offers a subset of commercial products and services to micro-businesses whose primary contact is through the branch network.

Wealth Management offers products and services consisting of fiduciary services, private banking, retirement services, securities-based lending, investment management and advisory services, investment banking and brokerage services. This business segment also offers the sale of annuity products, as well as life, disability and long-term care insurance products.

The Finance segment includes the Corporation's securities portfolio and asset and liability management activities. This segment is responsible for managing the Corporation's funding, liquidity and capital needs, performing interest sensitivity analysis and executing various strategies to manage the Corporation's exposure to liquidity, interest rate risk and foreign exchange risk.

The Other category includes the income and expense impact of equity and cash, tax benefits not assigned to specific business segments, charges of an unusual or infrequent nature that are not reflective of the normal operations of the business segments and miscellaneous other expenses of a corporate nature.

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Business segment financial results are as follows:

<i>(dollar amounts in millions)</i>	Commercial Bank	Retail Bank	Wealth Management	Finance	Other	Total
Year Ended December 31, 2022						
Earnings summary:						
Net interest income (expense)	\$ 1,753	\$ 680	\$ 199	\$ (187)	\$ 21	\$ 2,466
Provision for credit losses	32	11	9	—	8	60
Noninterest income	607	122	298	58	(17)	1,068
Noninterest expenses	963	689	348	1	(3)	1,998
Provision (benefit) for income taxes	313	22	33	(37)	(6)	325
Net income (loss)	\$ 1,052	\$ 80	\$ 107	\$ (93)	\$ 5	\$ 1,151
Net credit-related charge-offs (recoveries)	\$ 21	\$ (1)	\$ (3)	\$ —	\$ —	\$ 17
Selected average balances:						
Assets	\$ 47,660	\$ 2,814	\$ 5,037	\$ 20,682	\$ 11,079	\$87,272
Loans	43,481	2,063	4,906	—	10	50,460
Deposits	42,584	26,672	5,439	591	195	75,481
Statistical data:						
Return on average assets (a)	2.21 %	0.29 %	1.83 %	n/m	n/m	1.32 %
Efficiency ratio (b)	40.69	85.31	70.00	n/m	n/m	56.32
Year Ended December 31, 2021						
Earnings summary:						
Net interest income (expense)	\$ 1,574	\$ 565	\$ 166	\$ (471)	\$ 10	\$ 1,844
Provision for credit losses	(346)	(5)	(32)	—	(1)	(384)
Noninterest income	663	123	279	41	17	1,123
Noninterest expenses	870	645	317	1	28	1,861
Provision (benefit) for income taxes	384	5	36	(100)	(3)	322
Net income (loss)	\$ 1,329	\$ 43	\$ 124	\$ (331)	\$ 3	\$ 1,168
Net credit-related (recoveries) charge-offs	\$ (12)	\$ 2	\$ —	\$ —	\$ —	\$ (10)
Selected average balances:						
Assets	\$ 44,004	\$ 3,213	\$ 5,028	\$ 17,705	\$ 20,202	\$90,152
Loans	41,801	2,382	4,903	—	(3)	49,083
Deposits	45,602	25,682	5,218	965	214	77,681
Statistical data:						
Return on average assets (a)	2.71 %	0.16 %	2.24 %	n/m	n/m	1.30 %
Efficiency ratio (b)	38.76	92.98	71.02	n/m	n/m	62.42

(Table continues on following page)

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(dollar amounts in millions)

Year Ended December 31, 2020	Commercial Bank	Retail Bank	Wealth Management	Finance	Other	Total
Earnings summary:						
Net interest income (expense)	\$ 1,605	\$ 503	\$ 167	\$ (384)	\$ 20	\$ 1,911
Provision for credit losses	495	7	35	—	—	537
Noninterest income	555	110	263	55	18	1,001
Noninterest expenses	813	607	295	2	37	1,754
Provision (benefit) for income taxes	184	(3)	22	(78)	(1)	124
Net income (loss)	\$ 668	\$ 2	\$ 78	\$ (253)	\$ 2	\$ 497
Net credit-related charge-offs	\$ 192	\$ 1	\$ 3	\$ —	\$ —	\$ 196
Selected average balances:						
Assets	\$ 45,716	\$ 3,281	\$ 5,162	\$ 15,418	\$ 11,569	\$81,146
Loans	44,119	2,468	5,045	—	(1)	51,631
Deposits	36,616	22,832	4,402	1,026	162	65,038
Statistical data:						
Return on average assets (a)	1.46 %	— %	1.51 %	n/m	n/m	0.61 %
Efficiency ratio (b)	37.63	98.52	68.47	n/m	n/m	60.13

(a) *Return on average assets is calculated based on the greater of average assets or average liabilities and attributed equity.*

(b) *Noninterest expenses as a percentage of the sum of net interest income and noninterest income excluding net gains (losses) from securities, a derivative contract tied to the conversion rate of Visa Class B shares and changes in the value of shares obtained through monetization of warrants.*

n/m – not meaningful

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

NOTE 23 - PARENT COMPANY FINANCIAL STATEMENTS

BALANCE SHEETS - COMERICA INCORPORATED

(in millions, except share data)

December 31	2022	2021
Assets		
Cash and due from subsidiary banks	\$ 1,810	\$ 1,105
Other short-term investments	92	113
Receivable due from subsidiary bank	150	150
Investment in subsidiaries, principally banks	4,853	8,278
Premises and equipment	—	1
Accrued income and other assets	191	265
Total assets	\$ 7,096	\$ 9,912
Liabilities and Shareholders' Equity		
Medium- and long-term debt	\$ 1,593	\$ 1,736
Accrued expenses and other liabilities	322	279
Total liabilities	1,915	2,015
Fixed-rate reset non-cumulative perpetual preferred stock, series A, no par value, \$100,000 liquidation preference per share:		
Authorized - 4,000 shares		
Issued - 4,000 shares	394	394
Common stock - \$5 par value:		
Authorized - 325,000,000 shares		
Issued - 228,164,824 shares	1,141	1,141
Capital surplus	2,220	2,175
Accumulated other comprehensive loss	(3,742)	(212)
Retained earnings	11,258	10,494
Less cost of common stock in treasury - 97,197,962 shares at 12/31/2022 and 97,476,872 shares at 12/31/2021	(6,090)	(6,095)
Total shareholders' equity	5,181	7,897
Total liabilities and shareholders' equity	\$ 7,096	\$ 9,912

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

STATEMENTS OF INCOME - COMERICA INCORPORATED

(in millions)

Years Ended December 31	2022	2021	2020
Income			
Income from subsidiaries:			
Dividends from subsidiaries	\$ 1,067	\$ 849	\$ 498
Other interest income	13	1	4
Intercompany management fees	109	235	209
Total income	1,189	1,085	711
Expenses			
Interest on medium- and long-term debt	47	20	30
Salaries and benefits expense	53	170	141
Other noninterest expenses	46	72	66
Total expenses	146	262	237
Income before benefit for income taxes and equity in undistributed earnings of subsidiaries	1,043	823	474
Benefit for income taxes	(3)	(6)	(6)
Income before equity in undistributed earnings of subsidiaries	1,046	829	480
Equity in undistributed earnings of subsidiaries, principally banks	105	339	17
Net income	1,151	1,168	497
Less income allocated to participating securities	6	5	2
Preferred stock dividends	23	23	13
Net income attributable to common shares	\$ 1,122	\$ 1,140	\$ 482

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

STATEMENTS OF CASH FLOWS - COMERICA INCORPORATED

(in millions)

Years Ended December 31	2022	2021	2020
Operating Activities			
Net income	\$ 1,151	\$ 1,168	\$ 497
Adjustments to reconcile net income to net cash provided by operating activities:			
Undistributed (earnings) of subsidiaries, principally banks	(105)	(339)	(17)
Net periodic defined benefit cost	2	5	4
Share-based compensation expense	22	19	11
Benefit for deferred income taxes	—	(2)	(1)
Other, net	24	3	2
Net cash provided by operating activities	1,094	854	496
Investing Activities			
Advance to subsidiary bank	—	(150)	—
Capital transactions with subsidiaries	—	—	(21)
Other, net	2	(1)	2
Net cash provided by (used in) investing activities	2	(151)	(19)
Financing Activities			
Preferred Stock:			
Issuances	—	—	394
Cash dividends paid	(23)	(23)	(8)
Common Stock:			
Repurchases	(43)	(729)	(199)
Cash dividends paid	(353)	(369)	(375)
Issuances under employee stock plans	28	34	4
Net cash used in financing activities	(391)	(1,087)	(184)
Net increase (decrease) in cash and cash equivalents	705	(384)	293
Cash and cash equivalents at beginning of period	1,105	1,489	1,196
Cash and cash equivalents at end of period	\$ 1,810	\$ 1,105	\$ 1,489
Interest paid	\$ 41	\$ 21	\$ 33

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

NOTE 24 - REVENUE FROM CONTRACTS WITH CUSTOMERS

Revenue from contracts with customers comprises the noninterest income earned by the Corporation in exchange for services provided to customers. The following table presents the composition of revenue from contracts with customers, segregated from other sources of noninterest income, by business segment.

<i>(in millions)</i>	Commercial Bank	Retail Bank	Wealth Management	Finance & Other	Total
Year Ended December 31, 2022					
Revenue from contracts with customers:					
Card fees	\$ 227	\$ 42	\$ 4	\$ —	\$ 273
Fiduciary income	—	—	233	—	233
Service charges on deposit accounts	132	57	6	—	195
Commercial loan servicing fees (a)	18	—	—	—	18
Brokerage fees	—	—	21	—	21
Other noninterest income (b)	7	16	24	1	48
Total revenue from contracts with customers	384	115	288	1	788
Other sources of noninterest income	223	7	10	40	280
Total noninterest income	\$ 607	\$ 122	\$ 298	\$ 41	\$ 1,068
Year Ended December 31, 2021					
Revenue from contracts with customers:					
Card fees	\$ 250	\$ 44	\$ 4	\$ —	\$ 298
Fiduciary income	—	—	231	—	231
Service charges on deposit accounts	136	54	5	—	195
Commercial loan servicing fees (a)	19	—	—	—	19
Brokerage fees	—	—	14	—	14
Other noninterest income (b)	5	17	17	—	39
Total revenue from contracts with customers	410	115	271	—	796
Other sources of noninterest income	253	8	8	58	327
Total noninterest income	663	123	279	58	1,123
Year Ended December 31, 2020					
Revenue from contracts with customers:					
Card fees	\$ 229	\$ 38	\$ 3	\$ —	\$ 270
Fiduciary income	—	—	209	—	209
Service charges on deposit accounts	128	52	5	—	185
Commercial loan servicing fees (a)	18	—	—	—	18
Brokerage fees	—	—	21	—	21
Other noninterest income (b)	28	10	17	—	55
Total revenue from contracts with customers	403	100	255	—	758
Other sources of noninterest income	152	10	8	73	243
Total noninterest income	\$ 555	\$ 110	\$ 263	\$ 73	\$ 1,001

(a) Included in commercial lending fees on the Consolidated Statements of Income.

(b) Excludes derivative, warrant and other miscellaneous income.

Revenue from contracts with customers did not generate significant contract assets and liabilities.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

NOTE 25 - LEASES

As a lessee, the Corporation has entered into operating leases for the majority of its real estate locations, primarily retail and office space. Total lease expense for the years ended December 31, 2022, 2021 and 2020 were as follows:

(in millions)

Years Ended December 31	2022	2021	2020
Operating lease expense	\$ 68	\$ 65	\$ 64
Variable lease expense	17	15	16
Less sublease income	(1)	(1)	(1)
Total lease expense	\$ 84	\$ 79	\$ 79

Supplemental balance sheet information related to leases is summarized as follows:

(dollar amounts in millions)

Years Ended December 31	2022	2021	2020
Included in accrued income and other assets			
Right-of-use (ROU) assets	\$ 338	\$ 317	\$ 306
Included in accrued expenses and other liabilities			
Operating lease liabilities	406	356	344
Weighted average discount rate	3.53 %	3.33 %	3.61 %
Weighted average lease term in years	9	8	8

Supplemental cash flow information related to leases is summarized as follows:

(in millions)

Years Ended December 31	2022	2021	2020
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows from operating leases	\$ 66	\$ 66	\$ 65
ROU assets obtained in exchange for new liabilities (a)	80	64	28

(a) Includes a \$24 million reduction to both ROU assets and lease liabilities for a partial termination related to the Company's Texas headquarters for the year ended December 31, 2022.

As of December 31, 2022, the contractual maturities of operating lease liabilities were as follows:

(in millions)

Years Ending December 31	
2023	\$ 63
2024	69
2025	63
2026	55
2027	45
Thereafter	185
Total contractual maturities	480
Less imputed interest	(74)
Total operating lease liabilities	\$ 406

As a lessor, the Corporation leases certain types of manufacturing and warehouse equipment as well as public and private transportation vehicles to its customers. The Corporation recognized lease-related revenue, primarily interest income from sales-type and direct financing leases of \$21 million, \$12 million and \$13 million for the years ended December 31, 2022, 2021 and 2020, respectively. The Corporation's net investment in sales-type and direct financing leases was \$659 million and \$464 million at December 31, 2022 and 2021, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Comerica Incorporated and Subsidiaries

As of December 31, 2022, the contractual maturities of sales-type and direct financing lease receivables were as follows:

(in millions)

Years Ending December 31

2023	\$	101
2024		127
2025		137
2026		71
2027		36
Thereafter		148
Total lease payments receivable		620
Unguaranteed residual values		61
Less deferred interest income		(22)
Total lease receivables (a)		\$ 659

(a) Excludes net investment in leveraged leases of \$101 million.

REPORT OF MANAGEMENT

The management of Comerica Incorporated (the Corporation) is responsible for the accompanying consolidated financial statements and all other financial information in this Annual Report. The consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles and include amounts which of necessity are based on management's best estimates and judgments and give due consideration to materiality. The other financial information herein is consistent with that in the consolidated financial statements.

In meeting its responsibility for the reliability of the consolidated financial statements, management develops and maintains effective internal controls, including those over financial reporting, as defined in the Securities and Exchange Act of 1934, as amended. The Corporation's internal control over financial reporting includes 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 Corporation; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles, and that receipts and expenditures of the Corporation are made only in accordance with authorizations of management and directors of the Corporation; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Corporation's assets that could have a material effect on the consolidated financial statements.

Management assessed, with participation of the Corporation's Chief Executive Officer and Chief Financial Officer, internal control over financial reporting as it relates to the Corporation's consolidated financial statements presented in conformity with U.S. generally accepted accounting principles as of December 31, 2022. The assessment was based on criteria for effective internal control over financial reporting described in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Based on this assessment, management determined that internal control over financial reporting is effective as it relates to the Corporation's consolidated financial statements presented in conformity with U.S. generally accepted accounting principles as of December 31, 2022.

Because of 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 risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Corporation's internal control over financial reporting as of December 31, 2022 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their accompanying report.

The Corporation's Board of Directors oversees management's internal control over financial reporting and financial reporting responsibilities through its Audit Committee as well as various other committees. The Audit Committee, which consists of directors who are not officers or employees of the Corporation, meets regularly with management, internal audit and the independent public accountants to assure that the Audit Committee, management, internal auditors and the independent public accountants are carrying out their responsibilities, and to review auditing, internal control and financial reporting matters.

Curtis C. Farmer
Chairman, President and
Chief Executive Officer

James J. Herzog
Senior Executive Vice President and
Chief Financial Officer

Mauricio A. Ortiz
Executive Vice President and
Chief Accounting Officer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Comerica Incorporated

Opinion on Internal Control over Financial Reporting

We have audited Comerica Incorporated and subsidiaries' internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Comerica Incorporated and subsidiaries (the Corporation) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

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 Corporation as of December 31, 2022 and 2021, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes of the Corporation and our report dated February 14, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Corporation'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 Report of Management. Our responsibility is to express an opinion on the Corporation'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 Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Ernst & Young LLP

Dallas, Texas
February 14, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Comerica Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Comerica Incorporated and subsidiaries (the Corporation) as of December 31, 2022 and 2021, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Corporation at December 31, 2022 and 2021, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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 Corporation's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 14, 2023, expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the 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.

*Description of
the Matter*

Allowance for loan losses

The Corporation's loan portfolio and the associated allowance for credit losses (ACL) were \$53.4 billion and \$661 million as of December 31, 2022, respectively. The allowance for credit losses represents management's estimate of expected credit losses over the contractual life of the loan portfolio at the balance sheet date. The allowance for credit losses includes credit loss estimates for loans evaluated on an individual basis, such as for certain nonaccrual loans and collective loss estimates for pools of loans with similar risk characteristics. The Corporation determines the allowance for pools of loans with similar risk characteristics by applying loss factors to amortized cost balances over the remaining contractual life. Loss factors are based on estimated probability of default, set to a default horizon based on contractual life, and loss given default. Through the use of various models, historical estimates are calibrated to economic forecasts over the reasonable and supportable forecast period based on economic variables that statistically correlate with each of the probability of default and loss given default pools. Qualitative adjustments are then made to bring the allowance to the level management believes is appropriate based on factors that have not otherwise been fully accounted for in the quantitative analysis. Examples of these adjustments include 1) foresight risk, 2) input imprecision, and 3) model imprecision.

Auditing management's estimate of the allowance for credit losses involved a high degree of subjectivity due to the highly judgmental nature of the expected loss models and the qualitative adjustments included in the ACL. Management applies significant judgment when selecting the expected loss models to be used to determine the allowance and the inputs used in those models as well as in applying qualitative adjustments. These determinations could have a significant effect on the ACL.

*How We
Addressed the
Matter in Our
Audit*

We obtained an understanding of the Corporation's process for establishing the ACL, including selection of the models, inputs used in the models, monitoring of the models, and the qualitative adjustments made to the ACL. We evaluated the design and tested the operating effectiveness of the controls over 1) determining the appropriateness of the models used to estimate quantitative components of the ACL, 2) validating the models used to estimate quantitative components of the ACL, 3) selecting the appropriate inputs and assumptions within the models, 4) monitoring of the models including the assessment of the output, 5) determining the appropriateness of the qualitative reserve methodology, including the identification and the assessment for the need for qualitative adjustments, 6) validating the relevance and reliability of data used to estimate the various components of the qualitative reserves, and 7) management's review and approval of qualitative adjustments and model output.

To test the appropriateness of the models used by management to estimate quantitative components of the ACL, with the support of specialists, we evaluated the model methodology and model performance, and tested key modeling assumptions used within the models. To test the qualitative adjustments, we evaluated the identification and measurement of the qualitative adjustments, including the basis for concluding an adjustment was warranted when considering the potential impact of foresight risk, input imprecision and model imprecision, evaluated the appropriateness of the data used by the Corporation to estimate the qualitative adjustments, recalculated the analyses used by management to determine the qualitative adjustments, and analyzed the changes in assumptions and components of the qualitative reserves relative to changes in the Corporation's loan portfolio. For example, we evaluated the data and information utilized by management to estimate the qualitative adjustments by independently obtaining and comparing to historical loan data, third-party macroeconomic data, and peer bank data to assess the appropriateness of the information and to consider whether new or contradictory information existed. We also evaluated if qualitative adjustments were based on a comprehensive framework, well-documented, and consistently applied

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1992.

Dallas, TX

February 14, 2023

SHAREHOLDER INFORMATION

COMMON STOCK:

Comerica's common stock trades under the symbol CMA on the New York Stock Exchange (NYSE). Subject to approval of the board of directors and applicable regulatory requirements, dividends customarily are paid on a quarterly basis.

TRANSFER AGENT / REGISTRATION AND SHAREHOLDER ASSISTANCE:

- Inquiries related to shareholder name change, address or ownership of stock, and lost or stolen stock certificates
- Eliminate duplicate mailings received at one address
- Reinvest dividends and invest up to \$10,000 each month for the purchase of additional shares
- Direct deposit of dividends

CONTACT INFORMATION:

Website: computershare.com/investor
Email: web.queries@computershare.com
Phone: 877.536.3551 or 781.575.3100

WRITTEN REQUESTS:

Computershare
P.O. Box 43006
Providence, RI 02940-3078

CERTIFIED/OVERNIGHT MAIL:

Computershare
150 Royall St., Suite 101
Canton, MA 02021

OFFICER CERTIFICATIONS:

On May 11, 2022, Comerica's Chief Executive Officer submitted his annual certification to the New York Stock Exchange stating that he was not aware of any violation by Comerica of the Exchange's corporate governance listing standards. Comerica filed the certifications by its Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act of 2002 as exhibits to its Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

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