

**WELLS
FARGO**

2022

Annual Report

Wells Fargo & Company

CEO Letter

Dear Shareholders,

I'm proud to report that Wells Fargo continued to make progress on our priorities in 2022. Our underlying financial performance is improving, we are moving forward on our risk, control and regulatory agenda, we are focusing on businesses where we can generate appropriate risk-adjusted returns, we continue to strengthen the leadership team, and we are executing on our strategic objectives. While we have made progress, our work is not complete and we remain focused on successful and timely execution of our multi-year journey to complete our risk and control work and to move forward with our businesses.

Stronger financial performance

Our financial performance benefitted as we continued to drive improved efficiency, and it was positively impacted by both rising rates and a benign credit environment.

In 2022, Wells Fargo generated \$13.2 billion in net income, or \$3.17 per common share. Our results were significantly impacted by \$7 billion of operating losses, primarily related to putting historical issues behind us, including litigation, regulatory matters, and customer remediations. However, our performance excluding those items was solid and demonstrates the continued progress we are making to improve returns.

Our revenue decreased 6% from the previous year. The higher rate environment and good loan growth drove strong growth in net interest income, which was up 26% from a year ago. However, this growth was more than offset by lower net gains from equity securities, mortgage banking, and investment advisory and other asset-based fees reflecting market conditions, as well as the lost revenue related to businesses we sold in 2021.

Expenses increased 6% from a year ago, reflecting higher operating losses primarily related to putting historical matters behind us, as noted above. Excluding operating losses, noninterest expense declined from a year ago, reflecting continued progress on our efficiency initiatives and the impact from business sales. We achieved these efficiency gains while we made continued investments in our risk and control infrastructure and in strategic initiatives across our businesses, and in the face of continued inflationary pressures.

Credit quality remained strong, but, as expected, losses started to slowly increase in the second half of the year off their

historical lows. Our net charge-off rate declined from 18 basis points in 2021 to 17 basis points in 2022, and our allowance for credit losses declined by \$75 million in 2022, as our reserve release in the first quarter was slightly larger than the reserve builds we had in the last three quarters of the year.

Loans outstanding increased by 7% from one year ago, with growth in both our consumer and commercial portfolios. Consumer Banking and Lending grew 4%, driven by growth in residential mortgage and credit card, which offset a decline in auto loans. Both Commercial Banking and Corporate and Investment Banking had strong loan growth, with commercial loans up 9% from a year ago, driven by growth across all asset classes. Average deposits in 2022 decreased 1% to \$1.42 trillion, as higher market rates spurred customers to look for higher yielding alternatives, and consumers continued to spend savings that built up during the pandemic.

Our capital levels remained well above our required regulatory minimums plus buffers. We increased our quarterly common stock dividend in the first quarter of 2022 from \$0.20 per share to \$0.25 per share and then to \$0.30 in the third quarter of 2022. While we did not repurchase any common stock in the last three quarters of 2022, we have repurchased shares in the first quarter of 2023.

Our return on equity was 7.5% and our return on tangible common equity (ROTCE) was 9.0%¹. Both of these ratios were impacted by the operating losses I highlighted earlier.

In my shareholder letter over the past two years, I have discussed our path to higher returns. Since 2020, we have executed on a number of important items to improve our returns, including returning \$16 billion to shareholders through net common stock repurchases, increasing our common stock dividend from \$0.10 per share to \$0.30 per share, and delivering approximately \$7.5 billion of gross expense saves. Based on these actions and others that are in flight, we believe we have a clear line of sight to a sustainable ROTCE of approximately 15% in the medium term. In order to achieve that, we need to continue to optimize our capital, including returning capital to shareholders and redeploying capital to higher returning businesses; execute on efficiency initiatives; and benefit from the investments we are making in our businesses.

¹ Return on tangible common equity (ROTCE) is a non-GAAP financial measure. For additional information, including a corresponding reconciliation to GAAP financial measures, see the "Financial Review – Capital Management – Tangible Common Equity" section in this Report.

We are actively watching the economy

Consumers

After a period of strong economic growth and low unemployment, the Federal Reserve has been increasing interest rates aggressively with a goal of combatting high inflation. Increasing interest rates and a slowing economy have caused headwinds for some of our customers, but our customers have largely remained resilient over the past year, with deposit balances, consumer spending and credit quality still stronger than pre-pandemic levels.

Consumer credit card spend continued to be strong in 2022, with spending up 25% compared with 2021, which reflects the benefit of new Wells Fargo product launches. Almost all spending categories had double-digit spend growth year over year. Consumer debit card spend slowed to 3% growth in 2022 compared to 2021. Growth was driven by ticket size since transaction volume was flat year-over-year, and discretionary spend outpaced non-discretionary spend.

At the same time, we are carefully watching the impact of higher rates and we expect to see deposit balances continue to decrease and credit quality to continue to weaken. For certain cohorts of customers, average deposit balances are below pre-pandemic levels, and we are closely monitoring activity for signs of potential stress. For our borrowers, we are working to limit the risk – both to them and to us – of overextension. We have taken selective actions across our consumer lending businesses to mitigate risks associated with inflation and increased debt leverage. In our auto business, we have adjusted policies to address risk associated with collateral value declines and inflationary pressures on consumers' ability to pay. In home lending, we have tightened loan-to-value policies nationally and even more so in local markets that have elevated home value risk. Additionally, in our card business, we have tightened our lending policy to focus on applicants who may be exhibiting debt-seeking behavior.

Businesses

Commercial loans grew 9% in 2022, with most of the growth in the first half of the year. Higher inventory levels contributed to increased working capital needs, which drove higher utilization rates. However, utilization rates stabilized in the second half of the year, and current data is not pointing to additional inventory builds, which indicates most businesses are carefully managing inventory levels amid slowing demand.

We continue to closely monitor the most pandemic-impacted sectors and inflation-sensitive industries in our commercial portfolio. This includes:

- Updating underwriting guidelines to include interest-rate sensitivity to leveraged loans

- Analyzing supply chain issues, inflationary pressures, and the impact of a potential recession
- Making timely updates to our watchlist

The Commercial Real Estate office market is showing signs of weakness due to lower demand, driving higher vacancy rates and deteriorating operating performance. Challenging economic and capital market conditions are also buffeting the office market, and while we haven't seen this translate to significant loss content yet, we do expect to see stress over time and are proactively working with borrowers to manage our exposure. Specifically, we have issued underwriting guidance for navigating current conditions, including limited tolerance for new credit policy exceptions, increasing minimum debt yield thresholds, and stress testing and expansion of the watchlist process, including additional emphasis on the office market.

Looking ahead to the remainder of 2023, we are prepared for a range of scenarios. As a large lender to both consumers and businesses in the United States, we have significant credit exposure across our businesses, and as the Federal Reserve continues to take action to reduce inflation, we will continue to monitor both the markets and our own customer data and will react accordingly. If our view of economic stress deteriorates from our view at the end of 2022, we will likely add to credit loss reserves during 2023.

Moving forward on our risk, control, and regulatory agenda

We continue to move forward with the foundational work of building out a risk and control framework appropriate for our company. This multi-year journey continues to be about setting clear priorities, cultural change, and operational execution. I have been clear and consistently reinforce that this foundational work is our top priority. This should always be the case for a bank such as ours, but this has not always been the case, so reinforcement is necessary. We remain confident in our ability to complete this work and build appropriate risk, control, and operational excellence into our culture.

The Acting Comptroller of the Currency gave an important speech in January addressing the potential difficulties of managing a large bank. Given that the OCC is a key supervisor of ours, we take the speech seriously and are focused on its key messages.

The speech focused on the view that there are limits to an organization's manageability based on size and, if so, that the most efficient and effective way to fix this is to compel its simplification. I am not in a position to agree or disagree with this premise, but I am in a position to have the strong point of view that Wells Fargo is not too big or complex to manage. Our shortcomings are not structural, but they are the result of historically ineffective management and the lack of proper prioritization of building out an appropriate risk and control environment that will ultimately take multiple years to correct.

We are large but are far less complex than many with whom we compete. In fact, we have more similarities with regional banks than other global systemically important banks (GSIBs), and strong and effective risk management processes should scale to a company of our size. In addition, we have acted and will continue to act on our own to simplify our company and reduce operational complexity and risk, as I detail in the section later in this letter entitled “Executing on Strategic Objectives.”

Operating at a broad scale but with less complexity than peers

1. We are primarily a US domestic bank and we do not have the many complexities that running large-scale international businesses bring. Our legal entity structure, extent of international regulatory oversight and physical footprint are far simpler than many of our competitors. Approximately 90% of our revenues come from U.S. clients or activities of non-U.S. clients in the U.S. Our businesses outside the U.S. primarily support our U.S. customer base. We are very happy with our existing footprint and are not looking beyond for growth opportunities.
2. Our products are not complex compared with those offered by other banks and are similar to those offered by smaller institutions. We predominantly provide the same products and services as regional and smaller, more local banks. We take deposits, provide financing, move money, and provide financial advice for our customers. Our trading activities and the size of our market risk are relatively small compared to other large GSIBs.
3. Scale in each of our businesses should not make us more complex. Our distribution methods are similar to smaller institutions. We manage a branch network, have relationship managers across our markets, market through the internet, traditional advertising, direct mail, and word of mouth, and we rely on our local reputation. The controls necessary to manage a network of 4,000+ branches are similar to those necessary to manage a smaller branch network. The same is true for managing relationship managers, marketing, and protecting our reputation. Senior management should be involved at a detailed level, but all institutions should have and rely on defined control frameworks in place that are effective at risk management, regardless of individuals in a seat. These frameworks can effectively scale to a bank of our size.
4. Our customers benefit from our size and reach. Wells Fargo has nearly 4,600 retail bank branches, with a presence in 25 of the largest 30 markets in the U.S. A Wells Fargo branch or ATM is within 2 miles of over half of U.S. Census households and small businesses in our footprint. The range of banking services we provide helps us build full relationships with individuals and companies, allowing us to see a full picture of their personal, family, and/or business financial needs, and to meet these needs. We have the ability to invest in technology to make it faster, safer, and

more transparent for our customers to handle their banking needs. In addition, our resources allow us to innovate quickly, developing new products, services, and digitized experiences to meet constantly changing consumer and business expectations. These capabilities, along with our size and reach, are of tangible benefit to consumers across the country, whether they live in large cities or more rural areas, and also to the U.S. economy as a whole.

Managing the company with significantly heightened discipline

We agree that there are also traits that management should avoid as they grow. These signs are familiar to us, as we identified them as historical behaviors at Wells Fargo when I arrived. We viewed them then – as we do now – as unacceptable. Our approach today is dramatically different than it was at Wells Fargo in the past and we will continue to work so it becomes part of our culture at all levels in the organization.

1. Don't hide behind materiality – As a large institution we know we cannot let our size hide potential issues. We must think about raw numbers, not just percentages which are indexed to a large customer base, asset base, or capital base. We have built functions and processes to review customer complaints, employee allegations, and issues raised from outside the company, and aim to use them to identify issues and themes so we can address them and make changes as required.
2. Don't assume incidents are isolated – One of the advantages large institutions have is the amount of data and information we see and have, but we must use it expeditiously. Individual incidents provide data points which can help us learn and react, and we should treat each as such. We strive to make data-driven decisions and to explore whether incidents that can appear isolated can in fact have broader application elsewhere in the company.
3. Identify weaknesses ourselves and address them quickly – The Acting Comptroller stated that “the business of banking is operationally intensive. Even at banks with strong teams and robust risk management systems and controls, mistakes and problems can arise. Well-managed banks identify such problems early and often, address them quickly, and take steps to prevent their recurrence.” We agree completely. Many of the historical issues we continue to work through were identified by regulators, not by us. We are changing this, emphasizing our responsibility to self-identify more issues and address them with a heightened sense of urgency. As we implement our risk and control framework, we will likely identify more issues and move with haste to implement compensating and ultimately permanent controls. Our risk and control framework is not a project, but an ongoing set of actions, and it will be part of our culture.
4. Hubris, contempt, and indifference are unacceptable and dangerous traits – We cannot believe that we know better

than others and need to react with seriousness and urgency when issues are raised – whether from employees, customers, regulators, or others outside the company. Every issue raised has the opportunity to be a learning moment and we should also proactively look at our competitors to learn as well.

5. Integration of mergers is more than a short-term technology conversion – While we have not had a merger-related systems integration in my time at Wells Fargo, we agree that “simply stitch[ing]...systems together” can cause a proliferation of issues. It is critical to merge and simplify platforms, whether merger-related or as part of a customer service strategy, as the reduced complexity in the number of platforms should make it easier to properly serve customers. For example, asking customer-service representatives to learn multiple systems to provide the same information creates more operational risk and the possibility of a poor customer experience.

But these platform mergers should be the beginning of integration, not the end. This is true looking both from our perspective and the customer perspective. Customers think of us as one company, not as separate relationships with individual lines of business. They want to see their information seamlessly and be able to transact with us easily across all of their products. Unless we integrate our platforms, we will either not appear as one company to the customer, or we will create workarounds to try and accomplish this, which creates unneeded operational risk. A major competitive advantage of Wells Fargo is serving our customers across a broad range of products, but we can only do so effectively with common platforms.

The same is true of data platforms. Pulling customer data from multiple platforms is operationally complex and expensive. Common data platforms across our company are critical. We rely on this for financial reporting, regulatory reporting, risk reporting, and the ability to assess a customer relationship holistically.

And finally, it is a mistake to lose sight of aged platforms, to not invest in improving them and to not move to new ones. New software and hardware solutions make it easier to reduce complexity and properly serve customers, and when these solutions are part of a program with a clear target state, they should significantly reduce operational complexity.

Recognizing this, Wells Fargo is implementing a modern technology stack that is cloud-native and therefore more elastic and resilient. We are applying this stack for the various product domains that we are modernizing across our businesses. Examples include a more modern digital desktop for our financial advisors in Wealth and Investment Management, our value-at-risk models in Corporate and Investment Banking, and our payment platforms across businesses. These modernization initiatives are guided top-down by a product and platform architecture that sets

clear boundaries and expectations for teams. In addition to this, the hosting of our platforms is more and more migrating to a combination of private and public cloud, powered by our partnerships with Google and Microsoft. This also is leading to faster innovation by plugging in innovative services provided by these cloud providers into our platforms.

In parallel to these modernization efforts, we are also enhancing the way we deliver software and the developer experience. We are implementing new cloud-native tool-chains that allow our developers to have the experience that they deserve: on-demand, instant, elastic and with embedded automated controls.

Further taking stock of where we stand – why haven’t we completed our risk and regulatory work

I am frequently asked why our risk and regulatory work is not complete though we have been publicly reprimanded, have a growth constraint, and I have been leading the company for over 3 years. I wish my job was merely to complete work that was well underway, but unfortunately this was not the case. Simply said, the work to build the appropriate risk and control infrastructure and close consent orders takes years when managed effectively, and we were not as far along as I had expected when I arrived. Much work was needed to build what is necessary to properly accomplish the work.

When I arrived, we did not have the culture, effective processes, or appropriate management oversight in place to remediate weaknesses on a timely basis. Today, we approach these issues differently. This management team (the broad team – not just me) has the skills and experience and is now responsible for closing our consent orders. We have changed and implemented much to put ourselves in a position to have the confidence that we can accomplish this. The specifics of our regulatory remediation plans are confidential, and while we are not where we need to be, I believe that our position is significantly improved and that we will reach our goals. We are committed to making all necessary resources available to meet our obligations.

I have said we are a different company today, and in this sub-section, I provide some examples.

1. When I arrived at the company in 2019, we had 12 open, public enforcement actions. Given this and the other control issues we needed to assess, it took many months to understand the depth and breadth of the weaknesses and what was required to complete the work.
2. We then went about recruiting a mostly new management team with the experience and skills that we did not sufficiently have at the company. A large portion of the Operating Committee was recruited during 2020 and they then needed to do their own assessments and develop plans. They then needed several years to build out their teams.

3. For each consent order Matters Requiring Attention (MRAs), and other control gaps identified, we needed to build detailed plans that satisfied both us and our regulators. Our plans are now detailed and have hundreds of deliverables with designated delivery dates. Many of our consent orders have work that relies on work from another order, so any slippage on one plan can impact another. Our ability to assess all of this accurately for work to be done over multiple years has not been perfect, and we have missed some deliverables, but we have learned, adjusted, and continue to move forward.
4. We needed to build processes to manage these across the company. Building reporting and setting up management review structures for these activities has been critical to moving the work forward. Most of these did not exist or were ineffective, and we now believe we have much more effective reporting and processes in place to provide appropriate oversight and allow us to identify issues early so we can course-correct.
5. We did not have the resources necessary to accomplish this work when I arrived. We have added close to 10,000 people across numerous risk- and control-related groups and have spent approximately \$2 billion more in 2022 than in 2018 in these areas. We are committed to make the investments needed to complete the work.
6. And we had to build the management disciplines and culture to govern and execute such a large body of work. Our Operating Committee reviews risk and regulatory progress and escalations on a weekly basis. We provide detailed reporting to the full board and appropriate committees so they can provide oversight. These reviews are systematic and detailed, and they are helping us provide the appropriate oversight and involvement to accomplish the work.

I should add that we had to do all of this during the very worst of the COVID-19 pandemic. While we were not alone in dealing with the complexities of work from home, social distancing and meeting the needs of customers during a pandemic, we were alone in what we had to build, and doing so in a remote working environment increased the difficulty level significantly.

Some have suggested that banks view enforcement actions and fines as a cost of doing business, but I can tell you that today, nothing is further from the truth at Wells Fargo. We view any such action by our regulators as something that requires immediate management attention. We aim both to avoid the necessity of such action by doing the work ourselves and, when regulators do take enforcement action against us, we follow a disciplined process to work towards closure, again with all necessary resources available for the effort.

The negative impact on our reputation of having not fulfilled our obligations is clear. Simply put, failure to satisfy our regulatory requirements carries significant consequences for our company. On the other hand, fulfilling our obligations and building an

appropriate risk and control framework will allow us to build a strong reputation amongst a broad set of stakeholders. So why do we have so many consent orders that have been open for extended periods? Again, our historical practices were inadequate, and it has taken time to build what is necessary to change our historical inadequacies.

So as I look at our situation today, the failure of Wells Fargo to complete its work appropriately has resulted in multiple consent orders, fines, and an asset cap. But I can say confidently that we have taken significant actions including focusing and simplifying the company, refreshing the board, replacing most of the senior management team, and are now moving forward to correct past deficiencies. We have the willingness and the ability to complete the work.

And to be clear, we are committed to prioritizing this work above all else by devoting all necessary resources to the effort. Our planning is designed to ensure other activities do not interfere with this top priority. If we have a conflict, our risk and control work comes first.

I have said our progress will likely not be a straight line. We continue to resolve issues that were found years ago or are the result of the inadequate control environment that existed when we arrived at the company. This means that resolution of outstanding issues such as litigation, customer remediations or regulatory investigations have and could continue to have financial impacts. Additionally, until our work is complete, we will likely find new issues that need to be remediated, and these may result in additional regulatory actions.

Finally, as we continue to execute on our detailed plans, given the scope and complexity of our work, we may miss some interim milestones. We recognize the importance of meeting milestones that we ourselves set, but perfection is unlikely. When we discover an issue, we act quickly to course-correct and do what we can to get back on schedule. This is frustrating for us and others outside the company but is not indicative of our willingness or ability to complete our work. Rather, it is an obstacle that presents itself in nearly any large-scale, multi-year transformation.

When Wells Fargo faces criticism about where we stand, I understand the sentiment. I hope this section has provided detailed context and is helpful in providing an understanding of what we are doing to close our gaps. This team is taking decisive action to move our company past these issues.

Leadership Team

Key to transforming the company, changing our culture, and realizing the full strength of our franchise is having the best management team in place. Since I joined the company in 2019, 12 of our 17 Operating Committee members are new to Wells Fargo and 15 are new to their roles. In 2022, we put in place a new Chief Auditor, a new Chief Risk Officer, a new head of Consumer Lending, and a new head of Diverse Segments, Representation and Inclusion.

We continue to refresh our management ranks more broadly. Over 80% of our senior executive leaders – a group of approximately 150 people, most of whom report to Operating Committee members – are new to their roles since 2019, and nearly 60% are new to the company over the same time period. Over 30% of the individuals in this senior executive cohort began in new roles in 2022 or 2023. New leaders who have joined over the past several years bring important experience that is necessary for our journey.

Executing on Strategic Objectives

Simplifying our business

We continue to review the strategic positioning of the company and are focusing our efforts on building products and services that are core to serving our clients. This focus has led us to decisions to sell, downsize, or curtail multiple businesses. These decisions simplify the company, reduce operational complexity and risk, and allow us to focus on both our core risk and control buildout and ways to serve our customers in our core franchises. There are several examples since I joined the company in 2019.

In January 2023, we announced plans to simplify our Home Lending business and will primarily serve bank and wealth management customers as well as borrowers in minority communities. As part of this shift, we announced our plans to exit the Correspondent business, reduce the size of our Servicing portfolio, and optimize our Retail team so it aligns with our narrower customer focus. These actions will allow us to reduce risk in the Home Lending business while continuing making homeownership possible to thousands of Americans.

Over the past year, we have taken several additional steps to simplify the way we operate. For instance, we have:

- Implemented a cloud-native operating model which will enable us to reduce reliance on older, less stable platforms and allows us to innovate faster
- Centrally organized our Control Management teams, to enable better coordination across our businesses
- Streamlined our divisional leadership in Wells Fargo Advisors, moving from eight regional divisions to four
- Combined Treasury Services platforms across Commercial Banking and Corporate and Investment Banking

Looking further back to 2021, 2020, and 2019, we have:

- Sold Wells Fargo Asset Management
- Sold our Corporate Trust Services business
- Sold our student lending portfolio and stopped the origination of new student loans
- Exited our international wealth management segment
- Sold our Canadian direct equipment finance business

- Stopped offering new home equity lines and loans
- Exited the direct Auto business
- Stopped originating personal lines of credit
- Sold our Institutional Retirement and Trust business
- In addition, over the past several years, we have closed over a dozen representative offices globally to better focus our international business, including offices in Asia, Europe, South America, the Middle East, and elsewhere.

Going forward, we will continue to evaluate our businesses with an eye toward reducing complexity, increasing risk-adjusted returns, and focusing our resources on the most important products and services our customers require. Market dynamics change, the competitive environment changes, regulatory expectations evolve and we must adjust our business accordingly.

Focusing on customer needs and expectations

Each of our businesses is working to transform how we serve our customers by offering focused, innovative products and solutions. Many of the initiatives underway reduce risk in the company and we evaluate new initiatives to consider the potential impact on our control environment. Some examples are below.

Our Consumer Businesses: Consumer and Small Business Banking, Consumer Lending, and Wealth and Investment Management

- We rolled out our new consumer mobile app with a simpler, more intuitive user experience which has improved customer satisfaction. We also completed the development of Fargo, our new AI-powered virtual assistant, which provides a more personalized, convenient, and simple consumer banking experience. Fargo is currently live for eligible employees and is set to begin rolling out to customers during the first half of this year. Providing such digitized services directly to our customers reduces operational complexity in our service centers and increases customer satisfaction.
- We continued to improve our credit card offerings including launching two new cards – Wells Fargo Autograph and BILT. While we describe these as new products, these are actually updated products in a business we have been in for many years.
- We launched Wells Fargo Premier, our new offering dedicated to the financial needs of affluent clients by bringing together our branch-based and wealth-based businesses to provide a more comprehensive, relevant, and integrated offering for our clients.
- We also relaunched Intuitive Investor in our Wealth and Investment Management segment, making it easier for customers to invest with a streamlined account opening process and a lower minimum investment.

Our Wholesale Businesses: Commercial Banking and Corporate and Investment Banking

- We have made several hires in Corporate and Investment Banking that have received some press. These hires are in industries we currently serve and products we currently offer, but the individuals bring new expertise to Wells Fargo.
- We continued to enhance the partnership within our commercial businesses to bring Corporate and Investment Banking products such as foreign exchange and M&A advisory services to our middle-market corporate clients.
- In December we announced Vantage, an enhanced digital experience for our commercial and corporate clients. Vantage uses artificial intelligence and machine learning to provide a tailored and intuitive platform based on our clients' specific needs.
- Over the past year our industry-leading API platform team continued the development of payment APIs for commercial and corporate clients, invested in solutions to support our financial institution clients, ramped-up and grew product offerings in consumer lending, and began developing commercial lending solutions.

Evolving our approach to technology

Technology is helping us better serve our consumer and corporate clients. Our technology talent is modernizing platforms for our customers, clients and colleagues. Specific areas of focus are:

- A cross-product pricing platform
- Digitization of our lending origination platforms across Small Business, Commercial and Corporate Banking
- Continued modernization of our Treasury Services and Payments platforms
- Strengthening our technological capabilities in fraud prevention
- Modernizing key corporate risk platforms
- Refreshing our Auto loans platform

These enhanced digital capabilities are just the start of the initiatives we have planned as part of our multi-year digital transformation.

Seeing early returns from this work

Our work to build better, more customer-focused products and a more technology-enabled company is generating measurable returns. For instance:

- In Consumer and Small Business Banking, mobile active customers grew 4% from a year ago.
- The new credit cards I mentioned above helped drive a 31% increase in new credit card accounts in 2022, and we've continued to maintain strong credit profiles. The average

FICO score of our new accounts in 2022 was 773, compared to 761 for the 2019 vintage.

- In Wealth and Investment Management, total active Intuitive Investor accounts increased 56% from a year ago.
- Our U.S. investment banking market share was 3.2% in 2022, up 61 basis points versus 2021. We had the #7 ranking in this year's U.S. investment banking league tables, up two spots from 2021.
- As a company, we deliver many solutions nowadays in sprints, reducing our through-put time by as much as 60% compared to 2020.

ESG, communities and customer centricity

As I look back at 2022, I'm enthusiastic about the progress we've made in serving our communities and our customers, and I feel even better about the opportunities ahead.

Let me start with the changes we made during the year to help millions of customers avoid overdraft fees and meet short-term cash needs. These efforts included:

- The elimination of non-sufficient funds fees and transfer fees for customers enrolled in Overdraft Protection.
- Early Pay Day, making eligible direct deposits available up to two days early.
- Extra Day Grace, giving eligible customers an extra business day to make deposits to avoid overdraft fees.
- And in the fourth quarter we launched Flex Loan, a new digital-only, small-dollar loan that provides eligible customers convenient and affordable access to funds. Teams from across the company came together to roll out this new product in just a few months. Though it's still early, customer response is exceeding our expectations.

The above actions build on services we've introduced over the past several years, including Clear Access Banking, a consumer banking account with no overdraft fees. We now have over 1.7 million of those accounts, up 48% from a year ago.

Beyond our customers, we have an important responsibility to strengthen the communities we serve. We continued that work in 2022. This was true on several fronts.

Supporting homeownership

- We launched a Special Purpose Credit Program in 2022, committing \$150 million to advance racial equity in homeownership, with an additional \$100 million investment towards this racial equity effort announced in 2023.
- We established Wealth Opportunities Restored through Homeownership, or WORTH, a \$60 million national effort to address systematic barriers to homeownership for people of color. Nationally, WORTH aims to help create 40,000 new homeowners of color in eight markets by the end of 2025

- We announced an expansion of our Dream.Plan.Home closing cost credit, which provides borrowers with an income at or below 80% of the area median income where the property is located up to \$5,000 to use toward closing costs. The credit is available in 16 states and in Washington, DC.
- We announced Growing Diverse Housing Developers, a \$40 million grant initiative focused on expanding the growth and success of real estate developers of color, including Black- and Latino-owned firms.

Banking inclusion

- As part of our Banking Inclusion Initiative, we launched our first Community Connections Branch outside Atlanta, with more to come. These branches offer spaces for financial health seminars and individual consultations.
- Also as part of our Banking Inclusion Initiative, we announced plans with Operation HOPE to introduce HOPE Inside centers in 20 markets. HOPE Inside Centers feature financial coaches who will help empower community members to achieve their financial goals through financial education and free one-on-one coaching. To date, we've launched these centers in the Atlanta, Houston, Los Angeles, Oakland and Phoenix metro regions.
- Since its launch in 2022, our Small Business Resource Navigator has connected nearly 1,300 small businesses to potential credit opportunities and technical assistance services provided by CDFIs.

Climate initiatives

- We announced interim greenhouse gas reduction targets for the Oil & Gas and Power sectors
- We issued our second Inclusive Communities and Climate Bond, a \$2 billion bond that will finance projects and programs supporting housing affordability, economic opportunity, renewable energy and clean transportation

In addition, we have made significant progress on our Diversity, Equity and Inclusion initiatives. These are detailed in our first Diversity, Equity, and Inclusion annual report, which we published last summer. We continue to push forward on our commitment to integrating DE& across the company, and, as part of this commitment, we have commissioned an external, third-party Racial Equity Assessment. We plan to publish the results of the assessment by the end of this year.

I'm proud of all this work. We are balanced in our approach to environmental, social and governance issues, and, as I wrote a year ago, we believe that for us to be successful as a company, we must consider a broad set of stakeholders in our decisions and actions, beyond shareholders. This is not in lieu of shareholders – in fact we believe it will enhance our returns to shareholders over time. Our history has shown this to be true. Consumers and businesses want to do business with a company that has a strong reputation. A strong reputation is achieved not

just from strong financial performance, but from actively supporting employees, customers, and communities – especially those most in need.

As we look forward

I remain confident in our company. The franchise we have is enviable and will become increasingly more so as we transform the company. We have done much and we must finish the risk and control work I've described in a timeframe and with the quality to satisfy our regulators to take advantage of the opportunities in front of us, so this will remain our top priority.

We will do this while we navigate what will likely be a tricky economic environment. 2022 was a turning point in the cycle and the impact of the Federal Reserve's interest rate increases have not been fully seen in the economy yet. Though we are starting to see the impact on consumer spend, credit, housing, and demands for goods and services, it is still early. Thus far, the impact to consumers and businesses has been manageable.

Though there will certainly be some industries and segments of consumers that are more impacted than others, the rate of impact we see in our customer base is not materially accelerating. This plus the strength with which consumers and businesses went into this slowing economy is a helpful set of facts as we look forward.

While we are not predicting a severe downturn, we must be prepared for one and we are a stronger company today than 1 and 2 years ago. We have actively managed our capital position and focused on efficiency. Our margins are wider, our returns are higher, we are better managed, and our capital position is strong. While we will be impacted by a downturn in the economic cycle, we feel prepared for a downside scenario if we see broader deterioration than we currently see or predict.

We still have clear opportunities to improve our performance as we make progress on our efficiency initiatives. We will invest as necessary in our risk and control infrastructure, we will modernize our existing platforms, and we will continue to make the investments necessary serve our customers through service, technology and product enhancements.

I want to conclude by thanking our employees across the company who are working hard each day to continue to make progress on our transformation. The pressure they feel to accomplish our work is immense and the dedication that I see is unmatched. I'm thankful for all that they do and remain committed to leading us towards the goal of being the most respected financial institution in the country.

I'm excited about all that we will accomplish in the year ahead.

Charles W. Scharf

Chief Executive Officer
Wells Fargo & Company
March 3, 2023

Our Performance

\$ and shares outstanding in millions, except per share amounts	2022	2021	2020
SELECTED INCOME STATEMENT DATA			
Total revenue	\$ 73,785	78,492	74,264
Noninterest expense	57,282	53,831	57,630
Pre-tax pre-provision profit (PTPP) ¹	16,503	24,661	16,634
Provision for credit losses	1,534	(4,155)	14,129
Wells Fargo net income	13,182	21,548	3,377
Wells Fargo net income applicable to common stock	12,067	20,256	1,786
COMMON SHARE DATA			
Diluted earnings per common share	3.14	4.95	0.43
Dividends declared per common share	1.10	0.60	1.22
Common shares outstanding	3,833.8	3,885.8	4,144.0
Average common shares outstanding	3,805.2	4,061.9	4,118.0
Diluted average common shares outstanding	3,837.0	4,096.2	4,134.2
Book value per common share ²	\$ 41.89	43.32	39.71
Tangible book value per common share ^{2,3}	34.89	36.35	32.99
SELECTED EQUITY DATA (PERIOD-END)			
Total equity	181,875	190,110	185,712
Common stockholders' equity	160,614	168,331	164,570
Tangible common equity ³	133,752	141,254	136,727
PERFORMANCE RATIOS			
Return on average assets (ROA) ⁴	0.70%	1.11	0.17
Return on average equity (ROE) ⁵	7.5	12.0	1.1
Return on average tangible common equity (ROTCE) ³	9.0	14.3	1.3
Efficiency ratio ⁶	78	69	78
SELECTED BALANCE SHEET DATA (AVERAGE)			
Loans	\$ 929,820	864,288	941,788
Assets	1,894,309	1,941,905	1,941,709
Deposits	1,424,269	1,437,812	1,376,011
SELECTED BALANCE SHEET DATA (PERIOD-END)			
Debt securities	496,808	537,531	501,207
Loans	955,871	895,394	887,637
Allowance for loan losses	12,985	12,490	18,516
Assets	1,881,016	1,948,068	1,952,911
Deposits	1,383,985	1,482,479	1,404,381
OTHER METRICS			
Common Equity Tier 1 (CET1) ratio ⁷	10.60%	11.35	11.59
Market capitalization	\$ 158,298	186,441	125,066
Headcount (#) (period-end)	238,698	249,435	268,531

1. Pre-tax pre-provision profit (PTPP) is total revenue less noninterest expense. Management believes that PTPP is a useful financial measure because it enables investors and others to assess the Company's ability to generate capital to cover credit losses through a credit cycle.

2. Book value per common share is common stockholders' equity divided by common shares outstanding. Tangible book value per common share is tangible common equity divided by common shares outstanding.

3. Tangible common equity, tangible book value per common share, and return on average tangible common equity are non-GAAP financial measures. For additional information, including a corresponding reconciliation to GAAP financial measures, see the "Financial Review – Capital Management – Tangible Common Equity" section in this Report.

4. Represents Wells Fargo net income divided by average assets.

5. Represents Wells Fargo net income applicable to common stock divided by average common stockholders' equity.

6. The efficiency ratio is noninterest expense divided by total revenue (net interest income and noninterest income).

7. Represents our Common Equity Tier 1 (CET1) ratio calculated under the Standardized Approach, which is our binding CET1 ratio. For additional information, see the "Financial Review – Capital Management" section and Note 25 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report.

Wells Fargo & Company 2022 Financial Report

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This Annual Report, including the Financial Review and the Financial Statements and related Notes, contains forward-looking statements, which may include forecasts of our financial results and condition, expectations for our operations and business, and our assumptions for those forecasts and expectations. Do not unduly rely on forward-looking statements. Actual results may differ materially from our forward-looking statements due to several factors. Factors that could cause our actual results to differ materially from our forward-looking statements are described in this Report, including in the “Forward-Looking Statements” section, and in the “Risk Factors” and “Regulation and Supervision” sections of our Annual Report on Form 10-K for the year ended December 31, 2022 (2022 Form 10-K).

When we refer to “Wells Fargo,” “the Company,” “we,” “our,” or “us” in this Report, we mean Wells Fargo & Company and Subsidiaries (consolidated). When we refer to the “Parent,” we mean Wells Fargo & Company. See the “Glossary of Acronyms” for definitions of terms used throughout this Report.

Financial Review

Overview

Wells Fargo & Company is a leading financial services company that has approximately \$1.9 trillion in assets, proudly serves one in three U.S. households and more than 10% of small businesses in the U.S., and is a leading middle market banking provider in the U.S. We provide a diversified set of banking, investment and mortgage products and services, as well as consumer and commercial finance, through our four reportable operating segments: Consumer Banking and Lending, Commercial Banking, Corporate and Investment Banking, and Wealth and Investment Management. Wells Fargo ranked No. 41 on *Fortune’s* 2022 rankings of America’s largest corporations. We ranked fourth in assets and third in the market value of our common stock among all U.S. banks at December 31, 2022.

Wells Fargo’s top priority remains building a risk and control infrastructure appropriate for its size and complexity. The Company is subject to a number of consent orders and other regulatory actions, which may require the Company, among other things, to undertake certain changes to its business, operations, products and services, and risk management practices. Addressing these regulatory actions is expected to take multiple years, and we are likely to experience issues or delays along the way in satisfying their requirements. Issues or delays with one regulatory action could affect our progress on others, and failure to satisfy the requirements of a regulatory action on a timely basis could result in additional penalties, business restrictions, enforcement actions, and other negative consequences, which could be significant. While we still have significant work to do and have not yet satisfied certain aspects of these regulatory actions, the Company is committed to devoting the resources necessary to operate with strong business practices and controls, maintain the highest level of integrity, and have an appropriate culture in place.

Federal Reserve Board Consent Order Regarding Governance Oversight and Compliance and Operational Risk Management

On February 2, 2018, the Company entered into a consent order with the Board of Governors of the Federal Reserve System (FRB). As required by the consent order, the Company’s Board of Directors (Board) submitted to the FRB a plan to further enhance the Board’s governance and oversight of the Company, and the Company submitted to the FRB a plan to further improve the Company’s compliance and operational risk management program. The Company continues to engage with the FRB as the Company works to address the consent order provisions. The consent order also requires the Company, following the FRB’s acceptance and approval of the plans and the Company’s adoption and implementation of the plans, to complete an initial third-party review of the enhancements and improvements

provided for in the plans. Until this third-party review is complete and the plans are approved and implemented to the satisfaction of the FRB, the Company’s total consolidated assets as defined under the consent order will be limited to the level as of December 31, 2017. Compliance with this asset cap is measured on a two-quarter daily average basis to allow for management of temporary fluctuations. After removal of the asset cap, a second third-party review must also be conducted to assess the efficacy and sustainability of the enhancements and improvements.

Consent Orders with the Consumer Financial Protection Bureau and Office of the Comptroller of the Currency Regarding Compliance Risk Management Program, Automobile Collateral Protection Insurance Policies, and Mortgage Interest Rate Lock Extensions

On April 20, 2018, the Company entered into consent orders with the Consumer Financial Protection Bureau (CFPB) and the Office of the Comptroller of the Currency (OCC) to pay an aggregate of \$1 billion in civil money penalties to resolve matters regarding the Company’s compliance risk management program and past practices involving certain automobile collateral protection insurance (CPI) policies and certain mortgage interest rate lock extensions. As required by the consent orders, the Company submitted to the CFPB and OCC an enterprise-wide compliance risk management plan and a plan to enhance the Company’s internal audit program with respect to federal consumer financial law and the terms of the consent orders. In addition, as required by the consent orders, the Company submitted for non-objection plans to remediate customers affected by the automobile collateral protection insurance and mortgage interest rate lock matters, as well as a plan for the management of remediation activities conducted by the Company. The Company continues to work to address the provisions of the consent orders. On September 9, 2021, the OCC assessed a \$250 million civil money penalty against the Company related to insufficient progress in addressing requirements under the OCC’s April 2018 consent order and loss mitigation activities in the Company’s Home Lending business. On December 20, 2022, the CFPB modified its consent order to clarify how it would terminate.

Consent Order with the OCC Regarding Loss Mitigation Activities

On September 9, 2021, the Company entered into a consent order with the OCC requiring the Company to improve the execution, risk management, and oversight of loss mitigation activities in its Home Lending business. In addition, the consent order restricts the Company from acquiring certain third-party

residential mortgage servicing and limits transfers of certain mortgage loans requiring customer remediation out of the Company's mortgage servicing portfolio until remediation is provided.

Consent Order with the CFPB Regarding Automobile Lending, Consumer Deposit Accounts, and Mortgage Lending

On December 20, 2022, the Company entered into a consent order with the CFPB requiring the Company to provide customer remediation for multiple matters related to automobile lending, consumer deposit accounts, and mortgage lending; maintain practices designed to ensure auto lending customers receive refunds for the unused portion of certain guaranteed automobile protection agreements; comply with certain business practice requirements related to consumer deposit accounts; and pay a \$1.7 billion civil penalty to the CFPB. The required actions related to many of these matters were already substantially complete at the time we entered into the consent order, and the consent order lays out a path to termination after the Company completes the remainder of the required actions.

Retail Sales Practices Matters

In September 2016, we announced settlements with the CFPB, the OCC, and the Office of the Los Angeles City Attorney, and entered into related consent orders with the CFPB and the OCC, in connection with allegations that some of our retail customers received products and services they did not request. As a result, it remains a priority to rebuild trust through a comprehensive action plan that includes making things right for our customers, employees, and other stakeholders, and building a better Company for the future. On September 8, 2021, the CFPB consent order regarding retail sales practices expired.

For additional information regarding retail sales practices matters, including related legal and regulatory risk, see the "Risk Factors" section and Note 13 (Legal Actions) to Financial Statements in this Report.

Customer Remediation Activities

Our priority of rebuilding trust has included an effort to identify areas or instances where customers may have experienced financial harm, provide remediation as appropriate, and implement additional operational and control procedures. We are working with our regulatory agencies in this effort.

We have accrued for the probable and estimable costs related to our customer remediation activities, which amounts may change based on additional facts and information, as well as ongoing reviews and communications with our regulators. As our ongoing reviews continue and as we continue to strengthen our risk and control infrastructure, we have identified and may in the future identify additional items or areas of potential concern. To the extent issues are identified, we will continue to assess any customer harm and provide remediation as appropriate. We have previously disclosed key areas of focus as part of these activities.

For additional information regarding accruals for customer remediation, see the "Expenses" section in Note 20 (Revenue and Expenses) to Financial Statements in this Report, and for additional information regarding these activities, including related legal and regulatory risk, see the "Risk Factors" section and Note 13 (Legal Actions) to Financial Statements in this Report.

Recent Developments

LIBOR Transition

The London Interbank Offered Rate (LIBOR) is a widely referenced benchmark rate that seeks to estimate the cost at which banks can borrow on an unsecured basis from other banks. On March 5, 2021, the United Kingdom's Financial Conduct Authority and ICE Benchmark Administration, the administrator of LIBOR, announced that certain settings of LIBOR would no longer be published on a representative basis after December 31, 2021, and the most commonly used U.S. dollar (USD) LIBOR settings would no longer be published on a representative basis after June 30, 2023. Central banks in various jurisdictions convened committees to identify replacement rates to facilitate the transition away from LIBOR. The committee convened by the Federal Reserve in the United States, the Alternative Reference Rates Committee (ARRC), recommended the Secured Overnight Financing Rate (SOFR) as the replacement rate for USD LIBOR.

In first quarter 2022, the Adjustable Interest Rate (LIBOR) Act (the LIBOR Act) was enacted into U.S. federal law to provide a statutory framework to replace LIBOR with a benchmark rate based on SOFR in U.S. law contracts that do not have fallback provisions or that have fallback provisions resulting in a replacement rate based on LIBOR. The FRB adopted a final rule implementing the LIBOR Act on December 16, 2022, which will become effective on February 27, 2023. We expect that the LIBOR Act will transition certain of our legacy USD LIBOR contracts that do not have appropriate fallback provisions to the applicable SOFR-based replacement rates specified in the FRB's final rule.

We no longer offer new contracts referencing LIBOR, subject to limited exceptions based on regulatory guidance. During 2022, we executed certain LIBOR transition activities to enhance our operational readiness such as the development of new alternative reference rate products, model and system updates, and employee training.

For certain contracts, including commercial credit facilities and related derivatives, we continue to proactively engage with our clients and contract parties to replace LIBOR with SOFR-based rates or other alternative reference rates in advance of the June 30, 2023 cessation date.

Following June 30, 2023, we expect substantially all of our consumer loans, commercial credit facilities, debt securities, derivatives, and long-term debt indexed to USD LIBOR to transition to SOFR-based or other alternative reference rates in accordance with existing fallback provisions or the LIBOR Act.

For additional information regarding the risks and potential impact of LIBOR or any other referenced financial metric being significantly changed, replaced or discontinued, see the "Risk Factors" section in this Report.

Overview (continued)

Financial Performance

In 2022, we generated \$13.2 billion of net income and diluted earnings per common share (EPS) of \$3.14, compared with \$21.5 billion of net income and diluted EPS of \$4.95 in 2021. Financial performance for 2022, compared with 2021, included the following:

- total revenue decreased due to lower net gains from equity securities, mortgage banking, and investment advisory and other asset-based fee income, partially offset by higher net interest income;
- provision for credit losses increased reflecting loan growth and a less favorable economic environment;
- noninterest expense increased due to higher operating losses, partially offset by lower personnel expense, and professional and outside services expense;
- average loans increased driven by loan growth across both our commercial and consumer loan portfolios; and
- average deposits decreased driven by reductions in Corporate and Investment Banking, Commercial Banking, Wealth and Investment Management, and Corporate, partially offset by growth in Consumer Banking and Lending.

Capital and Liquidity

We maintained a strong capital position in 2022. Total equity of \$181.9 billion at December 31, 2022, decreased compared with \$190.1 billion at December 31, 2021, driven by a decrease in accumulated other comprehensive income due to net unrealized losses on available-for-sale (AFS) debt securities. Our liquidity and regulatory capital ratios remained strong at December 31, 2022, including:

- our Common Equity Tier 1 (CET1) ratio was 10.60% under the Standardized Approach (our binding ratio), which continued to exceed the regulatory minimum and buffers of 9.20%;
- our total loss absorbing capacity (TLAC) as a percentage of total risk-weighted assets was 23.27%, compared with the regulatory minimum of 21.50%; and
- our liquidity coverage ratio (LCR) was 122%, which continued to exceed the regulatory minimum of 100%.

See the “Capital Management” and the “Risk Management – Asset/Liability Management – Liquidity Risk and Funding” sections in this Report for additional information regarding our capital and liquidity, including the calculation of our regulatory capital and liquidity amounts.

Credit Quality

Credit quality reflected the following:

- The allowance for credit losses (ACL) for loans of \$13.6 billion at December 31, 2022, decreased \$179 million from December 31, 2021, reflecting reduced uncertainty around the economic impact of the COVID-19 pandemic on our loan portfolio. This decrease was partially offset by loan growth and a less favorable economic environment.
- Our provision for credit losses for loans was \$1.5 billion in 2022, compared with \$(4.2) billion in 2021, reflecting loan growth and a less favorable economic environment.
- The allowance coverage for total loans was 1.42% at December 31, 2022, compared with 1.54% at December 31, 2021.
- Commercial portfolio net loan charge-offs were \$79 million, or 1 basis point of average commercial loans, in 2022, compared with net loan charge-offs of \$295 million, or 6 basis points, in 2021, driven by lower losses in our commercial and industrial and commercial real estate mortgage portfolios.
- Consumer portfolio net loan charge-offs were \$1.5 billion, or 39 basis points of average consumer loans, in 2022, compared with net loan charge-offs of \$1.3 billion, or 33 basis points, in 2021, predominantly due to higher losses in our auto portfolio.
- Nonperforming assets (NPAs) of \$5.8 billion at December 31, 2022, decreased \$1.6 billion, or 21%, from December 31, 2021, driven by improved credit quality across our commercial loan portfolios, and a decrease in residential mortgage nonaccrual loans primarily due to sustained payment performance of borrowers after exiting COVID-19-related accommodation programs. NPAs represented 0.60% of total loans at December 31, 2022.

Table 1 presents a three-year summary of selected financial data and Table 2 presents selected ratios and per common share data.

Table 1: Summary of Selected Financial Data

(in millions, except per share amounts)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income statement							
Net interest income	\$ 44,950	35,779	9,171	26 %	\$ 39,956	(4,177)	(10)%
Noninterest income	28,835	42,713	(13,878)	(32)	34,308	8,405	24
Total revenue	73,785	78,492	(4,707)	(6)	74,264	4,228	6
Net charge-offs	1,609	1,582	27	2	3,370	(1,788)	(53)
Change in the allowance for credit losses	(75)	(5,737)	5,662	99	10,759	(16,496)	NM
Provision for credit losses	1,534	(4,155)	5,689	137	14,129	(18,284)	NM
Noninterest expense	57,282	53,831	3,451	6	57,630	(3,799)	(7)
Net income before noncontrolling interests	12,882	23,238	(10,356)	(45)	3,662	19,576	535
Less: Net income from noncontrolling interests	(300)	1,690	(1,990)	NM	285	1,405	493
Wells Fargo net income	13,182	21,548	(8,366)	(39)	3,377	18,171	538
Earnings per common share	3.17	4.99	(1.82)	(36)	0.43	4.56	NM
Diluted earnings per common share	3.14	4.95	(1.81)	(37)	0.43	4.52	NM
Dividends declared per common share	1.10	0.60	0.50	83	1.22	(0.62)	(51)
Balance sheet (at year end)							
Debt securities	496,808	537,531	(40,723)	(8)	501,207	36,324	7
Loans	955,871	895,394	60,477	7	887,637	7,757	1
Allowance for loan losses	12,985	12,490	495	4	18,516	(6,026)	(33)
Equity securities	64,414	72,886	(8,472)	(12)	60,008	12,878	21
Assets	1,881,016	1,948,068	(67,052)	(3)	1,952,911	(4,843)	—
Deposits	1,383,985	1,482,479	(98,494)	(7)	1,404,381	78,098	6
Long-term debt	174,870	160,689	14,181	9	212,950	(52,261)	(25)
Common stockholders' equity	160,614	168,331	(7,717)	(5)	164,570	3,761	2
Wells Fargo stockholders' equity	179,889	187,606	(7,717)	(4)	184,680	2,926	2
Total equity	181,875	190,110	(8,235)	(4)	185,712	4,398	2

NM – Not meaningful

Overview (continued)

Table 2: Ratios and Per Common Share Data

	Year ended December 31,		
	2022	2021	2020
Performance ratios			
Return on average assets (ROA) (1)	0.70%	1.11	0.17
Return on average equity (ROE) (2)	7.5	12.0	1.1
Return on average tangible common equity (ROTCE) (3)	9.0	14.3	1.3
Efficiency ratio (4)	78	69	78
Capital and other metrics (5)			
At year end:			
Wells Fargo common stockholders' equity to assets	8.54	8.64	8.43
Total equity to assets	9.67	9.76	9.51
Risk-based capital ratios and components:			
Standardized Approach:			
Common Equity Tier 1 (CET1)	10.60	11.35	11.59
Tier 1 capital	12.11	12.89	13.25
Total capital	14.82	15.84	16.47
Risk-weighted assets (RWAs) (in billions)	\$ 1,259.9	1,239.0	1,193.7
Advanced Approach:			
Common Equity Tier 1 (CET1)	12.00%	12.60	11.94
Tier 1 capital	13.72	14.31	13.66
Total capital	15.94	16.72	16.14
Risk-weighted assets (RWAs) (in billions)	\$ 1,112.3	1,116.1	1,158.4
Tier 1 leverage ratio	8.26%	8.34	8.32
Supplementary Leverage Ratio (SLR)	6.86	6.89	8.05
Total Loss Absorbing Capacity (TLAC) Ratio (6)	23.27	23.03	25.74
Liquidity Coverage Ratio (LCR) (7)	122	118	133
Average balances:			
Average Wells Fargo common stockholders' equity to average assets	8.51	8.73	8.43
Average total equity to average assets	9.67	9.85	9.51
Per common share data			
Dividend payout ratio (8)	35.0	12.1	283.7
Book value (9)	\$ 41.89	43.32	39.71

(1) Represents Wells Fargo net income divided by average assets.

(2) Represents Wells Fargo net income applicable to common stock divided by average common stockholders' equity.

(3) Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, goodwill, certain identifiable intangible assets (other than mortgage servicing rights) and goodwill and other intangibles on investments in consolidated portfolio companies, net of applicable deferred taxes. The methodology of determining tangible common equity may differ among companies. Management believes that return on average tangible common equity, which utilizes tangible common equity, is a useful financial measure because it enables management, investors, and others to assess the Company's use of equity. For additional information, including a corresponding reconciliation to generally accepted accounting principles (GAAP) financial measures, see the "Capital Management – Tangible Common Equity" section in this Report.

(4) The efficiency ratio is noninterest expense divided by total revenue (net interest income and noninterest income).

(5) See the "Capital Management" section and Note 25 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report for additional information.

(6) Represents TLAC divided by risk-weighted assets (RWAs), which is our binding TLAC ratio, determined by using the greater of RWAs under the Standardized and Advanced Approaches.

(7) Represents average high-quality liquid assets divided by average projected net cash outflows, as each is defined under the LCR rule.

(8) Dividend payout ratio is dividends declared per common share as a percentage of diluted earnings per common share.

(9) Book value per common share is common stockholders' equity divided by common shares outstanding.

Earnings Performance

Wells Fargo net income for 2022 was \$13.2 billion (\$3.14 diluted EPS), compared with \$21.5 billion (\$4.95 diluted EPS) in 2021. Net income decreased in 2022, compared with 2021, due to a \$13.9 billion decrease in noninterest income, a \$5.7 billion increase in provision for credit losses, and a \$3.5 billion increase in noninterest expense, partially offset by a \$9.2 billion increase in net interest income, a \$3.5 billion decrease in income tax expense, and a \$2.0 billion decrease in net income from noncontrolling interests.

For a discussion of our 2021 financial results, compared with 2020, see the “Earnings Performance” section of our Annual Report on Form 10-K for the year ended December 31, 2021.

Net Interest Income

Net interest income is the interest earned on debt securities, loans (including yield-related loan fees) and other interest-earning assets minus the interest paid on deposits, short-term borrowings and long-term debt. The net interest margin is the average yield on earning assets minus the average interest rate paid for deposits and our other sources of funding.

Net interest income and the net interest margin in any one period can be significantly affected by a variety of factors including the mix and overall size of our earning assets portfolio and the cost of funding those assets. In addition, variable sources of interest income, such as loan fees, periodic dividends, and collection of interest on nonaccrual loans, can fluctuate from period to period.

Net interest income and net interest margin increased in 2022, compared with 2021, due to the impact of higher interest rates on earning assets, higher loan balances, and lower mortgage-backed securities (MBS) premium amortization, partially offset by lower interest income from Paycheck Protection Program (PPP) loans and loans purchased from Government National Mortgage Association (GNMA) loan securitization pools, and higher expenses for interest-bearing deposits and long-term debt.

Table 3 presents the individual components of net interest income and net interest margin. Net interest income and net interest margin are presented on a taxable-equivalent basis in Table 3 to consistently reflect income from taxable and tax-exempt loans and debt and equity securities based on a 21% federal statutory tax rate for the periods ended December 31, 2022, 2021 and 2020.

Earnings Performance (continued)

Table 3: Average Balances, Yields and Rates Paid (Taxable-Equivalent Basis) (1)

(in millions)	Year ended December 31,								
	2022			2021			2020		
	Average balance	Interest income/expense	Interest rates	Average balance	Interest income/expense	Interest rates	Average balance	Interest income/expense	Interest rates
Assets									
Interest-earning deposits with banks	\$ 145,802	2,245	1.54 %	\$ 236,281	314	0.13 %	\$ 186,386	547	0.29 %
Federal funds sold and securities purchased under resale agreements	62,137	859	1.38	69,720	14	0.02	82,798	393	0.47
Debt securities:									
Trading debt securities	91,515	2,490	2.72	88,282	2,107	2.39	94,731	2,544	2.69
Available-for-sale debt securities	141,404	3,167	2.24	189,237	2,924	1.55	229,077	5,248	2.29
Held-to-maturity debt securities	296,540	6,480	2.19	245,304	4,589	1.87	173,505	3,841	2.21
Total debt securities	529,459	12,137	2.29	522,823	9,620	1.84	497,313	11,633	2.34
Loans held for sale (2)	13,900	513	3.69	27,554	865	3.14	27,493	947	3.45
Loans:									
Commercial and industrial – U.S.	291,996	11,293	3.87	252,025	6,526	2.59	281,080	7,912	2.82
Commercial and industrial – Non-U.S.	80,033	2,681	3.35	71,114	1,448	2.04	66,915	1,673	2.50
Commercial real estate mortgage	131,304	4,974	3.79	121,638	3,276	2.69	122,482	3,842	3.14
Commercial real estate construction	21,510	991	4.61	21,589	667	3.09	21,608	760	3.52
Lease financing	14,555	607	4.17	15,519	692	4.46	17,801	877	4.93
Total commercial loans	539,398	20,546	3.81	481,885	12,609	2.62	509,886	15,064	2.95
Residential mortgage – first lien	249,985	7,912	3.17	249,862	7,903	3.16	288,105	9,661	3.35
Residential mortgage – junior lien	14,703	729	4.95	19,710	818	4.15	26,700	1,185	4.44
Credit card	41,275	4,752	11.51	35,471	4,086	11.52	37,093	4,315	11.63
Auto	55,429	2,366	4.27	51,576	2,317	4.49	48,362	2,379	4.92
Other consumer	29,030	1,489	5.13	25,784	962	3.73	31,642	1,719	5.43
Total consumer loans	390,422	17,248	4.42	382,403	16,086	4.21	431,902	19,259	4.46
Total loans (2)	929,820	37,794	4.06	864,288	28,695	3.32	941,788	34,323	3.64
Equity securities	30,575	708	2.31	31,946	608	1.91	28,950	557	1.92
Other	13,275	204	1.54	10,052	6	0.06	7,505	14	0.18
Total interest-earning assets	\$ 1,724,968	54,460	3.16 %	\$ 1,762,664	40,122	2.28 %	\$ 1,772,233	48,414	2.73 %
Cash and due from banks	25,817	—	—	24,562	—	—	21,676	—	—
Goodwill	25,177	—	—	26,087	—	—	26,387	—	—
Other	118,347	—	—	128,592	—	—	121,413	—	—
Total noninterest-earning assets	\$ 169,341	—	—	\$ 179,241	—	—	\$ 169,476	—	—
Total assets	\$ 1,894,309	54,460		1,941,905	40,122		1,941,709	48,414	
Liabilities									
Deposits:									
Demand deposits	\$ 432,745	1,356	0.31 %	\$ 450,131	127	0.03 %	\$ 98,182	184	0.19 %
Savings deposits	433,415	406	0.09	423,221	124	0.03	744,226	1,492	0.20
Time deposits	33,148	449	1.36	36,519	122	0.33	81,674	892	1.09
Deposits in non-U.S. offices	19,191	138	0.72	28,297	15	0.05	39,260	236	0.60
Total interest-bearing deposits	918,499	2,349	0.26	938,168	388	0.04	963,342	2,804	0.29
Short-term borrowings:									
Federal funds purchased and securities sold under agreements to repurchase	24,553	407	1.66	35,245	8	0.02	58,971	276	0.47
Other short-term borrowings	15,257	175	1.15	12,020	(48)	(0.41)	11,235	(25)	(0.22)
Total short-term borrowings	39,810	582	1.46	47,265	(40)	(0.09)	70,206	251	0.36
Long-term debt	157,742	5,505	3.49	178,742	3,173	1.78	224,587	4,471	1.99
Other liabilities	34,126	638	1.87	28,809	395	1.37	28,435	438	1.54
Total interest-bearing liabilities	\$ 1,150,177	9,074	0.79 %	\$ 1,192,984	3,916	0.33 %	\$ 1,286,570	7,964	0.62 %
Noninterest-bearing demand deposits	505,770	—	—	499,644	—	—	412,669	—	—
Other noninterest-bearing liabilities	55,138	—	—	58,058	—	—	57,781	—	—
Total noninterest-bearing liabilities	\$ 560,908	—	—	\$ 557,702	—	—	\$ 470,450	—	—
Total liabilities	\$ 1,711,085	9,074		1,750,686	3,916		1,757,020	7,964	
Total equity	183,224	—	—	191,219	—	—	184,689	—	—
Total liabilities and equity	\$ 1,894,309	9,074		1,941,905	3,916		1,941,709	7,964	
Interest rate spread on a taxable-equivalent basis (3)			2.37 %			1.95 %			2.11 %
Net interest margin and net interest income on a taxable-equivalent basis (3)		\$ 45,386	2.63 %		\$ 36,206	2.05 %		\$ 40,450	2.28 %

(1) The average balance amounts represent amortized costs, except for certain held-to-maturity debt securities, which exclude unamortized basis adjustments related to the transfer of those securities from available-for-sale debt securities. The interest rates are based on interest income or expense amounts for the period and are annualized. Interest rates and amounts include the effects of hedge and risk management activities associated with the respective asset and liability categories.

(2) Nonaccrual loans and any related income are included in their respective loan categories.

(3) Includes taxable-equivalent adjustments of \$436 million, \$427 million and \$494 million for the years ended December 31, 2022, 2021 and 2020, respectively, predominantly related to tax-exempt income on certain loans and securities.

Table 4 allocates the changes in net interest income on a taxable-equivalent basis to changes in either average balances or average rates for both interest-earning assets and interest-bearing liabilities. Because of the numerous simultaneous volume and rate changes during any period, it is not possible to precisely

allocate such changes between volume and rate. For this table, changes that are not solely due to either volume or rate are allocated to these categories on a pro-rata basis based on the absolute value of the change due to average volume and average rate.

Table 4: Analysis of Changes in Net Interest Income

(in millions)	2022 vs. 2021			Year ended December 31,			
	Volume	Rate	Total	2021 vs. 2020	Volume	Rate	Total
Increase (decrease) in interest income:							
Interest-earning deposits with banks	\$ (162)	2,093	1,931	119	(352)	(233)	
Federal funds sold and securities purchased under resale agreements	(2)	847	845	(53)	(326)	(379)	
Debt securities:							
Trading debt securities	80	303	383	(165)	(272)	(437)	
Available-for-sale debt securities	(858)	1,101	243	(813)	(1,511)	(2,324)	
Held-to-maturity debt securities	1,039	852	1,891	1,405	(657)	748	
Total debt securities	261	2,256	2,517	427	(2,440)	(2,013)	
Loans held for sale	(484)	132	(352)	2	(84)	(82)	
Loans:							
Commercial and industrial – U.S.	1,158	3,609	4,767	(775)	(611)	(1,386)	
Commercial and industrial – Non-U.S.	201	1,032	1,233	99	(324)	(225)	
Commercial real estate mortgage	276	1,422	1,698	(26)	(540)	(566)	
Commercial real estate construction	(2)	326	324	(1)	(92)	(93)	
Lease financing	(42)	(43)	(85)	(106)	(79)	(185)	
Total commercial loans	1,591	6,346	7,937	(809)	(1,646)	(2,455)	
Residential mortgage – first lien	1	8	9	(1,232)	(526)	(1,758)	
Residential mortgage – junior lien	(230)	141	(89)	(294)	(73)	(367)	
Credit card	670	(4)	666	(188)	(41)	(229)	
Auto	166	(117)	49	153	(215)	(62)	
Other consumer	132	395	527	(281)	(476)	(757)	
Total consumer loans	739	423	1,162	(1,842)	(1,331)	(3,173)	
Total loans	2,330	6,769	9,099	(2,651)	(2,977)	(5,628)	
Equity securities	(26)	126	100	54	(3)	51	
Other	3	195	198	4	(12)	(8)	
Total increase (decrease) in interest income	1,920	12,418	14,338	(2,098)	(6,194)	(8,292)	
Increase (decrease) in interest expense:							
Deposits:							
Demand deposits	\$ (5)	1,234	1,229	208	(265)	(57)	
Savings deposits	3	279	282	(461)	(907)	(1,368)	
Time deposits	(12)	339	327	(340)	(430)	(770)	
Deposits in non-U.S. offices	(7)	130	123	(52)	(169)	(221)	
Total interest-bearing deposits	(21)	1,982	1,961	(645)	(1,771)	(2,416)	
Short-term borrowings:							
Federal funds purchased and securities sold under agreements to repurchase	(3)	402	399	(80)	(188)	(268)	
Other short-term borrowings	(10)	233	223	(2)	(21)	(23)	
Total short-term borrowings	(13)	635	622	(82)	(209)	(291)	
Long-term debt	(412)	2,744	2,332	(855)	(443)	(1,298)	
Other liabilities	82	161	243	6	(49)	(43)	
Total increase (decrease) in interest expense	(364)	5,522	5,158	(1,576)	(2,472)	(4,048)	
Increase (decrease) in net interest income on a taxable-equivalent basis	\$ 2,284	6,896	9,180	(522)	(3,722)	(4,244)	

Earnings Performance (continued)

Noninterest Income

Table 5: Noninterest Income

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Deposit-related fees	\$ 5,316	5,475	(159)	(3)%	\$ 5,221	254	5 %
Lending-related fees	1,397	1,445	(48)	(3)	1,381	64	5
Investment advisory and other asset-based fees	9,004	11,011	(2,007)	(18)	9,863	1,148	12
Commissions and brokerage services fees	2,242	2,299	(57)	(2)	2,384	(85)	(4)
Investment banking fees	1,439	2,354	(915)	(39)	1,865	489	26
Card fees	4,355	4,175	180	4	3,544	631	18
Net servicing income	533	194	339	175	(139)	333	240
Net gains on mortgage loan originations/sales	850	4,762	(3,912)	(82)	3,632	1,130	31
Mortgage banking	1,383	4,956	(3,573)	(72)	3,493	1,463	42
Net gains from trading activities	2,116	284	1,832	645	1,172	(888)	(76)
Net gains from debt securities	151	553	(402)	(73)	873	(320)	(37)
Net gains (losses) from equity securities	(806)	6,427	(7,233)	NM	665	5,762	866
Lease income	1,269	996	273	27	1,245	(249)	(20)
Other	969	2,738	(1,769)	(65)	2,602	136	5
Total	\$ 28,835	42,713	(13,878)	(32)	\$ 34,308	8,405	24

NM – Not meaningful

Full year 2022 vs. full year 2021

Deposit-related fees decreased reflecting:

- lower treasury management fees on commercial accounts driven by a higher earnings credit rate due to an increase in interest rates; and
- the elimination of non-sufficient funds and other fees as well as efforts to help customers avoid overdraft fees;

partially offset by:

- lower fee waivers as 2021 included additional accommodations to support customers.

Lending-related fees decreased reflecting lower commercial loan commitment fees.

Investment advisory and other asset-based fees decreased reflecting:

- lower asset-based and trust fees due to divestitures in 2021; and
- lower average market valuations.

For additional information on certain client investment assets, see the “Earnings Performance – Operating Segment Results – Wealth and Investment Management – WIM Advisory Assets” section in this Report.

Commissions and brokerage services fees decreased driven by lower transactional revenue.

Investment banking fees decreased due to lower market activity.

Card fees increased reflecting higher network revenue as well as higher interchange fees, net of rewards, driven by increased purchase and transaction volumes.

Net servicing income increased driven by a lower decline in residential mortgage servicing rights (MSRs) as a result of reduced prepayment rates, partially offset by net unfavorable hedge results due to interest rate volatility.

Net gains on mortgage loan originations/sales decreased driven by:

- lower residential mortgage origination volumes and lower gain on sale margins; and
- lower gains related to the securitization of loans we purchased from GNMA loan securitization pools.

For additional information on servicing income and net gains on mortgage loan originations/sales, see Note 6 (Mortgage Banking Activities) to Financial Statements in this Report.

Net gains from trading activities increased driven by higher commodities, foreign exchange, rates, and equities trading revenue.

Net gains from debt securities decreased due to lower gains on sales of corporate debt securities and agency MBS.

Net gains (losses) from equity securities decreased reflecting:

- lower unrealized gains on nonmarketable equity securities driven by our affiliated venture capital and private equity businesses;
- a \$2.5 billion impairment of equity securities (before the impact of noncontrolling interests) in 2022 predominantly in our affiliated venture capital business driven by market conditions; and
- lower realized gains on the sales of equity securities.

Lease income increased driven by a \$268 million impairment in 2021 of certain rail cars in our rail car leasing business that are used for the transportation of coal products.

Other income decreased driven by:

- gains in 2021 on the sales of our Corporate Trust Services business, our student loan portfolio, and Wells Fargo Asset Management (WFAM); and
- higher amortization due to growth in wind energy investments (offset by benefits and credits in income tax expense);

partially offset by:

- lower valuation losses related to the retained litigation risk associated with shares of Visa Class B common stock that we sold.

Noninterest Expense

Table 6: Noninterest Expense

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Personnel	\$ 34,340	35,541	(1,201)	(3)%	\$ 34,811	730	2 %
Technology, telecommunications and equipment	3,375	3,227	148	5	3,099	128	4
Occupancy	2,881	2,968	(87)	(3)	3,263	(295)	(9)
Operating losses	6,984	1,568	5,416	345	3,523	(1,955)	(55)
Professional and outside services	5,188	5,723	(535)	(9)	6,706	(983)	(15)
Leases (1)	750	867	(117)	(13)	1,022	(155)	(15)
Advertising and promotion	505	600	(95)	(16)	600	—	—
Restructuring charges	5	76	(71)	(93)	1,499	(1,423)	(95)
Other	3,254	3,261	(7)	—	3,107	154	5
Total	\$ 57,282	53,831	3,451	6	\$ 57,630	(3,799)	(7)

(1) Represents expenses for assets we lease to customers.

Full year 2022 vs. full year 2021

Personnel expense decreased driven by:

- lower revenue-related compensation expense; and
 - the impact of divestitures and efficiency initiatives;
- partially offset by:
- higher severance expense primarily in Home Lending.

Technology, telecommunications and equipment expense increased due to higher expense for technology contracts.

Occupancy expense decreased driven by lower cleaning fees, supplies, and equipment expense.

Operating losses increased reflecting a \$5.1 billion increase in expenses for litigation, regulatory, and customer remediation matters primarily related to a variety of historical matters.

Income Tax Expense

Table 7: Income Tax Expense

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income before income tax expense (benefit)	\$ 14,969	28,816	(13,847)	(48)%	\$ 2,505	26,311	NM
Income tax expense (benefit)	2,087	5,578	(3,491)	(63)	(1,157)	6,735	582 %
Effective Income tax rate	13.7%	20.6			(52.1)%		

NM – Not meaningful

Income tax expense for 2022, compared with 2021, decreased primarily due to lower pre-tax income. The effective income tax rate for 2022, compared with 2021, decreased reflecting the impact of income tax benefits, including tax credits, on lower pre-tax income and discrete tax benefits related to interest on overpayments in prior years.

As previously disclosed, we have outstanding litigation, regulatory, and customer remediation matters that could impact operating losses in the coming quarters.

Professional and outside services expense decreased driven by efficiency initiatives to reduce our spending on consultants and contractors.

Leases expense decreased driven by lower depreciation expense from a reduction in the size of our operating lease asset portfolio.

Advertising and promotion expense decreased due to lower marketing and brand campaign volumes.

For additional information on income taxes, see Note 22 (Income Taxes) to Financial Statements in this Report.

Earnings Performance (continued)

Operating Segment Results

Our management reporting is organized into four reportable operating segments: Consumer Banking and Lending; Commercial Banking; Corporate and Investment Banking; and Wealth and Investment Management. All other business activities that are not included in the reportable operating segments have been included in Corporate. For additional information, see Table 8. We define our reportable operating segments by type of product and customer segment, and their results are based on our management reporting process. The management reporting process measures the performance of the reportable operating segments based on the Company's management structure, and the results are regularly reviewed with our Chief Executive Officer and relevant senior management. The management reporting process is based on U.S. GAAP and includes specific adjustments, such as funds transfer pricing for asset/liability management, shared revenue and expenses, and taxable-equivalent adjustments to consistently reflect income from taxable and tax-exempt sources, which allows management to assess performance consistently across the operating segments.

Funds Transfer Pricing Corporate treasury manages a funds transfer pricing methodology that considers interest rate risk, liquidity risk, and other product characteristics. Operating segments pay a funding charge for their assets and receive a funding credit for their deposits, both of which are included in net interest income. The net impact of the funding charges or credits is recognized in corporate treasury.

Revenue and Expense Sharing When lines of business jointly serve customers, the line of business that is responsible for providing the product or service recognizes revenue or expense with a referral fee paid or an allocation of cost to the other line of

business based on established internal revenue-sharing agreements.

When a line of business uses a service provided by another line of business or enterprise function (included in Corporate), expense is generally allocated based on the cost and use of the service provided.

Taxable-Equivalent Adjustments Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

Allocated Capital Reportable operating segments are allocated capital under a risk-sensitive framework that is primarily based on aspects of our regulatory capital requirements, and the assumptions and methodologies used to allocate capital are periodically assessed and revised. Management believes that return on allocated capital is a useful financial measure because it enables management, investors, and others to assess a reportable operating segment's use of capital.

Selected Metrics We present certain financial and nonfinancial metrics that management uses when evaluating reportable operating segment results. Management believes that these metrics are useful to investors and others to assess the performance, customer growth, and trends of reportable operating segments or lines of business.

Table 8: Management Reporting Structure

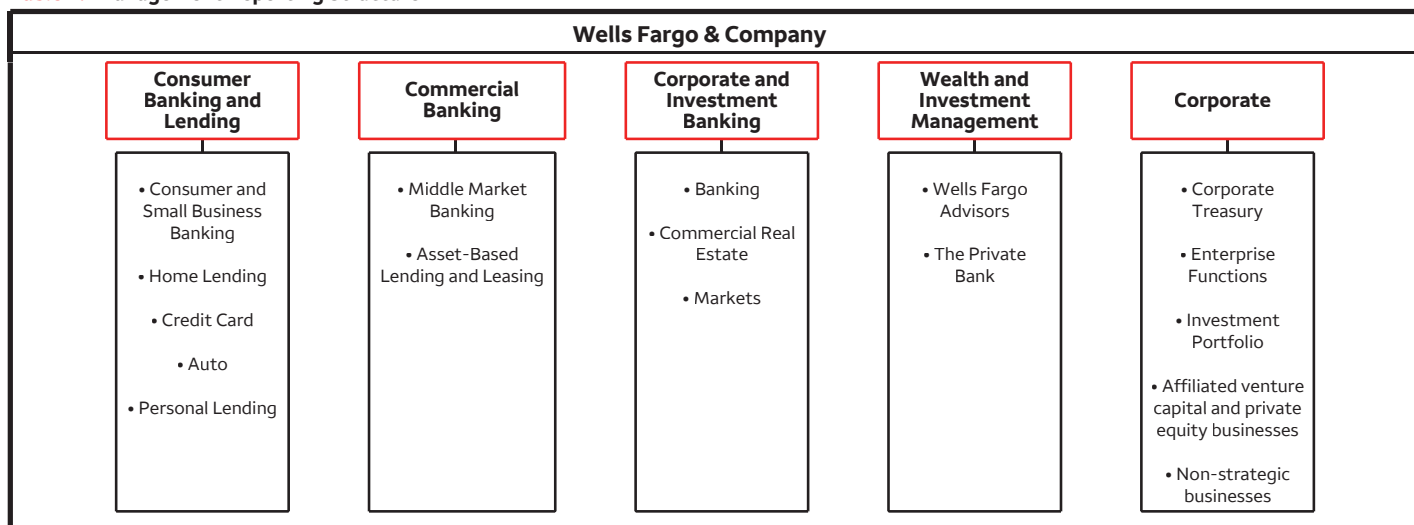


Table 9 and the following discussion present our results by reportable operating segment. For additional information, see Note 19 (Operating Segments) to Financial Statements in this Report.

Table 9: Operating Segment Results – Highlights

(in millions)	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate (1)	Reconciling Items (2)	Consolidated Company
Year ended December 31, 2022							
Net interest income	\$ 27,044	7,289	8,733	3,927	(1,607)	(436)	44,950
Noninterest income	8,766	3,631	6,509	10,895	609	(1,575)	28,835
Total revenue	35,810	10,920	15,242	14,822	(998)	(2,011)	73,785
Provision for credit losses	2,276	(534)	(185)	(25)	2	—	1,534
Noninterest expense	26,277	6,058	7,560	11,613	5,774	—	57,282
Income (loss) before income tax expense (benefit)	7,257	5,396	7,867	3,234	(6,774)	(2,011)	14,969
Income tax expense (benefit)	1,816	1,366	1,989	812	(1,885)	(2,011)	2,087
Net income (loss) before noncontrolling interests	5,441	4,030	5,878	2,422	(4,889)	—	12,882
Less: Net income (loss) from noncontrolling interests	—	12	—	—	(312)	—	(300)
Net income (loss)	\$ 5,441	4,018	5,878	2,422	(4,577)	—	13,182
Year ended December 31, 2021							
Net interest income	\$ 22,807	4,960	7,410	2,570	(1,541)	(427)	35,779
Noninterest income	12,070	3,589	6,429	11,776	10,036	(1,187)	42,713
Total revenue	34,877	8,549	13,839	14,346	8,495	(1,614)	78,492
Provision for credit losses	(1,178)	(1,500)	(1,439)	(95)	57	—	(4,155)
Noninterest expense	24,648	5,862	7,200	11,734	4,387	—	53,831
Income (loss) before income tax expense (benefit)	11,407	4,187	8,078	2,707	4,051	(1,614)	28,816
Income tax expense (benefit)	2,852	1,045	2,019	680	596	(1,614)	5,578
Net income before noncontrolling interests	8,555	3,142	6,059	2,027	3,455	—	23,238
Less: Net income (loss) from noncontrolling interests	—	8	(3)	—	1,685	—	1,690
Net income	\$ 8,555	3,134	6,062	2,027	1,770	—	21,548
Year ended December 31, 2020							
Net interest income	\$ 23,378	6,134	7,509	2,988	441	(494)	39,956
Noninterest income	10,638	3,041	6,419	10,225	4,916	(931)	34,308
Total revenue	34,016	9,175	13,928	13,213	5,357	(1,425)	74,264
Provision for credit losses	5,662	3,744	4,946	249	(472)	—	14,129
Noninterest expense	26,976	6,323	7,703	10,912	5,716	—	57,630
Income (loss) before income tax expense (benefit)	1,378	(892)	1,279	2,052	113	(1,425)	2,505
Income tax expense (benefit)	302	(208)	330	514	(670)	(1,425)	(1,157)
Net income (loss) before noncontrolling interests	1,076	(684)	949	1,538	783	—	3,662
Less: Net income (loss) from noncontrolling interests	—	5	(1)	—	281	—	285
Net income (loss)	\$ 1,076	(689)	950	1,538	502	—	3,377

(1) All other business activities that are not included in the reportable operating segments have been included in Corporate. For additional information, see the "Corporate" section below.

(2) Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

Earnings Performance (continued)

Consumer Banking and Lending offers diversified financial products and services for consumers and small businesses with annual sales generally up to \$10 million. These financial products and services include checking and savings accounts, credit and

debit cards as well as home, auto, personal, and small business lending. Table 9a and Table 9b provide additional information for Consumer Banking and Lending.

Table 9a: Consumer Banking and Lending – Income Statement and Selected Metrics

(\$ in millions, unless otherwise noted)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income Statement							
Net interest income	\$ 27,044	22,807	4,237	19 %	\$ 23,378	(571)	(2)%
Noninterest income:							
Deposit-related fees	3,093	3,045	48	2	2,904	141	5
Card fees	4,067	3,930	137	3	3,318	612	18
Mortgage banking	1,100	4,490	(3,390)	(76)	3,224	1,266	39
Other	506	605	(99)	(16)	1,192	(587)	(49)
Total noninterest income	8,766	12,070	(3,304)	(27)	10,638	1,432	13
Total revenue	35,810	34,877	933	3	34,016	861	3
Net charge-offs	1,693	1,439	254	18	1,875	(436)	(23)
Change in the allowance for credit losses	583	(2,617)	3,200	122	3,787	(6,404)	NM
Provision for credit losses	2,276	(1,178)	3,454	293	5,662	(6,840)	NM
Noninterest expense	26,277	24,648	1,629	7	26,976	(2,328)	(9)
Income before income tax expense	7,257	11,407	(4,150)	(36)	1,378	10,029	728
Income tax expense	1,816	2,852	(1,036)	(36)	302	2,550	844
Net income	\$ 5,441	8,555	(3,114)	(36)	\$ 1,076	7,479	695
Revenue by Line of Business							
Consumer and Small Business Banking	\$ 23,421	18,958	4,463	24	\$ 18,684	274	1
Consumer Lending:							
Home Lending	4,221	8,154	(3,933)	(48)	7,875	279	4
Credit Card	5,271	4,928	343	7	4,685	243	5
Auto	1,716	1,733	(17)	(1)	1,575	158	10
Personal Lending	1,181	1,104	77	7	1,197	(93)	(8)
Total revenue	\$ 35,810	34,877	933	3	\$ 34,016	861	3
Selected Metrics							
Consumer Banking and Lending:							
Return on allocated capital (1)	10.8%	17.2			1.6 %		
Efficiency ratio (2)	73	71			79		
Retail bank branches (#)	4,598	4,777		(4)	5,032		(5)
Digital active customers (# in millions) (3)	33.5	33.0		2	32.0		3
Mobile active customers (# in millions) (3)	28.3	27.3		4	26.0		5
Consumer and Small Business Banking:							
Deposit spread (4)	2.0%	1.5			1.8 %		
Debit card purchase volume (\$ in billions) (5)	\$ 486.6	471.5	15.1	3	\$ 391.9	79.6	20
Debit card purchase transactions (# in millions) (5)	9,852	9,808		—	8,792		12

(continued on following page)

(continued from previous page)

(\$ in millions, unless otherwise noted)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Home Lending:							
Mortgage banking:							
Net servicing income	\$ 368	35	333	951 %	\$ (160)	195	122 %
Net gains on mortgage loan originations/sales	732	4,455	(3,723)	(84)	3,384	1,071	32
Total mortgage banking	\$ 1,100	4,490	(3,390)	(76)	\$ 3,224	1,266	39
Originations (\$ in billions):							
Retail	\$ 64.3	138.5	(74.2)	(54)	\$ 118.7	19.8	17
Correspondent	43.8	66.5	(22.7)	(34)	104.0	(37.5)	(36)
Total originations	\$ 108.1	205.0	(96.9)	(47)	\$ 222.7	(17.7)	(8)
% of originations held for sale (HFS)	52.5 %	64.6			73.9 %		
Third-party mortgage loans serviced (period-end) (\$ in billions) (6)	\$ 679.2	716.8	(37.6)	(5)	\$ 856.7	(139.9)	(16)
Mortgage servicing rights (MSR) carrying value (period-end)	9,310	6,920	2,390	35	6,125	795	13
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) (6)	1.37 %	0.97			0.71 %		
Home lending loans 30+ days delinquency rate (7)(8)(9)	0.31	0.39			0.64		
Credit Card:							
Point of sale (POS) volume (\$ in billions)	\$ 119.1	95.3	23.8	25	\$ 75.3	20.0	27
New accounts (# in thousands)	2,153	1,640		31	1,022		60
Credit card loans 30+ days delinquency rate	2.08 %	1.52			2.26 %		
Credit card loans 90+ days delinquency rate	1.01	0.72			1.04		
Auto:							
Auto originations (\$ in billions)	\$ 23.1	33.9	(10.8)	(32)	\$ 22.8	11.1	49
Auto loans 30+ days delinquency rate (8)	2.64 %	1.84			1.77 %		
Personal Lending:							
New volume (\$ in billions)	\$ 12.6	9.8	2.8	29	\$ 7.9	1.9	24

NM – Not meaningful

- (1) Return on allocated capital is segment net income (loss) applicable to common stock divided by segment average allocated capital. Segment net income (loss) applicable to common stock is segment net income (loss) less allocated preferred stock dividends.
- (2) Efficiency ratio is segment noninterest expense divided by segment total revenue (net interest income and noninterest income).
- (3) Digital and mobile active customers is the number of consumer and small business customers who have logged on via a digital or mobile device, respectively, in the prior 90 days. Digital active customers includes both online and mobile customers.
- (4) Deposit spread is (i) the internal funds transfer pricing credit on segment deposits minus interest paid to customers for segment deposits, divided by (ii) average segment deposits.
- (5) Debit card purchase volume and transactions reflect combined activity for both consumer and business debit card purchases.
- (6) Excludes residential mortgage loans subserviced for others.
- (7) Excludes residential mortgage loans insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA) and loans held for sale.
- (8) Excludes nonaccrual loans.
- (9) Beginning in second quarter 2020, customer payment deferral activities instituted in response to the COVID-19 pandemic may have delayed the recognition of delinquencies for those customers who would have otherwise moved into past due or nonaccrual status.

Full year 2022 vs. full year 2021

Revenue increased driven by:

- higher net interest income reflecting higher interest rates and higher average deposit balances and deposit spreads;
- higher card fees reflecting higher network revenue as well as higher interchange fees, net of rewards, driven by increased purchase and transaction volumes; and
- higher deposit-related fees reflecting lower fee waivers as 2021 included additional accommodations to support customers, and a higher volume of monthly account service fees in 2022, partially offset by the elimination of non-sufficient funds and other fees in 2022 as well as initiatives to help customers avoid overdraft fees;

partially offset by:

- lower mortgage banking noninterest income due to lower origination volumes and gain on sale margins, and lower

revenue related to the securitization of loans we purchased from GNMA loan securitization pools.

Provision for credit losses increased reflecting loan growth, a less favorable economic environment, and higher net charge-offs.

Noninterest expense increased driven by:

- higher operating losses reflecting higher expenses primarily related to a variety of historical matters, including litigation, regulatory, and customer remediation matters; and

- higher operating costs;

partially offset by:

- lower personnel expense driven by lower revenue-related incentive compensation in Home Lending due to lower production and the impact of efficiency initiatives, partially offset by higher severance expense;

Earnings Performance (continued)

- lower occupancy expense as well as lower professional and outside services expense related to efficiency initiatives; and
- lower donation expense due to higher donations of PPP processing fees in 2021.

Table 9b: Consumer Banking and Lending – Balance Sheet

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Selected Balance Sheet Data (average)							
Loans by Line of Business:							
Consumer and Small Business Banking	\$ 10,132	16,625	(6,493)	(39)%	\$ 15,173	1,452	10 %
Consumer Lending:							
Home Lending	219,157	224,446	(5,289)	(2)	268,586	(44,140)	(16)
Credit Card	34,151	29,052	5,099	18	30,861	(1,809)	(6)
Auto	55,994	52,293	3,701	7	49,460	2,833	6
Personal Lending	12,999	11,469	1,530	13	12,383	(914)	(7)
Total loans	\$ 332,433	333,885	(1,452)	—	\$ 376,463	(42,578)	(11)
Total deposits	883,130	834,739	48,391	6	722,085	112,654	16
Allocated capital	48,000	48,000	—	—	48,000	—	—
Selected Balance Sheet Data (period-end)							
Loans by Line of Business:							
Consumer and Small Business Banking	\$ 9,704	11,270	(1,566)	(14)	\$ 17,743	(6,473)	(36)
Consumer Lending:							
Home Lending	223,525	214,407	9,118	4	253,942	(39,535)	(16)
Credit Card	38,475	31,671	6,804	21	30,178	1,493	5
Auto	54,281	57,260	(2,979)	(5)	49,072	8,188	17
Personal Lending	14,544	11,966	2,578	22	11,861	105	1
Total loans	\$ 340,529	326,574	13,955	4	\$ 362,796	(36,222)	(10)
Total deposits	859,695	883,674	(23,979)	(3)	784,565	99,109	13

Full year 2022 vs. full year 2021

Total loans (average) decreased driven by:

- a decline in PPP loans in Consumer and Small Business Banking; and
- a decline in Home Lending loan balances due to the securitization of loans we purchased from GNMA loan securitization pools and the continued pause in originating home equity loans;

partially offset by:

- higher customer purchase volume and the impact of new products in our Credit Card business; and
- higher loan balances in our Auto business.

Total loans (period-end) increased driven by:

- originations exceeding paydowns in Home Lending;
- higher customer purchase volume and the impact of new products in our Credit Card business; and
- growth in our Personal Lending business;

partially offset by:

- a decline in our Auto business due to lower origination volumes reflecting credit tightening actions and rising interest rates; and
- a decline in PPP loans in Consumer and Small Business Banking.

Total deposits (average) increased driven by higher levels of customer liquidity and savings in the first half of 2022, partially offset by increased consumer spending in the second half of 2022, customers continuing to allocate more cash into higher yielding liquid alternatives, and lower servicing escrow deposits.

Total deposits (period-end) decreased driven by increased consumer spending, customers continuing to allocate more cash into higher yielding liquid alternatives, and lower servicing escrow deposits.

Commercial Banking provides financial solutions to private, family owned and certain public companies. Products and services include banking and credit products across multiple

industry sectors and municipalities, secured lending and lease products, and treasury management. Table 9c and Table 9d provide additional information for Commercial Banking.

Table 9c: Commercial Banking – Income Statement and Selected Metrics

(\$ in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income Statement							
Net interest income	\$ 7,289	4,960	2,329	47 %	\$ 6,134	(1,174)	(19)%
Noninterest income:							
Deposit-related fees	1,131	1,285	(154)	(12)	1,219	66	5
Lending-related fees	491	532	(41)	(8)	531	1	—
Lease income	710	682	28	4	646	36	6
Other	1,299	1,090	209	19	645	445	69
Total noninterest income	3,631	3,589	42	1	3,041	548	18
Total revenue	10,920	8,549	2,371	28	9,175	(626)	(7)
Net charge-offs	4	101	(97)	(96)	590	(489)	(83)
Change in the allowance for credit losses	(538)	(1,601)	1,063	66	3,154	(4,755)	NM
Provision for credit losses	(534)	(1,500)	966	64	3,744	(5,244)	NM
Noninterest expense	6,058	5,862	196	3	6,323	(461)	(7)
Income (loss) before income tax expense (benefit)	5,396	4,187	1,209	29	(892)	5,079	569
Income tax expense (benefit)	1,366	1,045	321	31	(208)	1,253	602
Less: Net income from noncontrolling interests	12	8	4	50	5	3	60
Net income (loss)	\$ 4,018	3,134	884	28	\$ (689)	3,823	555
Revenue by Line of Business							
Middle Market Banking	\$ 6,574	4,642	1,932	42	\$ 5,067	(425)	(8)
Asset-Based Lending and Leasing	4,346	3,907	439	11	4,108	(201)	(5)
Total revenue	\$ 10,920	8,549	2,371	28	\$ 9,175	(626)	(7)
Revenue by Product							
Lending and leasing	\$ 5,253	4,835	418	9	\$ 5,432	(597)	(11)
Treasury management and payments	4,483	2,825	1,658	59	3,205	(380)	(12)
Other	1,184	889	295	33	538	351	65
Total revenue	\$ 10,920	8,549	2,371	28	\$ 9,175	(626)	(7)
Selected Metrics							
Return on allocated capital	19.7 %	15.1			(4.5)%		
Efficiency ratio	55	69			69		

NM – Not meaningful

Full year 2022 vs. full year 2021

Revenue increased driven by:

- higher net interest income reflecting higher interest rates and deposit spreads as well as higher loan balances; and
- higher other noninterest income driven by higher net gains from equity securities and higher income from renewable energy investments;

partially offset by:

- lower deposit-related fees driven by the impact of higher earnings credit rates, which result in lower fees for commercial customers.

Provision for credit losses reflected loan growth and a less favorable economic environment, partially offset by lower net charge-offs.

Noninterest expense increased driven by higher operating costs and operating losses, partially offset by the impact of efficiency initiatives.

Earnings Performance (continued)

Table 9d: Commercial Banking – Balance Sheet

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Selected Balance Sheet Data (average)							
Loans:							
Commercial and industrial	\$ 147,379	120,396	26,983	22 %	\$ 143,263	(22,867)	(16)%
Commercial real estate	45,130	47,018	(1,888)	(4)	52,220	(5,202)	(10)
Lease financing and other	13,523	13,823	(300)	(2)	15,953	(2,130)	(13)
Total loans	\$ 206,032	181,237	24,795	14	\$ 211,436	(30,199)	(14)
Loans by Line of Business:							
Middle Market Banking	\$ 114,634	102,882	11,752	11	\$ 112,848	(9,966)	(9)
Asset-Based Lending and Leasing	91,398	78,355	13,043	17	98,588	(20,233)	(21)
Total loans	\$ 206,032	181,237	24,795	14	\$ 211,436	(30,199)	(14)
Total deposits	186,079	197,269	(11,190)	(6)	178,946	18,323	10
Allocated capital	19,500	19,500	—	—	19,500	—	—
Selected Balance Sheet Data (period-end)							
Loans:							
Commercial and industrial	\$ 163,797	131,078	32,719	25	\$ 124,253	6,825	5
Commercial real estate	45,816	45,467	349	1	49,903	(4,436)	(9)
Lease financing and other	13,916	13,803	113	1	14,821	(1,018)	(7)
Total loans	\$ 223,529	190,348	33,181	17	\$ 188,977	1,371	1
Loans by Line of Business:							
Middle Market Banking	\$ 121,192	106,834	14,358	13	\$ 101,193	5,641	6
Asset-Based Lending and Leasing	102,337	83,514	18,823	23	87,784	(4,270)	(5)
Total loans	\$ 223,529	190,348	33,181	17	\$ 188,977	1,371	1
Total deposits	173,942	205,428	(31,486)	(15)	188,292	17,136	9

Full year 2022 vs. full year 2021

Total loans (average and period-end) increased driven by growth in new commitments with existing and new customers as well as higher line utilization and increased originations.

Total deposits (average and period-end) decreased reflecting:

- customers continuing to allocate more cash into higher yielding liquid alternatives;
- the transfer of certain customer accounts to the Consumer Banking and Lending operating segment in first quarter 2022; and
- actions taken in 2021 and early 2022 to manage under the asset cap.

Corporate and Investment Banking delivers a suite of capital markets, banking, and financial products and services to corporate, commercial real estate, government and institutional clients globally. Products and services include corporate banking, investment banking, treasury management, commercial real

estate lending and servicing, equity and fixed income solutions as well as sales, trading, and research capabilities. Table 9e and Table 9f provide additional information for Corporate and Investment Banking.

Table 9e: Corporate and Investment Banking – Income Statement and Selected Metrics

(\$ in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income Statement							
Net interest income	\$ 8,733	7,410	1,323	18 %	\$ 7,509	(99)	(1)%
Noninterest income:							
Deposit-related fees	1,068	1,112	(44)	(4)	1,062	50	5
Lending-related fees	769	761	8	1	684	77	11
Investment banking fees	1,492	2,405	(913)	(38)	1,952	453	23
Net gains from trading activities	1,886	272	1,614	593	1,190	(918)	(77)
Other	1,294	1,879	(585)	(31)	1,531	348	23
Total noninterest income	6,509	6,429	80	1	6,419	10	—
Total revenue	15,242	13,839	1,403	10	13,928	(89)	(1)
Net charge-offs	(48)	(22)	(26)	NM	742	(764)	NM
Change in the allowance for credit losses	(137)	(1,417)	1,280	90	4,204	(5,621)	NM
Provision for credit losses	(185)	(1,439)	1,254	87	4,946	(6,385)	NM
Noninterest expense	7,560	7,200	360	5	7,703	(503)	(7)
Income before income tax expense	7,867	8,078	(211)	(3)	1,279	6,799	532
Income tax expense	1,989	2,019	(30)	(1)	330	1,689	512
Less: Net loss from noncontrolling interests	—	(3)	3	100	(1)	(2)	NM
Net income	\$ 5,878	6,062	(184)	(3)	\$ 950	5,112	538
Revenue by Line of Business							
Banking:							
Lending	\$ 2,222	1,948	274	14	\$ 1,767	181	10
Treasury Management and Payments	2,369	1,468	901	61	1,680	(212)	(13)
Investment Banking	1,206	1,654	(448)	(27)	1,448	206	14
Total Banking	5,797	5,070	727	14	4,895	175	4
Commercial Real Estate	4,534	3,963	571	14	3,607	356	10
Markets:							
Fixed Income, Currencies, and Commodities (FICC)	3,660	3,710	(50)	(1)	4,314	(604)	(14)
Equities	1,115	897	218	24	1,204	(307)	(25)
Credit Adjustment (CVA/DVA) and Other	20	91	(71)	(78)	26	65	250
Total Markets	4,795	4,698	97	2	5,544	(846)	(15)
Other	116	108	8	7	(118)	226	192
Total revenue	\$ 15,242	13,839	1,403	10	\$ 13,928	(89)	(1)
Selected Metrics							
Return on allocated capital	15.3 %	16.9			1.8 %		
Efficiency ratio	50	52			55		

NM – Not meaningful

Full year 2022 vs. full year 2021

Revenue increased driven by:

- higher net interest income reflecting higher interest rates as well as higher loan balances; and
- higher net gains from trading activities driven by higher commodities, foreign exchange, rates, and equities trading revenue;

partially offset by:

- lower investment banking fees due to lower market activity; and

- lower other noninterest income driven by lower mortgage banking income due to lower commercial MBS gain on sale margins and volumes.

Provision for credit losses reflected loan growth and a less favorable economic environment.

Noninterest expense increased driven by higher operating costs and operating losses, partially offset by the impact of efficiency initiatives.

Earnings Performance (continued)

Table 9f: Corporate and Investment Banking – Balance Sheet

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Selected Balance Sheet Data (average)							
Loans:							
Commercial and industrial	\$ 198,424	170,713	27,711	16 %	\$ 172,492	(1,779)	(1)%
Commercial real estate	98,560	86,323	12,237	14	82,832	3,491	4
Total loans	\$ 296,984	257,036	39,948	16	\$ 255,324	1,712	1
Loans by Line of Business:							
Banking	\$ 106,440	93,766	12,674	14	\$ 93,501	265	—
Commercial Real Estate	133,719	110,978	22,741	20	108,279	2,699	2
Markets	56,825	52,292	4,533	9	53,544	(1,252)	(2)
Total loans	\$ 296,984	257,036	39,948	16	\$ 255,324	1,712	1
Trading-related assets:							
Trading account securities	\$ 112,213	110,386	1,827	2	\$ 109,803	583	1
Reverse repurchase agreements/securities borrowed	50,491	59,044	(8,553)	(14)	71,485	(12,441)	(17)
Derivative assets	27,421	25,315	2,106	8	21,986	3,329	15
Total trading-related assets	\$ 190,125	194,745	(4,620)	(2)	\$ 203,274	(8,529)	(4)
Total assets	557,396	523,344	34,052	7	521,514	1,830	—
Total deposits	161,720	189,176	(27,456)	(15)	234,332	(45,156)	(19)
Allocated capital	36,000	34,000	2,000	6	34,000	—	—
Selected Balance Sheet Data (period-end)							
Loans:							
Commercial and industrial	\$ 196,529	191,391	5,138	3	\$ 160,000	31,391	20
Commercial real estate	101,848	92,983	8,865	10	84,456	8,527	10
Total loans	\$ 298,377	284,374	14,003	5	\$ 244,456	39,918	16
Loans by Line of Business:							
Banking	\$ 101,183	101,926	(743)	(1)	\$ 84,640	17,286	20
Commercial Real Estate	137,495	125,926	11,569	9	107,207	18,719	17
Markets	59,699	56,522	3,177	6	52,609	3,913	7
Total loans	\$ 298,377	284,374	14,003	5	\$ 244,456	39,918	16
Trading-related assets:							
Trading account securities	\$ 111,801	108,697	3,104	3	\$ 109,311	(614)	(1)
Reverse repurchase agreements/securities borrowed	55,407	55,973	(566)	(1)	57,248	(1,275)	(2)
Derivative assets	22,218	21,398	820	4	25,916	(4,518)	(17)
Total trading-related assets	\$ 189,426	186,068	3,358	2	\$ 192,475	(6,407)	(3)
Total assets	550,177	546,549	3,628	1	508,518	38,031	7
Total deposits	157,217	168,609	(11,392)	(7)	203,004	(34,395)	(17)

Full year 2022 vs. full year 2021

Total assets (average and period-end) increased driven by higher loan balances reflecting broad-based loan demand driven by a modest increase in utilization rates due to increased client working capital needs.

Total deposits (average) decreased driven by customers continuing to allocate more cash into higher yielding liquid alternatives as well as actions taken in 2021 and early 2022 to manage under the asset cap.

Total deposits (period-end) decreased driven by customers continuing to allocate more cash into higher yielding liquid alternatives.

Wealth and Investment Management provides personalized wealth management, brokerage, financial planning, lending, private banking, trust and fiduciary products and services to affluent, high-net worth and ultra-high-net worth clients. We operate through financial advisors in our brokerage and wealth

offices, consumer bank branches, independent offices, and digitally through WellsTrade® and Intuitive Investor®. Table 9g and Table 9h provide additional information for Wealth and Investment Management (WIM).

Table 9g: Wealth and Investment Management

(\$ in millions, unless otherwise noted)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income Statement							
Net interest income	\$ 3,927	2,570	1,357	53 %	\$ 2,988	(418)	(14)%
Noninterest income:							
Investment advisory and other asset-based fees	8,847	9,574	(727)	(8)	8,085	1,489	18
Commissions and brokerage services fees	1,931	2,010	(79)	(4)	2,078	(68)	(3)
Other	117	192	(75)	(39)	62	130	210
Total noninterest income	10,895	11,776	(881)	(7)	10,225	1,551	15
Total revenue	14,822	14,346	476	3	13,213	1,133	9
Net charge-offs	(7)	10	(17)	NM	(3)	13	433
Change in the allowance for credit losses	(18)	(105)	87	83	252	(357)	NM
Provision for credit losses	(25)	(95)	70	74	249	(344)	NM
Noninterest expense	11,613	11,734	(121)	(1)	10,912	822	8
Income before income tax expense	3,234	2,707	527	19	2,052	655	32
Income tax expense	812	680	132	19	514	166	32
Net income	\$ 2,422	2,027	395	19	\$ 1,538	489	32
Selected Metrics							
Return on allocated capital	27.1 %	22.6			17.0 %		
Efficiency ratio	78	82			83		
Advisory assets (\$ in billions)	\$ 797	964	(167)	(17)	\$ 853	111	13
Other brokerage assets and deposits (\$ in billions)	1,064	1,219	(155)	(13)	1,152	67	6
Total client assets (\$ in billions)	\$ 1,861	2,183	(322)	(15)	\$ 2,005	178	9
Annualized revenue per advisor (\$ in thousands) (1)	1,219	1,114	105	9	939	175	19
Total financial and wealth advisors (#) (period-end)	12,027	12,367		(3)	13,513		(8)
Selected Balance Sheet Data (average)							
Total loans	\$ 85,228	82,364	2,864	3	\$ 78,775	3,589	5
Total deposits	164,883	176,562	(11,679)	(7)	162,476	14,086	9
Allocated capital	8,750	8,750	—	—	8,750	—	—
Selected Balance Sheet Data (period-end)							
Total loans	\$ 84,273	84,101	172	—	\$ 80,785	3,316	4
Total deposits	138,760	192,548	(53,788)	(28)	175,483	17,065	10

NM – Not meaningful

(1) Represents annualized segment total revenue divided by average total financial and wealth advisors for the period.

Full year 2022 vs. full year 2021

Revenue increased driven by:

- higher net interest income driven by higher interest rates, partially offset by lower deposit balances;
- lower investment advisory and other asset-based fees due to lower average market valuations and net outflows of advisory assets; and
- lower commissions and brokerage services fees driven by lower transactional revenue.

Provision for credit losses reflected loan growth and a less favorable economic environment.

Noninterest expense decreased driven by:

- lower personnel expense driven by lower revenue-related compensation; and
- the impact of efficiency initiatives.

Total deposits (period-end) decreased as customers continued to allocate more cash into higher yielding liquid alternatives.

Earnings Performance (continued)

WIM Advisory Assets In addition to transactional accounts, WIM offers advisory account relationships to brokerage customers. Fees from advisory accounts are based on a percentage of the market value of the assets as of the beginning of the quarter, which vary across the account types based on the distinct services provided, and are affected by investment performance as well as asset inflows and outflows. Advisory accounts include assets that are financial advisor-directed and separately managed by third-party managers as well as certain client-directed brokerage assets where we earn a fee for advisory and other services, but do not have investment discretion.

WIM also manages personal trust and other assets for high net worth clients, with fee income earned based on a percentage of the market value of these assets. Table 9h presents advisory assets activity by WIM line of business. Management believes that advisory assets is a useful metric because it allows management, investors, and others to assess how changes in asset amounts may impact the generation of certain asset-based fees.

For the years ended December 31, 2022, 2021 and 2020, the average fee rate by account type ranged from 50 to 120 basis points.

Table 9h: WIM Advisory Assets

(in billions)					Year ended
	Balance, beginning of period	Inflows (1)	Outflows (2)	Market impact (3)	Balance, end of period
December 31, 2022					
Client-directed (4)	\$ 205.6	31.8	(39.0)	(33.2)	165.2
Financial advisor-directed (5)	255.5	41.6	(44.2)	(30.0)	222.9
Separate accounts (6)	203.3	24.6	(26.5)	(24.9)	176.5
Mutual fund advisory (7)	102.1	8.7	(15.0)	(17.2)	78.6
Total Wells Fargo Advisors	\$ 766.5	106.7	(124.7)	(105.3)	643.2
The Private Bank (8)	198.0	27.4	(47.1)	(24.7)	153.6
Total WIM advisory assets	\$ 964.5	134.1	(171.8)	(130.0)	796.8
December 31, 2021					
Client-directed (4)	\$ 186.3	41.5	(45.0)	22.8	205.6
Financial advisor-directed (5)	211.0	48.7	(41.1)	36.9	255.5
Separate accounts (6)	174.6	31.8	(30.7)	27.6	203.3
Mutual fund advisory (7)	91.4	15.6	(15.0)	10.1	102.1
Total Wells Fargo Advisors	\$ 663.3	137.6	(131.8)	97.4	766.5
The Private Bank (8)	189.4	40.0	(51.1)	19.7	198.0
Total WIM advisory assets	\$ 852.7	177.6	(182.9)	117.1	964.5
December 31, 2020					
Client directed (4)	\$ 169.4	36.4	(38.2)	18.7	186.3
Financial advisor directed (5)	176.3	40.6	(33.6)	27.7	211.0
Separate accounts (6)	160.1	24.6	(27.4)	17.3	174.6
Mutual fund advisory (7)	83.7	11.3	(13.9)	10.3	91.4
Total Wells Fargo Advisors	\$ 589.5	112.9	(113.1)	74.0	663.3
The Private Bank (8)	188.0	34.0	(45.8)	13.2	189.4
Total WIM advisory assets	\$ 777.5	146.9	(158.9)	87.2	852.7

(1) Inflows include new advisory account assets, contributions, dividends and interest.

(2) Outflows include closed advisory account assets, withdrawals and client management fees.

(3) Market impact reflects gains and losses on portfolio investments.

(4) Investment advice and other services are provided to client, but decisions are made by the client and the fees earned are based on a percentage of the advisory account assets, not the number and size of transactions executed by the client.

(5) Professionally managed portfolios with fees earned based on respective strategies and as a percentage of certain client assets.

(6) Professional advisory portfolios managed by third-party asset managers. Fees are earned based on a percentage of certain client assets.

(7) Program with portfolios constructed of load-waived, no-load and institutional share class mutual funds. Fees are earned based on a percentage of certain client assets.

(8) Discretionary and non-discretionary portfolios held in personal trusts, investment agency, or custody accounts with fees earned based on a percentage of client assets.

Corporate includes corporate treasury and enterprise functions, net of allocations (including funds transfer pricing, capital, liquidity and certain expenses), in support of the reportable operating segments as well as our investment portfolio and affiliated venture capital and private equity businesses. In addition, Corporate includes all restructuring charges related to our efficiency initiatives. See Note 20 (Revenue and Expenses) to Financial Statements in this Report for additional information on restructuring charges. Corporate also includes certain lines of business that management has determined are no longer

consistent with the long-term strategic goals of the Company as well as results for previously divested businesses. In fourth quarter 2021, we completed the sales of Wells Fargo Asset Management (WFAM) and our Corporate Trust Services business; however, we continue to provide certain services related to these businesses pursuant to transition services agreements. The transition services agreement related to the sale of our Institutional Retirement and Trust business terminated in June 2022. Table 9i and Table 9j provide additional information for Corporate.

Table 9i: Corporate – Income Statement

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Income Statement							
Net interest income	\$ (1,607)	(1,541)	(66)	(4)%	\$ 441	(1,982)	NM
Noninterest income	609	10,036	(9,427)	(94)	4,916	5,120	104 %
Total revenue	(998)	8,495	(9,493)	NM	5,357	3,138	59
Net charge-offs	(33)	54	(87)	NM	166	(112)	(67)
Change in the allowance for credit losses	35	3	32	NM	(638)	641	100
Provision for credit losses	2	57	(55)	(96)	(472)	529	112
Noninterest expense	5,774	4,387	1,387	32	5,716	(1,329)	(23)
Income (loss) before income tax expense (benefit)	(6,774)	4,051	(10,825)	NM	113	3,938	NM
Income tax expense (benefit)	(1,885)	596	(2,481)	NM	(670)	1,266	189
Less: Net income (loss) from noncontrolling interests (1)	(312)	1,685	(1,997)	NM	281	1,404	500
Net income (loss)	\$ (4,577)	1,770	(6,347)	NM	\$ 502	1,268	253

NM – Not meaningful

(1) Reflects results attributable to noncontrolling interests predominantly associated with the Company's consolidated venture capital investments.

Full year 2022 vs. full year 2021

Revenue decreased driven by:

- lower net gains from equity securities due to lower unrealized and realized gains on nonmarketable equity securities from our affiliated venture capital and private equity businesses, and higher impairment driven by market conditions;
- lower investment advisory and other asset-based fees reflecting divestitures in 2021;
- lower gains on sales of corporate debt securities; and
- gains in 2021 on the sales of our Corporate Trust Services business, our student loan portfolio, and WFAM;

partially offset by:

- higher net gains from trading activities;
- lower valuation losses related to the retained litigation risk associated with shares of Visa Class B common stock that we sold; and
- higher lease income driven by a \$268 million impairment in 2021 of certain rail cars in our rail car leasing business that are used for the transportation of coal products.

Provision for credit losses decreased due to lower net charge-offs driven by the sale of our student loan portfolio in 2021.

Noninterest expense increased due to:

- higher operating losses reflecting higher expenses primarily related to a variety of historical matters, including litigation and regulatory matters;

partially offset by:

- the impact of divestitures;
- a write-down of goodwill in 2021 related to the sale of our student loan portfolio;
- lower lease expense driven by lower depreciation expense from a reduction in the size of our rail car leasing business; and
- lower restructuring charges.

Corporate includes our rail car leasing business, which had long-lived operating lease assets, net of accumulated depreciation, of \$4.7 billion and \$5.1 billion as of December 31, 2022, and December 31, 2021, respectively. The average age of our rail cars is 22 years and the rail cars are typically leased to customers under short-term leases of 3 to 5 years. Our three largest concentrations, which represented 55% of our rail car fleet as of December 31, 2022, were rail cars used for the transportation of agricultural grain, coal, and cement/sand products. Impairment may result in the future based on changing economic and market conditions affecting the long-term demand and utility of specific types of rail cars. Our assumptions for impairment are sensitive to estimated utilization and rental rates as well as the estimated economic life of the leased asset. For additional information on the accounting for impairment of operating lease assets, see Note 1 (Summary of Significant Accounting Policies) and Note 8 (Leasing Activity) to Financial Statements in this Report.

Earnings Performance (continued)

Table 9j: Corporate – Balance Sheet

(in millions)	Year ended December 31,						
	2022	2021	\$ Change 2022/ 2021	% Change 2022/ 2021	2020	\$ Change 2021/ 2020	% Change 2021/ 2020
Selected Balance Sheet Data (average)							
Cash, cash equivalents, and restricted cash	\$ 147,192	236,124	(88,932)	(38)%	\$ 183,420	52,704	29 %
Available-for-sale debt securities	124,308	181,841	(57,533)	(32)	221,493	(39,652)	(18)
Held-to-maturity debt securities	290,087	244,735	45,352	19	172,755	71,980	42
Equity securities	15,695	12,720	2,975	23	12,445	275	2
Total loans	9,143	9,766	(623)	(6)	19,790	(10,024)	(51)
Total assets	638,017	743,089	(105,072)	(14)	675,250	67,839	10
Total deposits	28,457	40,066	(11,609)	(29)	78,172	(38,106)	(49)
Selected Balance Sheet Data (period-end)							
Cash, cash equivalents, and restricted cash	\$ 127,106	209,696	(82,590)	(39)	\$ 235,262	(25,566)	(11)
Available-for-sale debt securities	102,669	165,926	(63,257)	(38)	208,694	(42,768)	(20)
Held-to-maturity debt securities	294,141	269,285	24,856	9	204,858	64,427	31
Equity securities	15,508	16,549	(1,041)	(6)	10,305	6,244	61
Total loans	9,163	9,997	(834)	(8)	10,623	(626)	(6)
Total assets	601,214	721,335	(120,121)	(17)	728,667	(7,332)	(1)
Total deposits	54,371	32,220	22,151	69	53,037	(20,817)	(39)

Full year 2022 vs. full year 2021

Total assets (average and period-end) decreased reflecting:

- a decrease in cash, cash equivalents, and restricted cash managed by corporate treasury as a result of payments on long-term debt and an increase in loans originated in the operating segments; and
- lower available-for-sale debt securities due to sales and net unrealized losses as well as a transfer from available-for-sale debt securities to held-to-maturity debt securities related to portfolio rebalancing to manage liquidity and interest rate risk.

Total deposits (average) decreased driven by the transition of deposits related to divested businesses.

Total deposits (period-end) increased driven by issuances of certificates of deposit (CDs), partially offset by the transition of deposits related to divested businesses.

Balance Sheet Analysis

At December 31, 2022, our assets totaled \$1.88 trillion, down \$67.1 billion from December 31, 2021.

The following discussion provides additional information about the major components of our consolidated balance sheet. See the “Capital Management” section in this Report for information on changes in our equity.

Available-for-Sale and Held-to-Maturity Debt Securities

Table 10: Available-for-Sale and Held-to-Maturity Debt Securities

(\$ in millions)	December 31, 2022				December 31, 2021			
	Amortized cost, net (1)	Net unrealized gains (losses)	Fair value	Weighted average expected maturity (yrs)	Amortized cost, net (1)	Net unrealized gains (losses)	Fair value	Weighted average expected maturity (yrs)
Available-for-sale (2)	\$ 121,725	(8,131)	113,594	5.4	\$ 175,463	1,781	177,244	5.2
Held-to-maturity (3)	297,059	(41,538)	255,521	8.1	272,022	364	272,386	6.3
Total	\$ 418,784	(49,669)	369,115	n/a	\$ 447,485	2,145	449,630	n/a

(1) Represents amortized cost of the securities, net of the allowance for credit losses of \$6 million and \$8 million related to available-for-sale debt securities and \$85 million and \$96 million related to held-to-maturity debt securities at December 31, 2022 and 2021, respectively.

(2) Available-for-sale debt securities are carried on our consolidated balance sheet at fair value.

(3) Held-to-maturity debt securities are carried on our consolidated balance sheet at amortized cost, net of the allowance for credit losses.

Table 10 presents a summary of our portfolio of investments in available-for-sale (AFS) and held-to-maturity (HTM) debt securities. The size and composition of our AFS and HTM debt securities is dependent upon the Company’s liquidity and interest rate risk management objectives. The AFS debt securities portfolio can be used to meet funding needs that arise in the normal course of business or due to market stress. Changes in our interest rate risk profile may occur due to changes in overall economic or market conditions, which could influence loan origination demand, prepayment rates, or deposit balances and mix. In response, the AFS debt securities portfolio can be rebalanced to meet the Company’s interest rate risk management objectives. In addition to meeting liquidity and interest rate risk management objectives, the AFS and HTM debt securities portfolios may provide yield enhancement over other short-term assets. See the “Risk Management – Asset/Liability Management” section in this Report for additional information on liquidity and interest rate risk.

The AFS debt securities portfolio predominantly consists of liquid, high-quality U.S. Treasury and federal agency debt, and agency MBS. The portfolio also includes securities issued by U.S. states and political subdivisions and highly rated collateralized loan obligations (CLOs).

The HTM debt securities portfolio predominantly consists of liquid, high-quality U.S. Treasury and federal agency debt, and agency MBS. The portfolio also includes securities issued by U.S. states and political subdivisions and highly rated CLOs. Debt securities are classified as HTM at the time of purchase or when transferred from the AFS debt securities portfolio. Our intent is to hold these securities to maturity and collect the contractual cash flows. In January 2023, we changed our intent with respect to HTM debt securities with an amortized cost of \$23.9 billion and reclassified them to AFS in connection with the adoption of a new accounting standard. For additional information, see the “Current Accounting Developments” section in this Report.

The amortized cost, net of the allowance for credit losses, of AFS and HTM debt securities decreased from December 31, 2021. Purchases of AFS and HTM debt securities were more than offset by portfolio runoff and AFS debt security sales. In addition, we transferred AFS debt securities with a fair value of \$50.1 billion to HTM debt securities in 2022 due to actions taken to reposition the overall portfolio for capital management purposes. Debt securities transferred from AFS to HTM in 2022 had \$4.5 billion of pre-tax unrealized losses at the time of the transfers.

The total net unrealized losses on AFS and HTM debt securities at December 31, 2022, were driven by higher interest rates and wider credit spreads.

At December 31, 2022, 99% of the combined AFS and HTM debt securities portfolio was rated AA- or above. Ratings are based on external ratings where available and, where not available, based on internal credit grades. See Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) to Financial Statements in this Report for additional information on AFS and HTM debt securities, including a summary of debt securities by security type.

Balance Sheet Analysis (continued)

Loan Portfolios

Table 11 provides a summary of total outstanding loans by portfolio segment. Commercial loans increased from December 31, 2021, predominantly due to an increase in the commercial and industrial loan portfolio, driven by higher loan demand resulting in increased originations and loan draws, partially offset by paydowns. Consumer loans increased from

December 31, 2021, primarily driven by an increase in the residential mortgage portfolio due to loan originations, partially offset by loan paydowns and the transfer of first lien mortgage loans to loans held for sale (LHFS), which predominantly related to loans purchased from GNMA loan securitization pools in prior periods.

Table 11: Loan Portfolios

(\$ in millions)	December 31, 2022	December 31, 2021	\$ Change	% Change
Commercial	\$ 557,516	513,120	44,396	9 %
Consumer	398,355	382,274	16,081	4
Total loans	\$ 955,871	895,394	60,477	7

Average loan balances and a comparative detail of average loan balances is included in Table 3 under “Earnings Performance – Net Interest Income” earlier in this Report. Additional information on total loans outstanding by portfolio segment and class of financing receivable is included in the “Risk Management – Credit Risk Management” section in this Report. Period-end balances and other loan related information are in Note 5 (Loans

and Related Allowance for Credit Losses) to Financial Statements in this Report.

Table 12 shows loan maturities based on contractually scheduled repayment timing and the distribution by changes in interest rates for loans with a contractual maturity greater than one year. Nonaccrual loans and loans with indeterminate maturities have been classified as maturing within one year.

Table 12: Loan Maturities

(in millions)	December 31, 2022						December 31, 2022	
	Loan maturities					Loans maturing after one year		
	Within one year	After one year through five years	After five years through fifteen years	After fifteen years	Total	Fixed interest rates	Floating/variable interest rates	
Commercial and industrial	\$ 134,858	229,197	21,255	1,496	386,806	21,507	230,441	
Commercial real estate	43,307	88,576	22,431	1,488	155,802	19,679	92,816	
Lease financing	3,283	10,159	1,400	66	14,908	11,625	—	
Total commercial	181,448	327,932	45,086	3,050	557,516	52,811	323,257	
Residential mortgage	10,666	30,464	87,675	140,312	269,117	179,246	79,205	
Credit card	46,293	—	—	—	46,293	—	—	
Auto	12,672	38,812	2,185	—	53,669	40,997	—	
Other consumer	24,995	3,775	483	23	29,276	3,851	430	
Total consumer	94,626	73,051	90,343	140,335	398,355	224,094	79,635	
Total loans	\$ 276,074	400,983	135,429	143,385	955,871	276,905	402,892	

Deposits

Deposits decreased from December 31, 2021, reflecting:

- customers continuing to allocate more cash into higher yielding liquid alternatives;
- increased consumer spending; and
- the transition of deposits related to divested businesses; partially offset by:
- higher time deposits driven by issuances of certificates of deposit (CDs).

Table 13 provides additional information regarding deposit balances. Information regarding the impact of deposits on net interest income and a comparison of average deposit balances is provided in the “Earnings Performance – Net Interest Income” section and Table 3 earlier in this Report. In response to rising interest rates in 2022, our average deposit cost in fourth quarter 2022 increased to 0.46%, compared with 0.02% in fourth quarter 2021.

Table 13: Deposits

(\$ in millions)	Dec 31, 2022	% of total deposits	Dec 31, 2021	% of total deposits	\$ Change	% Change
Noninterest-bearing demand deposits	\$ 458,010	33 %	\$ 527,748	36 %	\$ (69,738)	(13)%
Interest-bearing demand deposits	428,877	31	465,887	31	(37,010)	(8)
Savings deposits	410,139	30	439,600	30	(29,461)	(7)
Time deposits	66,197	5	29,461	2	36,736	125
Interest-bearing deposits in non-U.S. offices	20,762	1	19,783	1	979	5
Total deposits	\$ 1,383,985	100 %	\$ 1,482,479	100 %	\$ (98,494)	(7)

As of December 31, 2022 and 2021, total deposits that exceed Federal Deposit Insurance Corporation (FDIC) insurance limits, or are otherwise uninsured, were estimated to be \$510 billion and \$590 billion, respectively. Estimated uninsured domestic deposits reflect amounts disclosed in the U.S. regulatory reports of our subsidiary banks, with adjustments for

amounts related to consolidated subsidiaries. All non-U.S. deposits are treated for these purposes as uninsured.

Table 14 presents the contractual maturities of estimated time deposits that exceed FDIC insurance limits, or are otherwise uninsured. All non-U.S. time deposits are uninsured.

Table 14: Uninsured Time Deposits by Maturity

(in millions)	Three months or less	After three months through six months	After six months through twelve months	After twelve months	Total
December 31, 2022					
Domestic time deposits	\$ 4,514	826	857	906	7,103
Non-U.S. time deposits	499	176	—	15	690
Total	\$ 5,013	1,002	857	921	7,793

Off-Balance Sheet Arrangements

In the ordinary course of business, we engage in financial transactions that are not recorded on our consolidated balance sheet, or may be recorded on our consolidated balance sheet in amounts that are different from the full contract or notional amount of the transaction. Our off-balance sheet arrangements include unfunded credit commitments, transactions with unconsolidated entities, guarantees, commitments to purchase debt and equity securities, derivatives, and other commitments. These transactions are designed to (1) meet the financial needs of customers, (2) manage our credit, market or liquidity risks, and/or (3) diversify our funding sources.

Unfunded Credit Commitments

Unfunded credit commitments are legally binding agreements to lend to customers with terms covering usage of funds, contractual interest rates, expiration dates, and any required collateral. The maximum credit risk for these commitments will generally be lower than the contractual amount because these commitments may expire without being used or may be cancelled at the customer's request. Our credit risk monitoring activities include managing the amount of commitments, both to individual customers and in total, and the size and maturity structure of these commitments. For additional information, see Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Transactions with Unconsolidated Entities

In the normal course of business, we enter into various types of on- and off-balance sheet transactions with special purpose entities (SPEs), which are corporations, trusts, limited liability companies or partnerships that are established for a limited purpose. Generally, SPEs are formed in connection with securitization transactions and are considered variable interest entities (VIEs). For additional information, see Note 16 (Securitized and Variable Interest Entities) to Financial Statements in this Report.

Guarantees and Other Arrangements

Guarantees are contracts that contingently require us to make payments to a guaranteed party based on an event or a change in an underlying asset, liability, rate or index. Guarantees are generally in the form of standby and direct pay letters of credit, written options, recourse obligations, exchange and clearing house guarantees, indemnifications, and other types of similar arrangements. For additional information, see Note 17 (Guarantees and Other Commitments) to Financial Statements in this Report.

Commitments to Purchase Debt and Equity Securities

We enter into commitments to purchase securities under resale agreements. We also may enter into commitments to purchase debt and equity securities to provide capital for customers' funding, liquidity or other future needs. For additional information, see Note 17 (Guarantees and Other Commitments) to Financial Statements in this Report.

Derivatives

We use derivatives to manage exposure to market risk, including interest rate risk, credit risk and foreign currency risk, and to assist customers with their risk management objectives. Derivatives are recorded on our consolidated balance sheet at fair value, and volume can be measured in terms of the notional amount, which is generally not exchanged, but is used only as the basis on which interest and other payments are determined. The notional amount is not recorded on our consolidated balance sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the instruments. For additional information, see Note 14 (Derivatives) to Financial Statements in this Report.

Risk Management

Wells Fargo manages a variety of risks that can significantly affect our financial performance and our ability to meet the expectations of our customers, shareholders, regulators and other stakeholders.

Risk is Part of our Business Model. Risk is the possibility of an event occurring that could adversely affect the Company's ability to achieve its strategic or business objectives. The Company routinely takes risks to achieve its business goals and to serve its customers. These risks include financial risks, such as interest rate, credit, liquidity, and market risks, and non-financial risks, such as operational risk, which includes compliance and model risks, and strategic and reputation risks.

Risk Profile. The Company's risk profile is an assessment of the aggregate risks associated with the Company's exposures and business activities after taking into consideration risk management effectiveness. The Company monitors its risk profile, and the Board reviews risk profile reports and analysis.

Risk Capacity. Risk capacity is the maximum level of risk that the Company could assume given its current level of resources before triggering regulatory and other constraints on its capital and liquidity needs.

Risk Appetite. Risk appetite is the amount of risk, within its risk capacity, the Company is comfortable taking given its current level of resources. Risk appetite is articulated in our Statement of Risk Appetite, which establishes acceptable risks and at what level and includes risk appetite principles. The Company's Statement of Risk Appetite is defined by senior management, approved at least annually by the Board, and helps guide the Company's business and risk leaders. The Company continuously monitors its risk appetite, and the Board reviews reports which include risk appetite information and analysis.

Risk and Strategy. The Chief Executive Officer (CEO) drives the Company's strategic planning process, which identifies the Company's most significant opportunities and challenges, develops options to address them, and evaluates the risks and trade-offs of each. The Company's risk profile, risk capacity, risk appetite, and risk management effectiveness are considered in the strategic planning process, which is linked with the Company's capital planning process. The Company's Independent Risk Management (IRM) organization participates in strategic planning, providing challenge to and independent assessment of the risks associated with strategic initiatives. IRM also independently assesses and challenges the impact of the strategic plan on risk capacity, risk appetite, and risk management effectiveness at the principal lines of business, enterprise functions, and aggregate Company level. After review, the strategic plan is presented to the Board each year with IRM's evaluation.

Risk and Climate Change. The Company is committed to helping mitigate the impacts of climate change related to its activities and to partner with key stakeholders, including communities and customers, to do the same. The Company expects that climate change will increasingly impact the risk types it manages, and the Company will continue to integrate climate considerations into its risk management framework as its understanding of climate change and risks driven by it evolve.

Risk is Managed by Everyone. Every employee, in the course of their daily activities, creates risk and is responsible for managing risk. Every employee has a role to play in risk management, including establishing and maintaining the Company's control environment. Every employee must comply with applicable laws, regulations, and Company policies.

Risk and Culture. Senior management sets the tone at the top by supporting a strong culture, defined by the Company's expectations, that guides how employees conduct themselves and make decisions. The Board oversees senior management in establishing and maintaining this culture and effectively managing risk. Senior management expects employees to speak up when they see something that could cause harm to the Company's customers, communities, employees, shareholders, or reputation. Because risk management is everyone's responsibility, all employees are empowered to and expected to challenge risk decisions when appropriate and to escalate their concerns when they have not been addressed. The Company's performance management and incentive compensation programs are designed to establish a balanced framework for risk and reward under core principles that employees are expected to know and practice. The Board, through its Human Resources Committee, plays an important role in overseeing and providing credible challenge to the Company's performance management and incentive compensation programs. Effective risk management is a central component of employee performance evaluations.

Risk Management Framework. The Company's risk management framework sets forth the Company's core principles for managing and governing its risk. It is approved by the Board's Risk Committee and reviewed and updated annually. Many other documents and policies flow from its core principles.

Wells Fargo's top priority is to strengthen our company by building an appropriate risk and control infrastructure. We continue to enhance and mature our risk management programs, including operational and compliance risk management programs as required by the FRB's February 2, 2018, and the CFPB/OCC's April 20, 2018, consent orders.

Risk Governance

Role of the Board. The Board oversees the Company's business, including its risk management. It assesses senior management's performance and holds senior management accountable for maintaining and adhering to an effective risk management program.

Board Committee Structure. The Board carries out its risk oversight responsibilities directly and through its committees. The Risk Committee reviews and approves the Company's risk management framework and oversees management's implementation of the framework, including how the Company manages and governs risk. The Risk Committee also oversees the Company's adherence to its risk appetite. In addition, the Risk Committee supports the stature, authority and independence of IRM and oversees and receives reports on its operation. The Chief Risk Officer (CRO) reports functionally to the Risk Committee and administratively to the CEO.

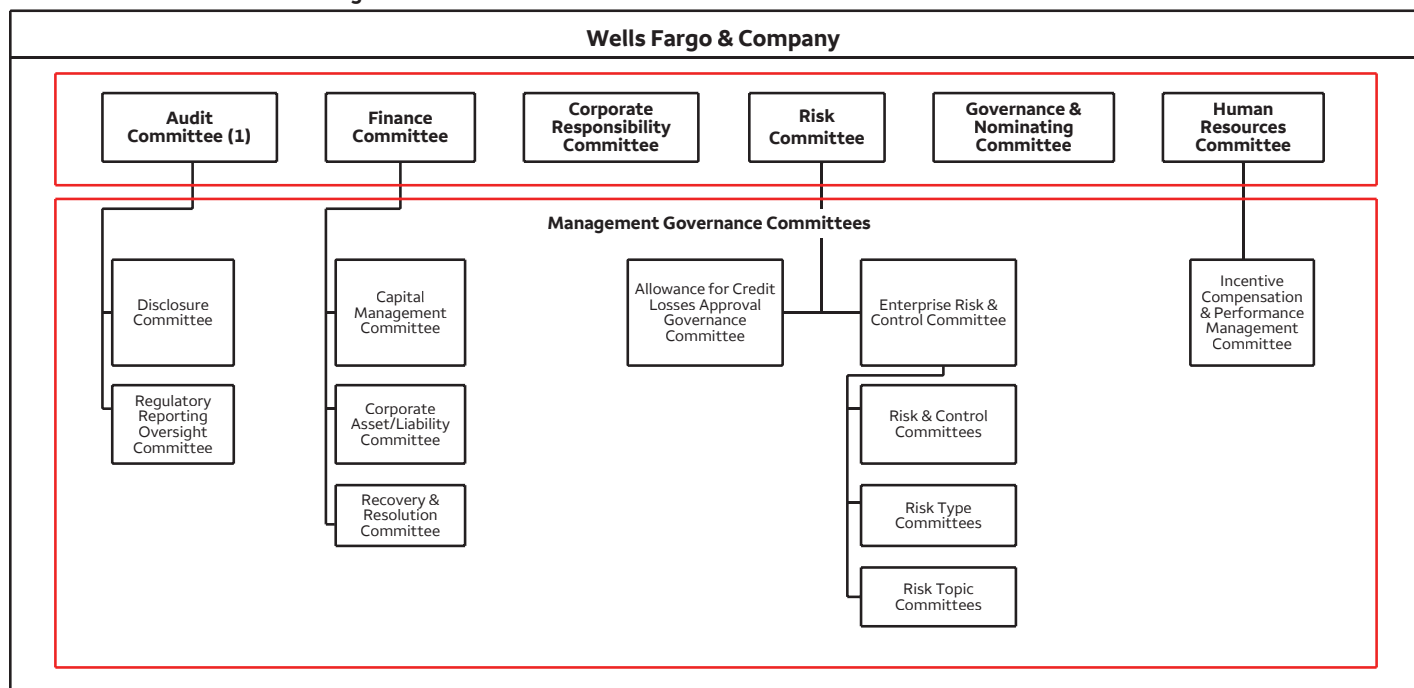
Management Committee Structure. The Company has established management committees, including those focused on risk, that support management in carrying out its governance and risk management responsibilities. One type of management committee is a governance committee, which is a decision-making body that operates for a particular purpose and may report to a Board committee.

Each management governance committee, in accordance with its charter, is expected to discuss, document, and make decisions regarding high priority and significant risks, emerging

risks, risk acceptances, and risks and issues escalated to it; review and monitor progress related to critical and high-risk issues and remediation efforts, including lessons learned; and report key challenges, decisions, escalations, other actions, and open issues as appropriate.

Table 15 presents, as of December 31, 2022, the structure of the Company's Board committees and escalation paths of relevant management governance committees reporting to a Board committee.

Table 15: Board and Relevant Management-level Governance Committee Structure



(1) The Audit Committee assists the Board in its oversight of the Company's financial statements and disclosures to shareholders and regulatory agencies; oversees the internal audit function and external auditor independence, activities, and performance; and assists the Board and the Risk Committee in the oversight of the Company's compliance with legal and regulatory requirements.

Management Governance Committees Reporting to the Risk Committee of the Board. The Enterprise Risk & Control Committee (ERCC) is a decision-making and escalation body that governs the management of all risk types. The ERCC receives information about risk and control issues, addresses escalated risks and issues, and actively oversees risk controls. The ERCC also makes decisions related to significant risks and changes to the Company's risk appetite. The Risk Committee receives regular updates from the ERCC chairs and senior management regarding current and emerging risks and senior management's assessment of the effectiveness of the Company's risk management program.

The ERCC is co-chaired by the CEO and CRO, and its membership is comprised of principal line of business and certain enterprise function heads. The Chief Auditor or a designee attends all meetings of the ERCC. The ERCC has a direct escalation path to the Risk Committee. The ERCC also has an escalation path for certain human capital risks and issues to the Human Resources Committee. In addition, the CRO may escalate anything directly to the Board. Risks and issues are escalated to the ERCC in accordance with the Company's escalation management policy.

Each principal line of business and enterprise function has a risk and control committee, which is a management governance committee with a mandate that aligns with the ERCC but with its scope limited to the respective principal line of business or

enterprise function. These committees focus on and consider risks that the respective principal line of business or enterprise function generate and manage, and the controls the principal line of business or enterprise function are expected to have in place.

As a complement to these risk and control committees, management governance committees dedicated to specific risk types and risk topics also report to the ERCC to enable more comprehensive governance of risks.

Risk Operating Model – Roles and Responsibilities

The Company has three lines of defense for managing risk: the Front Line, Independent Risk Management, and Internal Audit.

- **Front Line** The Front Line, which comprises principal line of business and certain enterprise function activities, is the first line of defense. The Front Line is responsible for understanding the risks generated by its activities, applying adequate controls, and managing risk in the course of its business activities. The Front Line identifies, measures and assesses, controls, monitors, and reports on risk generated by or associated with its business activities and balances risk and reward in decision making while operating within the Company's risk appetite.
- **Independent Risk Management** IRM is the second line of defense. It establishes and maintains the Company's risk management program and provides oversight, including

Risk Management (continued)

challenge to and independent assessment of, the Front Line's execution of its risk management responsibilities.

- **Internal Audit** Internal Audit is the third line of defense. It is responsible for acting as an independent assurance function and validates that the risk management program is adequately designed and functioning effectively.

Risk Type Classifications

The Company uses common classifications, hierarchies, and ratings to enable consistency across risk management programs and aggregation of information. Risk type classifications permit the Company to identify and prioritize its risk exposures, including emerging risk exposures.

Operational Risk Management

Operational risk, which in addition to those discussed in this section, includes compliance risk and model risk, is the risk resulting from inadequate or failed internal processes, people and systems, or from external events.

The Board's Risk Committee has primary oversight responsibility for all aspects of operational risk, including significant supporting programs and/or policies regarding the Company's business resiliency and disaster recovery, change management, data management, information security, technology, and third-party risk management. As part of its oversight responsibilities, the Board's Risk Committee reviews and approves significant operational risk policies and oversees the Company's operational risk management program.

At the management level, Operational Risk Management, which is part of IRM, has oversight responsibility for operational risk. Operational Risk Management reports to the CRO and provides periodic reports related to operational risk to the Board's Risk Committee. Operational Risk Management's oversight responsibilities include change management risk, data management risk, fraud risk, human capital risk, information management risk, information security risk, technology risk, and third-party risk.

Information security is a significant operational risk for financial institutions such as Wells Fargo and includes the risk arising from unauthorized access, use, disclosure, disruption, modification, or destruction of information or information systems. The Board is actively engaged in the oversight of the Company's information security risk management and cyber defense programs. The Board's Risk Committee has primary oversight responsibility for information security risk and approves the Company's information security program, which includes the information security policy and the cyber defense program.

Wells Fargo and other financial institutions, as well as our third-party service providers, continue to be the target of various evolving and adaptive information security threats, including cyber attacks, malware, ransomware, other malicious software intended to exploit hardware or software vulnerabilities, phishing, credential validation, and distributed denial-of-service, in an effort to disrupt the operations of financial institutions, test their cybersecurity capabilities, commit fraud, or obtain confidential, proprietary or other information. Cyber attacks have also focused on targeting online applications and services, such as online banking, as well as cloud-based and other products and services provided by third parties, and have targeted the infrastructure of the internet causing the widespread unavailability of websites and degrading website performance. As a result, information security and the continued development and enhancement of our controls, processes and systems designed to protect our networks, computers, software and data

from attack, damage or unauthorized access remain a priority for Wells Fargo. Wells Fargo is also proactively involved in industry cybersecurity efforts and working with other parties, including our third-party service providers and governmental agencies, to continue to enhance defenses and improve resiliency to information security threats. See the "Risk Factors" section in this Report for additional information regarding the risks associated with a failure or breach of our operational or security systems or infrastructure, including as a result of cyber attacks.

Compliance Risk Management

Compliance risk (a type of operational risk) is the risk resulting from the failure to comply with laws (legislation, regulations and rules) and regulatory guidance, and the failure to appropriately address associated impact, including to customers. Compliance risk encompasses violations of applicable internal policies, program requirements, procedures, and standards related to ethical principles applicable to the Company.

The Board's Risk Committee has primary oversight responsibility for all aspects of compliance risk, including financial crimes risk. As part of its oversight responsibilities, the Board's Risk Committee reviews and approves significant supporting compliance risk and financial crimes risk policies and programs and oversees the Company's compliance risk management and financial crimes risk management programs.

Conduct risk, a sub-category of compliance risk, is the risk of inappropriate, unethical, or unlawful behavior on the part of employees or individuals acting on behalf of the Company, caused by deliberate or unintentional actions or business practices. In connection with its oversight of conduct risk, the Board oversees the alignment of employee conduct to the Company's risk appetite (which the Board approves annually). The Board's Risk Committee has primary oversight responsibility for conduct risk and risk management components of the Company's culture, while the responsibilities of the Board's Human Resources Committee include oversight of the Company's culture, Code of Ethics and Business Conduct, human capital management (including talent management and succession planning), performance management program, and incentive compensation risk management program.

At the management level, the Compliance function, which is part of IRM, monitors the implementation of the Company's compliance and conduct risk programs. Financial Crimes Risk Management, which is part of the Compliance function, oversees and monitors financial crimes risk. The Compliance function reports to the CRO and provides periodic reports related to compliance risk to the Board's Risk Committee.

Model Risk Management

Model risk (a type of operational risk) is the risk arising from the potential for adverse consequences of decisions made based on model output that may be incorrect or used inappropriately.

The Board's Risk Committee has primary oversight responsibility for model risk. As part of its oversight responsibilities, the Board's Risk Committee oversees the Company's model risk management policy, model governance, model performance, model issue remediation status, and adherence to model risk appetite metrics.

At the management level, the Model Risk function, which is part of IRM, has oversight responsibility for model risk and is responsible for governance, validation and monitoring of model risk across the Company. The Model Risk function reports to the CRO and provides periodic reports related to model risk to the Board's Risk Committee.

Strategic Risk Management

Strategic risk is the risk to earnings, capital, or liquidity arising from adverse business decisions, improper implementation of strategic initiatives, or inadequate responses to changes in the external operating environment.

The Board has primary oversight responsibility for strategic planning and oversees management's development and implementation of and approves the Company's strategic plan, and considers whether it is aligned with the Company's risk appetite and risk management effectiveness. Management develops, executes and recommends significant strategic corporate transactions and the Board evaluates management's proposals, including their impact on the Company's risk profile and financial position. The Board's Risk Committee has primary oversight responsibility for the Company's strategic risk and the adequacy of the Company's strategic risk management program, including associated risk management practices, processes and controls. The Board's Risk Committee also receives updates from management regarding new business initiatives activity and risks related to new or changing products, as appropriate.

At the management level, the Strategic Risk Oversight function, which is part of IRM, has oversight responsibility for strategic risk. The Strategic Risk Oversight function reports into the CRO and supports periodic reports related to strategic risk provided to the Board's Risk Committee.

Reputation Risk Management

Reputation risk is the risk arising from the potential that negative stakeholder opinion or negative publicity regarding the Company's business practices, whether true or not, will adversely impact current or projected financial conditions and resilience, cause a decline in the customer base, or result in costly litigation. Key stakeholders include customers, employees, communities, shareholders, regulators, elected officials, advocacy groups, and media organizations.

The Board's Risk Committee has primary oversight responsibility for reputation risk, while each Board committee has reputation risk oversight responsibilities related to their primary oversight responsibilities. As part of its oversight responsibilities, the Board's Risk Committee receives reports from management that help it monitor how effectively the Company is managing reputation risk. As part of its oversight responsibilities for social and public responsibility matters, the Board's Corporate Responsibility Committee receives reports from management relating to stakeholder perceptions of the Company.

At the management level, the Reputation Risk Oversight function, which is part of IRM, has oversight responsibility for reputation risk. The Reputation Risk Oversight function reports into the CRO and supports periodic reports related to reputation risk provided to the Board's Risk Committee.

Credit Risk Management

We define credit risk as the risk of loss associated with a borrower or counterparty default (failure to meet obligations in accordance with agreed upon terms). Credit risk exists with many of the Company's assets and exposures such as debt security holdings, certain derivatives, and loans.

The Board's Risk Committee has primary oversight responsibility for credit risk. A Credit Subcommittee of the Risk Committee assists the Risk Committee in providing oversight of credit risk. At the management level, Corporate Credit Risk, which is part of Independent Risk Management, has oversight responsibility for credit risk. Corporate Credit Risk reports to the CRO and supports periodic reports related to credit risk provided to the Board's Risk Committee or its Credit Subcommittee.

Loan Portfolio Our loan portfolios represent the largest component of assets on our consolidated balance sheet for which we have credit risk. Table 16 presents our total loans outstanding by portfolio segment and class of financing receivable.

Table 16: Total Loans Outstanding by Portfolio Segment and Class of Financing Receivable

(in millions)	Dec 31, 2022	Dec 31, 2021
Commercial and industrial	\$ 386,806	350,436
Commercial real estate	155,802	147,825
Lease financing	14,908	14,859
Total commercial	557,516	513,120
Residential mortgage	269,117	258,888
Credit card	46,293	38,453
Auto	53,669	56,659
Other consumer	29,276	28,274
Total consumer	398,355	382,274
Total loans	\$ 955,871	895,394

We manage our credit risk by establishing what we believe are sound credit policies for underwriting new business, while monitoring and reviewing the performance of our existing loan portfolios. We employ various credit risk management and monitoring activities to mitigate risks associated with multiple risk factors affecting loans we hold including:

- Loan concentrations and related credit quality;
- Counterparty credit risk;
- Economic and market conditions;
- Legislative or regulatory mandates;
- Changes in interest rates;
- Merger and acquisition activities; and
- Reputation risk.

In addition, the Company will continue to integrate climate considerations into its credit risk management activities.

Our credit risk management oversight process is governed centrally, but provides for direct management and accountability by our lines of business. Our overall credit process includes comprehensive credit policies, disciplined credit underwriting, frequent and detailed risk measurement and modeling, extensive credit training programs, and a continual loan review and audit process.

A key to our credit risk management is adherence to a well-controlled underwriting process, which we believe is appropriate for the needs of our customers as well as investors who purchase the loans or securities collateralized by the loans.

Risk Management – Credit Risk Management (continued)

Credit Quality Overview Table 17 provides credit quality trends.

Table 17: Credit Quality Overview

(in millions)	Dec 31, 2022	Dec 31, 2021
Nonaccrual loans		
Commercial loans	\$ 1,823	2,376
Consumer loans	3,803	4,836
Total nonaccrual loans	\$ 5,626	7,212
Nonaccrual loans as a % of total loans	0.59%	0.81
Net loan charge-offs as a % of:		
Average commercial loans	0.01%	0.06
Average consumer loans	0.39	0.33
Allowance for credit losses (ACL) for loans	\$ 13,609	13,788
ACL for loans as a % of total loans	1.42%	1.54

Additional information on our loan portfolios and our credit quality trends follows.

Significant Loan Portfolio Reviews Measuring and monitoring our credit risk is an ongoing process that tracks delinquencies, collateral values, Fair Isaac Corporation (FICO) scores, economic trends by geographic areas, loan-level risk grading for certain portfolios (typically commercial) and other indications of credit risk. Our credit risk monitoring process is designed to enable early identification of developing risk and to support our determination of an appropriate allowance for credit losses. The following discussion provides additional characteristics and analysis of our significant portfolios. See Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report for more analysis and credit metric information for each of the following portfolios.

COMMERCIAL AND INDUSTRIAL LOANS AND LEASE FINANCING

For purposes of portfolio risk management, we aggregate commercial and industrial loans and lease financing according to market segmentation and standard industry codes. We generally subject commercial and industrial loans and lease financing to individual risk assessment using our internal borrower and collateral quality ratings. Our ratings are aligned to regulatory definitions of pass and criticized categories with criticized segmented among special mention, substandard, doubtful and loss categories.

We had \$12.6 billion of the commercial and industrial loans and lease financing portfolio internally classified as criticized in accordance with regulatory guidance at December 31, 2022, compared with \$13.0 billion at December 31, 2021. The decline was driven by decreases in the technology, telecom and media, real estate and construction, and oil, gas and pipelines industries, as these industries continued to recover from the economic impacts of the COVID-19 pandemic, partially offset by an increase in the materials and commodities, and equipment, machinery and parts manufacturing industries.

The majority of our commercial and industrial loans and lease financing portfolio is secured by short-term assets, such as accounts receivable, inventory and debt securities, as well as long-lived assets, such as equipment and other business assets. Generally, the primary source of repayment for this portfolio is the operating cash flows of customers, with the collateral securing this portfolio representing a secondary source of repayment.

The portfolio increased at December 31, 2022, compared with December 31, 2021, driven by higher loan demand resulting in increased originations and loan draws, partially offset by paydowns. Table 18 provides our commercial and industrial loans and lease financing by industry. The industry categories are based on the North American Industry Classification System.

Table 18: Commercial and Industrial Loans and Lease Financing by Industry

(\$ in millions)	December 31, 2022				December 31, 2021			
	Nonaccrual loans	Loans outstanding balance	% of total loans	Total commitments (1)	Nonaccrual loans	Loans outstanding balance	% of total loans	Total commitments (1)
Financials except banks	\$ 44	147,171	15%	\$ 247,936	104	142,283	16%	\$ 236,133
Technology, telecom and media	31	27,767	3	78,230	64	23,345	3	62,984
Real estate and construction	73	24,478	3	57,138	78	25,035	3	55,304
Equipment, machinery and parts manufacturing	83	23,675	2	54,807	24	18,130	2	43,729
Retail	47	19,487	2	54,260	27	17,645	2	41,344
Materials and commodities	86	16,610	2	41,707	32	14,684	2	36,660
Oil, gas and pipelines	55	9,991	1	39,329	197	8,828	*	28,978
Food and beverage manufacturing	17	17,393	2	35,094	7	13,242	1	30,882
Health care and pharmaceuticals	21	14,861	2	30,463	24	12,847	1	28,808
Auto related	10	13,168	1	28,545	31	10,629	1	25,735
Commercial services	50	11,418	1	27,989	78	10,492	1	24,617
Utilities	18	9,457	*	26,918	77	6,982	*	22,406
Entertainment and recreation	28	13,085	1	24,535	23	9,907	1	17,893
Diversified or miscellaneous	2	8,161	*	22,432	3	7,493	*	18,317
Banks	—	14,403	2	16,733	—	16,178	2	16,612
Transportation services	237	8,389	*	16,342	288	8,162	*	14,710
Insurance and fiduciaries	1	4,691	*	15,741	1	3,387	*	13,993
Agribusiness	24	6,180	*	14,063	35	6,086	*	11,576
Government and education	25	6,482	*	12,590	5	5,863	*	11,193
Other (2)	13	4,847	*	14,325	30	4,077	*	11,583
Total	\$ 865	401,714	42%	\$ 859,177	1,128	365,295	41%	\$ 753,457

* Less than 1%.

(1) Total commitments consist of loans outstanding plus unfunded credit commitments, excluding issued letters of credit. For additional information on issued letters of credit, see Note 17 (Guarantees and Other Commitments) to Financial Statements in this Report.

(2) No other single industry had total loans in excess of \$3.4 billion and \$3.1 billion at December 31, 2022 and 2021, respectively.

Table 18a provides further loan segmentation for our largest industry category, financials except banks. This category includes loans to investment firms, financial vehicles, nonbank creditors, rental and leasing companies, securities firms, and investment banks. These loans are generally secured and have features to

help manage credit risk, such as structural credit enhancements, collateral eligibility requirements, contractual re-margining of collateral supporting the loans, and loan amounts limited to a percentage of the value of the underlying assets considering underlying credit risk, asset duration, and ongoing performance.

Table 18a: Financials Except Banks Industry Category

(\$ in millions)	December 31, 2022				December 31, 2021			
	Nonaccrual loans	Loans outstanding balance	% of total loans	Total commitments (1)	Nonaccrual loans	Loans outstanding balance	% of total loans	Total commitments (1)
Asset managers and funds (2)	\$ 1	52,254	5 %	\$ 100,537	1	60,518	7 %	\$ 101,035
Commercial finance (3)	31	53,269	5	76,334	82	46,043	5	69,923
Real estate finance (4)	8	24,620	3	41,589	9	23,231	3	37,997
Consumer finance (5)	4	17,028	2	29,476	12	12,491	1	27,178
Total	\$ 44	147,171	15%	\$ 247,936	104	142,283	16%	\$ 236,133

(1) Total commitments consist of loans outstanding plus unfunded credit commitments, excluding issued letters of credit. For additional information on issued letters of credit, see Note 17 (Guarantees and Other Commitments) to Financial Statements in this Report.

(2) Includes loans for subscription or capital calls and loans to prime brokerage customers and securities firms.

(3) Includes asset-based lending and leasing, including loans to special purpose entities, loans to commercial leasing entities, structured lending facilities to commercial loan managers, and also includes collateralized loan obligations (CLOs) in loan form, all of which were rated AA or above, of \$7.8 billion and \$8.1 billion at December 31, 2022 and 2021, respectively.

(4) Includes originators or servicers of financial assets collateralized by commercial or residential real estate loans.

(5) Includes originators or servicers of financial assets collateralized by consumer loans such as auto loans and leases, and credit cards.

Our commercial and industrial loans and lease financing portfolio also included non-U.S. loans of \$79.7 billion and \$78.0 billion at December 31, 2022 and 2021, respectively. Significant industry concentrations of non-U.S. loans at December 31, 2022 and 2021, respectively, included:

- \$45.7 billion and \$46.7 billion in the financials except banks industry;
- \$14.1 billion and \$15.9 billion in the banks industry; and
- \$1.2 billion and \$1.7 billion in the oil, gas and pipelines industry.

Risk mitigation actions, including the restructuring of repayment terms, securing collateral or guarantees, and entering into extensions, are based on a re-underwriting of the loan and our assessment of the borrower's ability to perform under the agreed-upon terms. Extension terms generally range from six to thirty-six months and may require that the borrower provide additional economic support in the form of partial repayment, or additional collateral or guarantees. In cases where the value of collateral or financial condition of the borrower is insufficient to

Risk Management – Credit Risk Management (continued)

repay our loan, we may rely upon the support of an outside repayment guarantee in providing the extension.

Our ability to seek performance under a guarantee is directly related to the guarantor's creditworthiness, capacity and willingness to perform, which is evaluated on an annual basis, or more frequently as warranted. Our evaluation is based on the most current financial information available and is focused on various key financial metrics, including net worth, leverage, and current and future liquidity. We consider the guarantor's reputation, creditworthiness, and willingness to work with us based on our analysis as well as other lenders' experience with the guarantor. Our assessment of the guarantor's credit strength is reflected in our loan risk ratings for such loans. The loan risk rating and accruing status are important factors in our allowance for credit losses methodology.

In considering the accrual status of the loan, we evaluate the collateral and future cash flows as well as the anticipated support of any repayment guarantor. In many cases, the strength of the guarantor provides sufficient assurance that full repayment of the loan is expected. When full and timely collection of the loan becomes uncertain, including the performance of the guarantor, we place the loan on nonaccrual status. As appropriate, we also charge the loan down in accordance with our charge-off policies, generally to the net realizable value of the collateral securing the loan, if any.

COMMERCIAL REAL ESTATE (CRE) Our CRE loan portfolio is comprised of CRE mortgage and CRE construction loans. We generally subject CRE loans to individual risk assessment using our internal borrower and collateral quality ratings. We had \$11.3 billion of CRE mortgage loans classified as criticized at December 31, 2022, compared with \$13.1 billion at December 31, 2021, and \$1.1 billion of CRE construction loans classified as criticized at December 31, 2022, compared with \$1.7 billion at December 31, 2021. The decrease in criticized CRE loans was driven by the hotel/motel and shopping center property types, as these property types continued to recover from the economic impacts of the COVID-19 pandemic, partially offset by an increase in the office buildings and apartment property types. Criticized CRE loans at December 31, 2022, increased compared with September 30, 2022, primarily due to an increase in the office buildings property type. The credit quality of the office buildings property type could continue to be adversely affected if weakened demand for office space continues to drive higher vacancy rates and deteriorating operating performance. At December 31, 2022, nearly one-third of the CRE loans in the office buildings property type had recourse to a guarantor, typically through a repayment guarantee, in addition to the related collateral.

The total CRE loan portfolio increased \$8.0 billion from December 31, 2021, predominantly driven by an increase in loans for apartments and industrial/warehouse property types, partially offset by a decrease in loans for the shopping center property type. The CRE loan portfolio included \$7.6 billion of non-U.S. CRE loans at December 31, 2022, down from \$8.7 billion at December 31, 2021. The portfolio is diversified both geographically and by property type. The largest geographic concentrations of CRE loans are in California, New York, Texas, and Florida, which represented a combined 49% of the total CRE portfolio. The largest property type concentrations are apartments at 26% and office buildings at 23% of the portfolio. The unfunded credit commitments were \$8.8 billion and \$11.5 billion at December 31, 2022 and 2021, respectively, for CRE mortgage loans and \$20.7 billion and \$20.0 billion, respectively, for CRE construction loans.

Table 19 provides our CRE loans by state and property type.

Table 19: CRE Loans by State and Property Type

(\$ in millions)	Dec 31, 2022								Dec 31, 2021		
	Real estate mortgage		Real estate construction		Total commercial real estate				Total commercial real estate		
	Nonaccrual loans	Loans outstanding balance	Nonaccrual loans	Loans outstanding balance	Nonaccrual loans	Loans outstanding balance	Loans as % of total loans	Total commitments (1)	Loans outstanding balance	Total commitments (1)	
By state:											
California	\$ 121	29,531	1	4,754	122	34,285	4%	\$ 39,594	34,668	40,241	
New York	106	15,009	—	2,285	106	17,294	2	19,360	15,636	17,967	
Texas	23	11,564	—	1,243	23	12,807	1	14,941	10,605	12,263	
Florida	10	9,833	—	1,585	10	11,418	1	14,690	10,435	13,219	
Washington	80	4,253	—	1,350	80	5,603	*	6,868	5,301	7,013	
Georgia	69	4,661	—	767	69	5,428	*	6,651	4,662	5,857	
North Carolina	4	4,345	—	882	4	5,227	*	6,650	4,755	6,160	
Arizona	14	4,761	—	541	14	5,302	*	6,288	5,046	5,975	
New Jersey	7	2,738	—	1,381	7	4,119	*	5,660	3,625	4,793	
Illinois	11	3,988	—	603	11	4,591	*	5,394	4,042	4,560	
Other (2)	511	41,546	1	8,182	512	49,728	5	59,224	49,050	61,235	
Total	\$ 956	132,229	2	23,573	958	155,802	16%	\$ 185,320	147,825	179,283	
By property:											
Apartments	\$ 8	31,205	—	8,538	8	39,743	4%	\$ 51,567	31,901	42,119	
Office buildings	186	32,478	—	3,666	186	36,144	4	40,827	36,736	42,781	
Industrial/warehouse	42	17,244	—	3,390	42	20,634	2	24,546	17,714	20,967	
Hotel/motel	153	11,212	—	1,539	153	12,751	1	13,758	12,764	13,179	
Retail (excl shopping center)	197	11,621	2	132	199	11,753	1	12,486	12,450	13,014	
Shopping center	259	9,014	—	520	259	9,534	*	10,131	10,448	11,082	
Institutional	33	5,201	—	2,524	33	7,725	*	9,178	7,743	9,588	
Mixed use properties	54	4,906	—	981	54	5,887	*	7,139	6,303	10,718	
Collateral pool	—	3,031	—	31	—	3,062	*	3,662	3,509	4,106	
Storage facility	—	2,772	—	157	—	2,929	*	3,201	2,257	2,742	
Other	24	3,545	—	2,095	24	5,640	*	8,825	6,000	8,987	
Total	\$ 956	132,229	2	23,573	958	155,802	16 %	\$ 185,320	147,825	179,283	

* Less than 1%.

(1) Total commitments consist of loans outstanding plus unfunded credit commitments, excluding issued letters of credit. For additional information on issued letters of credit, see Note 17 (Guarantees and Other Commitments) to Financial Statements in this Report.

(2) Includes 40 states; no state in Other had loans in excess of \$4.1 billion and \$3.7 billion at December 31, 2022 and 2021, respectively.

NON-U.S. LOANS Our classification of non-U.S. loans is based on whether the borrower's primary address is outside of the United States. At December 31, 2022, non-U.S. loans totaled \$87.5 billion, representing approximately 9% of our total consolidated loans outstanding, compared with \$86.9 billion, or approximately 10% of our total consolidated loans outstanding, at December 31, 2021. Non-U.S. loans were approximately 5% and 4% of our total consolidated assets at December 31, 2022 and 2021, respectively.

COUNTRY RISK EXPOSURE Our country risk monitoring process incorporates centralized monitoring of economic, political, social, legal, and transfer risks in countries where we do or plan to do business, along with frequent dialogue with our customers, counterparties and regulatory agencies. We establish exposure limits for each country through a centralized oversight process based on customer needs, and through consideration of the relevant and distinct risk of each country. We monitor exposures closely and adjust our country limits in response to changing conditions. We evaluate our individual country risk exposure based on our assessment of the borrower's ability to repay,

which gives consideration for allowable transfers of risk, such as guarantees and collateral, and may be different from the reporting based on the borrower's primary address.

Our largest single country exposure outside the U.S. at December 31, 2022, was the United Kingdom, which totaled \$33.2 billion, or approximately 2% of our total assets, and included \$5.5 billion of sovereign claims. Our United Kingdom sovereign claims arise from deposits we have placed with the Bank of England pursuant to regulatory requirements in support of our London branch.

Table 20 provides information regarding our top 20 exposures by country (excluding the U.S.), based on our assessment of risk, which gives consideration to the country of any guarantors and/or underlying collateral. With respect to Table 20:

- Lending and deposits exposure includes outstanding loans, unfunded credit commitments, and deposits with non-U.S. banks. These balances are presented prior to the deduction of allowance for credit losses or collateral received under the terms of the credit agreements, if any.

Risk Management – Credit Risk Management (continued)

- Securities exposure represents debt and equity securities of non-U.S. issuers. Long and short positions are netted, and net short positions are reflected as negative exposure.
- Derivatives and other exposure represents foreign exchange contracts, derivative contracts, securities resale agreements, and securities lending agreements.

Table 20: Select Country Exposures

	December 31, 2022								
	Lending and deposits		Securities		Derivatives and other		Total exposure		
(\$ in millions)	Sovereign	Non-sovereign	Sovereign	Non-sovereign	Sovereign	Non-sovereign	Sovereign	Non-sovereign (1)	Total
Top 20 country exposures:									
United Kingdom	\$ 5,513	24,291	—	1,102	2	2,299	5,515	27,692	33,207
Canada	1	18,051	1	582	69	294	71	18,927	18,998
Cayman Islands	—	8,464	—	—	—	179	—	8,643	8,643
Luxembourg	—	6,719	—	32	—	177	—	6,928	6,928
Japan	5,658	700	—	365	—	46	5,658	1,111	6,769
Ireland	6	4,888	—	223	—	107	6	5,218	5,224
France	57	4,138	—	108	175	72	232	4,318	4,550
Germany	—	3,910	—	29	—	202	—	4,141	4,141
Bermuda	—	3,600	—	35	—	30	—	3,665	3,665
Guernsey	—	3,375	—	—	—	12	—	3,387	3,387
South Korea	—	2,983	(1)	381	1	15	—	3,379	3,379
China	17	2,966	1	259	17	35	35	3,260	3,295
Netherlands	—	3,165	—	(6)	—	124	—	3,283	3,283
Chile	—	1,939	—	212	—	—	—	2,151	2,151
Australia	—	1,969	—	5	—	30	—	2,004	2,004
Brazil	—	1,499	—	1	9	—	9	1,500	1,509
United Arab Emirates	—	1,477	—	11	—	—	—	1,488	1,488
Switzerland	—	1,202	—	(4)	—	170	—	1,368	1,368
India	250	1,072	(64)	(5)	—	1	186	1,068	1,254
Belgium	—	1,103	—	1	—	4	—	1,108	1,108
Total top 20 country exposures	\$ 11,502	97,511	(63)	3,331	273	3,797	11,712	104,639	116,351

(1) Total non-sovereign exposure comprised \$51.2 billion exposure to financial institutions and \$53.4 billion to non-financial corporations at December 31, 2022.

RESIDENTIAL MORTGAGE LOANS Our residential mortgage loan portfolio is comprised of 1–4 family first and junior lien mortgage loans. Residential mortgage – first lien loans comprised 95% of the total residential mortgage loan portfolio at December 31, 2022, compared with 94% at December 31, 2021.

The residential mortgage loan portfolio includes loans with adjustable-rate features. We monitor the risk of default as a result of interest rate increases on adjustable-rate mortgage (ARM) loans, which may be mitigated by product features that limit the amount of the increase in the contractual interest rate. The default risk of these loans is considered in our ACL for loans. ARM loans were 7% of total loans at both December 31, 2022 and 2021, with an initial reset date in 2025 or later for the majority of this portfolio at December 31, 2022. We do not offer option ARM products, nor do we offer variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans.

The residential mortgage – junior lien portfolio consists of residential mortgage lines of credit and loans that are subordinate in rights to an existing lien on the same property. These lines and loans may have draw periods, interest-only payments, balloon payments, adjustable rates and similar features. Junior lien loan products are primarily amortizing payment loans with fixed interest rates and repayment periods between five to 30 years. We continuously monitor the credit performance of our residential mortgage – junior lien portfolio for trends and factors that influence the frequency and severity of losses, such as junior lien performance when the first lien loan is delinquent.

The outstanding balance of residential mortgage lines of credit was \$18.3 billion at December 31, 2022. The unfunded credit commitments for these lines of credit totaled \$35.5 billion at December 31, 2022. Our residential mortgage lines of credit

(both first and junior lien) generally have draw periods of 10, 15 or 20 years with variable interest rate and payment options available during the draw period of (1) interest-only or (2) 1.5% of outstanding principal balance plus accrued interest. As of December 31, 2022, a significant portion of the lines of credit in a draw period used the interest-only option. The lines that enter their amortization period may experience higher delinquencies and higher loss rates than the ones in their draw or term period. We have considered this increased risk in our ACL for loans estimate. Interest-only lines and loans were approximately 2% and 3% of total loans at December 31, 2022 and 2021, respectively.

During the draw period, the borrower has the option of converting all or a portion of the line from a variable interest rate to a fixed rate with terms including interest-only payments for a fixed period between three to seven years or a fully amortizing payment with a fixed period between five to 30 years. At the end of the draw period, a line of credit generally converts to an amortizing payment schedule with repayment terms of up to 30 years based on the balance at time of conversion. Certain lines and loans have been structured with a balloon payment, which requires full repayment of the outstanding balance at the end of the term period. The conversion of lines or loans to fully amortizing or balloon payoff may result in a significant payment increase, which can affect some borrowers' ability to repay the outstanding balance.

In anticipation of our residential mortgage line of credit borrowers reaching the end of their draw period, we have created a program to inform, educate and help these borrowers transition from interest-only to fully-amortizing payments or full repayment. We monitor the performance of the borrowers moving through the program in an effort to refine our ongoing program strategy.

We monitor changes in real estate values and underlying economic or market conditions for all geographic areas of our residential mortgage portfolio as part of our credit risk management process. Our periodic review of this portfolio includes original appraisals adjusted for the change in Home Price Index (HPI) or estimates from automated valuation models (AVMs) to support property values. AVMs are computer-based tools used to estimate the market value of homes. We have processes to periodically validate AVMs and specific risk management guidelines addressing the circumstances when AVMs may be used. For additional information about our use of appraisals and AVMs, see Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Part of our credit monitoring includes tracking delinquency, current FICO scores and loan/combined loan to collateral values (LTV/CLTV) on the entire residential mortgage loan portfolio. CLTV represents the ratio of the total loan balance of first and junior lien mortgages (including unused line amounts for credit line products) to property collateral value. For additional information regarding credit quality indicators, see Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

We continue to modify residential mortgage loans to assist homeowners and other borrowers experiencing financial difficulties. Under these programs, we may provide concessions

such as interest rate reductions, forbearance of principal, and in some cases, principal forgiveness. These programs generally include trial payment periods of three to four months, and after successful completion and compliance with terms during this period, the loan is permanently modified. Loans included under these programs are accounted for as troubled debt restructurings (TDRs) at the start of the trial period or at the time of permanent modification, if no trial period is used. Customer payment deferral activities instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies. For additional information on customer accommodations, including loan modifications, in response to the COVID-19 pandemic, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Residential Mortgage – First Lien Portfolio Our residential mortgage – first lien portfolio increased \$13.5 billion from December 31, 2021, driven by originations, partially offset by loan paydowns and the transfer of first lien mortgage loans to loans held for sale (LHFS), which predominantly related to loans purchased from GNMA loan securitization pools in prior periods.

Table 21 shows certain delinquency and loss information for the residential mortgage – first lien portfolio and lists the top five states by outstanding balance.

Table 21: Residential Mortgage – First Lien Portfolio Performance

(\$ in millions)	Outstanding balance		% of total loans		% of loans 30 days or more past due		Net loan charge-off rate (1)	
	December 31,		December 31,		December 31,		Year ended December 31,	
	2022	2021	2022	2021	2022	2021	2022	2021
California (2)	\$ 110,877	100,933	11.60%	11.27	0.45	0.95	—	(0.01)
New York	31,753	30,039	3.32	3.35	0.80	1.34	(0.02)	0.12
Florida	10,535	9,978	1.10	1.11	1.13	1.93	(0.08)	0.09
Washington	10,523	8,636	1.10	0.96	0.30	0.47	—	—
New Jersey	10,416	10,205	1.09	1.14	1.24	1.95	0.01	0.08
Other (3)	72,843	69,321	7.62	7.74	0.93	1.48	0.01	0.01
Total	246,947	229,112	25.83	25.57	0.69	1.23	—	0.02
Government insured/guaranteed loans (4)	8,860	13,158	0.93	1.47				
Total first lien mortgage portfolio	\$ 255,807	242,270	26.76%	27.04				

(1) The net loan charge-off rate for the year ended December 31, 2021, includes \$120 million of loan charge-offs related to a change in practice to fully charge-off certain delinquent legacy residential mortgage loans.

(2) Our residential mortgage loans to borrowers in California are located predominantly within the larger metropolitan areas, with no single California metropolitan area consisting of more than 4% of total loans.

(3) Consists of 45 states; no state in Other had loans in excess of \$7.7 billion and \$7.2 billion at December 31, 2022, and 2021, respectively.

(4) Represents loans, substantially all of which were purchased from GNMA loan securitization pools, where the repayment of the loans is predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). For additional information on GNMA loan securitization pools, see the "Risk Management – Credit Risk Management – Mortgage Banking Activities" section in this Report.

Risk Management – Credit Risk Management (continued)

Residential Mortgage – Junior Lien Portfolio Our residential mortgage – junior lien portfolio decreased \$3.3 billion from December 31, 2021, driven by loan paydowns.

Table 22 shows certain delinquency and loss information for the residential mortgage – junior lien portfolio and lists the top five states by outstanding balance.

Table 22: Residential Mortgage – Junior Lien Portfolio Performance

(\$ in millions)	Outstanding balance		% of total loans		% of loans 30 days or more past due		Net loan charge-off rate (1)	
	December 31,		December 31,		December 31,		Year ended December 31,	
	2022	2021	2022	2021	2022	2021	2022	2021
California	\$ 3,550	4,310	0.37 %	0.48	2.02	3.52	(0.26)	(0.59)
New Jersey	1,383	1,728	0.14	0.19	2.76	2.98	0.10	0.04
Florida	1,165	1,533	0.12	0.17	2.69	2.54	(0.71)	(0.13)
Pennsylvania	832	1,039	0.09	0.12	2.76	2.19	(0.17)	(0.12)
New York	794	975	0.08	0.11	2.86	4.05	(0.09)	0.57
Other (2)	5,586	7,033	0.58	0.79	2.05	2.25	(0.53)	(0.51)
Total junior lien mortgage portfolio	\$ 13,310	16,618	1.38 %	1.86	2.27	2.91	(0.36)	(0.36)

(1) The net loan charge-off rate for the year ended December 31, 2021, includes \$32 million of loan charge-offs related to a change in practice to fully charge-off certain delinquent legacy residential mortgage loans.

(2) Consists of 45 states; no state in Other had loans in excess of \$790 million and \$980 million at December 31, 2022, and 2021, respectively.

CREDIT CARD, AUTO, AND OTHER CONSUMER LOANS Table 23 shows the outstanding balance of our credit card, auto, and other consumer loan portfolios. For information regarding credit quality indicators for these portfolios, see Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

Table 23: Credit Card, Auto, and Other Consumer Loans

(\$ in millions)	December 31, 2022		December 31, 2021	
	Outstanding balance	% of total loans	Outstanding balance	% of total loans
Credit card	\$ 46,293	4.84%	\$ 38,453	4.29%
Auto	53,669	5.61	56,659	6.33
Other consumer (1)	29,276	3.06	28,274	3.16
Total	\$ 129,238	13.51%	\$ 123,386	13.78%

(1) Includes \$19.4 billion and \$18.6 billion at December 31, 2022 and 2021, respectively, of commercial and consumer securities-based loans originated by the WIM operating segment.

Credit Card The increase in the outstanding balance at December 31, 2022, compared with December 31, 2021, was due to higher purchase volume and the launch of new products.

Auto The decrease in the outstanding balance at December 31, 2022, compared with December 31, 2021, was due to lower origination volumes reflecting credit tightening actions and continued price competition due to rising interest rates.

Other Consumer The increase in the outstanding balance at December 31, 2022, compared with December 31, 2021, was primarily due to originations of personal lines and loans.

NONPERFORMING ASSETS (NONACCRUAL LOANS AND FORECLOSED ASSETS) We generally place loans on nonaccrual status when:

- the full and timely collection of interest or principal becomes uncertain (generally based on an assessment of the borrower's financial condition and the adequacy of collateral, if any), such as in bankruptcy or other circumstances;
- they are 90 days (120 days with respect to residential mortgage loans) past due for interest or principal, unless the loan is both well-secured and in the process of collection;
- part of the principal balance has been charged off; or
- for junior lien mortgage loans, we have evidence that the related first lien mortgage may be 120 days past due or in the process of foreclosure regardless of the junior lien delinquency status.

Certain nonaccrual loans may be returned to accrual status after they perform for a period of time. Consumer credit card loans are not placed on nonaccrual status, but are generally fully charged off when the loan reaches 180 days past due.

Customer payment deferral activities in the residential mortgage portfolio instituted in response to the COVID-19 pandemic could continue to delay the recognition of nonaccrual loans for those residential mortgage customers who would have otherwise moved into nonaccrual status. For additional information on customer accommodations, including loan modifications, in response to the COVID-19 pandemic, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Table 24 summarizes nonperforming assets (NPAs).

Table 24: Nonperforming Assets (Nonaccrual Loans and Foreclosed Assets)

(\$ in millions)	December 31,	
	2022	2021
Nonaccrual loans:		
Commercial and industrial	\$ 746	980
Commercial real estate	958	1,248
Lease financing	119	148
Total commercial	1,823	2,376
Residential mortgage (1)	3,611	4,604
Auto	153	198
Other consumer	39	34
Total consumer	3,803	4,836
Total nonaccrual loans	\$ 5,626	7,212
As a percentage of total loans	0.59 %	0.81
Foreclosed assets:		
Government insured/guaranteed (2)	\$ 22	16
Non-government insured/guaranteed	115	96
Total foreclosed assets	137	112
Total nonperforming assets	\$ 5,763	7,324
As a percentage of total loans	0.60 %	0.82

(1) Residential mortgage loans predominantly insured by the FHA or guaranteed by the VA are not placed on nonaccrual status because they are insured or guaranteed.

(2) Consistent with regulatory reporting requirements, foreclosed real estate resulting from government insured/guaranteed loans are classified as nonperforming. Both principal and interest related to these foreclosed real estate assets are collectible because the loans were predominantly insured by the FHA or guaranteed by the VA. Receivables related to the foreclosure of certain government guaranteed real estate mortgage loans are excluded from this table and included in Accounts Receivable in Other Assets. For additional information on the classification of certain government-guaranteed mortgage loans upon foreclosure, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Commercial nonaccrual loans decreased \$553 million from December 31, 2021, due to improved credit quality across our commercial loan portfolios. For additional information on commercial nonaccrual loans, see the "Risk Management – Credit Risk Management – Commercial and Industrial Loans and Lease Financing" and "Risk Management – Credit Risk Management – Commercial Real Estate" sections in this Report.

Consumer nonaccrual loans decreased \$1.0 billion from December 31, 2021, driven by a decrease in residential mortgage nonaccrual loans primarily due to sustained payment performance of borrowers after exiting COVID-19-related accommodation programs.

Risk Management – Credit Risk Management (continued)

Table 25 provides an analysis of the changes in nonaccrual loans. Typically, changes to nonaccrual loans period-over-period represent inflows for loans that are placed on nonaccrual status in accordance with our policies, offset by reductions for loans

that are paid down, charged off, sold, foreclosed, or are no longer classified as nonaccrual as a result of continued performance and an improvement in the borrower's financial condition and loan repayment capabilities.

Table 25: Analysis of Changes in Nonaccrual Loans

(in millions)	Year ended December 31,	
	2022	2021
Commercial nonaccrual loans		
Balance, beginning of period	\$ 2,376	4,779
Inflows	1,391	2,113
Outflows:		
Returned to accruing	(451)	(1,003)
Foreclosures	(20)	(13)
Charge-offs	(247)	(533)
Payments, sales and other	(1,226)	(2,967)
Total outflows	(1,944)	(4,516)
Balance, end of period	1,823	2,376
Consumer nonaccrual loans		
Balance, beginning of period	4,836	3,949
Inflows	1,728	3,281
Outflows:		
Returned to accruing	(1,599)	(828)
Foreclosures	(85)	(69)
Charge-offs	(245)	(252)
Payments, sales and other	(832)	(1,245)
Total outflows	(2,761)	(2,394)
Balance, end of period	3,803	4,836
Total nonaccrual loans	\$ 5,626	7,212

We considered the risk of losses on nonaccrual loans in developing our allowance for loan losses. We believe exposure to losses on nonaccrual loans is mitigated by the following factors at December 31, 2022:

- 97% of total commercial nonaccrual loans are secured, the majority of which are secured by real estate.
- 81% of commercial nonaccrual loans were current on interest and 77% of commercial nonaccrual loans were current on both principal and interest, but were on nonaccrual status because the full or timely collection of interest or principal had become uncertain.

- 99% of total consumer nonaccrual loans are secured, of which 95% are secured by real estate and 98% have a combined LTV (CLTV) ratio of 80% or less.
- \$588 million of the \$743 million of consumer loans in bankruptcy or discharged in bankruptcy, and classified as nonaccrual, were current.

Table 26 provides a summary of foreclosed assets and an analysis of changes in foreclosed assets.

Table 26: Foreclosed Assets

(in millions)	December 31,	
	2022	2021
Summary by loan segment		
Government insured/guaranteed	\$ 22	16
Commercial	65	54
Consumer	50	42
Total foreclosed assets	\$ 137	112
Analysis of changes in foreclosed assets		
Balance, beginning of period	\$ 112	159
Net change in government insured/guaranteed (1)	6	(2)
Additions to foreclosed assets (2)	420	370
Reductions from sales and write-downs	(401)	(415)
Balance, end of period	\$ 137	112

(1) Foreclosed government insured/guaranteed loans are temporarily transferred to and held by us as servicer, until reimbursement is received from FHA or VA.

(2) Includes loans moved into foreclosed assets from nonaccrual status and repossessed autos.

As part of our actions to support customers during the COVID-19 pandemic, we temporarily suspended certain residential mortgage foreclosure activities through December 31, 2021. Beginning January 1, 2022, we resumed these mortgage foreclosure activities. For additional information on loans in process of foreclosure, see Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

TROUBLED DEBT RESTRUCTURINGS (TDRs) Table 27 provides information regarding the recorded investment of loans modified in TDRs. TDRs decreased from December 31, 2021, predominantly driven by a decrease in residential mortgage loans, partially offset by an increase in trial modifications. The decrease in residential mortgage loans was due to paydowns and transfers to LHFS, which related to loans purchased from GNMA loan securitization pools. In January 2023, we adopted a new

accounting standard that eliminates the accounting and reporting guidance for TDRs. For additional information, see the “Current Accounting Developments” section in this Report.

The amount of our TDRs at December 31, 2022, would have otherwise been higher without the TDR relief provided by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) and the *Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus (Revised)* (Interagency Statement). Customers who are unable to resume making their contractual loan payments upon exiting from these deferral programs may require further assistance and may receive or be eligible to receive modifications, which may be classified as TDRs. For additional information on customer accommodations, including loan modifications, in response to the COVID-19 pandemic, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Table 27: TDR Balances

(in millions)	December 31,	
	2022	2021
Commercial and industrial	\$ 543	793
Commercial real estate	431	545
Lease financing	5	10
Total commercial TDRs	979	1,348
Residential mortgage	7,429	8,228
Credit card	407	309
Auto	118	169
Other consumer	58	57
Trial modifications	242	71
Total consumer TDRs	8,254	8,834
Total TDRs	\$ 9,233	10,182
TDRs on nonaccrual status	\$ 3,223	3,142
TDRs on accrual status:		
Government insured/guaranteed	1,870	2,462
Non-government insured/guaranteed	4,140	4,578
Total TDRs	\$ 9,233	10,182

Our nonaccrual policies are generally the same for all loan types when a restructuring is involved. We may re-underwrite loans at the time of restructuring to determine whether there is sufficient evidence of sustained repayment capacity based on the borrower’s documented income, debt to income ratios, and other factors. Loans that are not re-underwritten or loans that lack sufficient evidence of sustained repayment capacity at the time of modification are charged down to the fair value of the collateral, if applicable. For an accruing loan that has been modified, if the borrower has demonstrated performance under the previous terms and the underwriting process shows the capacity to continue to perform under the restructured terms, the loan will generally remain in accruing status. Otherwise, the loan will be placed in nonaccrual status and may be returned to accruing status when the borrower demonstrates a sustained period of performance, generally six consecutive months of payments, or equivalent, inclusive of consecutive payments made prior to modification. Loans will also be placed on nonaccrual status, and a corresponding charge-off is recorded to the loan balance, when we believe that principal and interest contractually due under the modified agreement will not be collectible. See Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report for additional information regarding TDRs.

Risk Management – Credit Risk Management (continued)

Table 28 provides an analysis of the changes in TDRs. Loans modified more than once as a TDR are reported as inflows only in the period they are first modified. In addition to foreclosures,

sales and transfers to held for sale, we may remove loans from TDR classification, but only if they have been refinanced or restructured at market terms and qualify as a new loan.

Table 28: Analysis of Changes in TDRs

(in millions)	Year ended December 31,	
	2022	2021
Commercial TDRs		
Balance, beginning of period	\$ 1,348	2,731
Inflows (1)	544	746
Outflows		
Charge-offs	(10)	(141)
Foreclosure	—	(5)
Payments, sales and other (2)	(903)	(1,983)
Balance, end of period	979	1,348
Consumer TDRs		
Balance, beginning of period	8,834	11,792
Inflows (1)	1,892	1,665
Outflows		
Charge-offs	(150)	(185)
Foreclosure	(54)	(56)
Payments, sales and other (2)	(2,439)	(4,363)
Net change in trial modifications (3)	171	(19)
Balance, end of period	8,254	8,834
Total TDRs	\$ 9,233	10,182

- (1) Inflows include loans that modify, even if they resolve within the period, as well as gross advances on term loans that modified in a prior period and net advances on revolving TDRs that modified in a prior period.
- (2) Other outflows include normal amortization/accretion of loan basis adjustments and loans transferred to LHFS. Occasionally, loans that have been refinanced or restructured at market terms qualify as new loans, which are also included as other outflows.
- (3) Net change in trial modifications includes: inflows of new TDRs entering the trial payment period, net of outflows for modifications that either (i) successfully perform and enter into a permanent modification or (ii) did not successfully perform according to the terms of the trial period plan and are subsequently charged-off, foreclosed upon, or otherwise resolved.

NET CHARGE-OFFS Table 29 presents net loan charge-offs.

Table 29: Net Loan Charge-offs

(\$ in millions)	Quarter ended December 31,				Year ended December 31,			
	2022		2021		2022		2021	
	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans (1)	Net loan charge-offs	% of avg. loans	Net loan charge-offs	% of avg. loans
Commercial and industrial	\$ 66	0.07 %	\$ 3	— %	\$ 83	0.02 %	\$ 218	0.07 %
Commercial real estate	10	0.03	22	0.06	(11)	(0.01)	53	0.04
Lease financing	3	0.06	3	0.09	7	0.04	24	0.15
Total commercial	79	0.06	28	0.02	79	0.01	295	0.06
Residential mortgage	(12)	(0.02)	118	0.18	(63)	(0.02)	(17)	(0.01)
Credit card	274	2.42	150	1.61	851	2.06	800	2.26
Auto	137	1.00	58	0.41	422	0.76	181	0.35
Other consumer	82	1.13	67	0.96	319	1.11	315	1.22
Total consumer	481	0.48	393	0.41	1,529	0.39	1,279	0.33
Total	\$ 560	0.23 %	\$ 421	0.19 %	\$ 1,608	0.17 %	\$ 1,574	0.18 %

(1) Net loan charge-offs as a percentage of average respective loans are annualized.

The decrease in commercial net loan charge-offs in 2022, compared with 2021, was driven by lower losses in our commercial and industrial and commercial real estate mortgage portfolios.

The increase in consumer net loan charge-offs in 2022, compared with 2021, was predominantly due to higher losses in our auto portfolio, driven by loans originated in 2021.

The COVID-19 pandemic may continue to impact the credit quality of our loan portfolio. Although the potential impacts were considered in our allowance for credit losses for loans, payment deferral activities in our residential mortgage portfolio instituted in response to the COVID-19 pandemic could continue to delay the recognition of residential mortgage loan charge-offs. For additional information on customer accommodations in response to the COVID-19 pandemic, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

ALLOWANCE FOR CREDIT LOSSES We maintain an allowance for credit losses (ACL) for loans, which is management's estimate of the expected life-time credit losses in the loan portfolio and unfunded credit commitments, at the balance sheet date, excluding loans and unfunded credit commitments carried at fair value or held for sale. Additionally, we maintain an ACL for debt securities classified as either AFS or HTM, other financial assets measured at amortized cost, net investments in leases, and other off-balance sheet credit exposures.

We apply a disciplined process and methodology to establish our ACL each quarter. The process for establishing the ACL for loans takes into consideration many factors, including historical and forecasted loss trends, loan-level credit quality ratings and loan grade-specific characteristics. The process involves subjective and complex judgments. In addition, we review a variety of credit metrics and trends. These credit metrics and trends, however, do not solely determine the amount of the allowance as we use several analytical tools. For additional information on our ACL, see the "Critical Accounting Policies – Allowance for Credit Losses" section and Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report. For additional information on our ACL for loans, see Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report, and for additional information on our ACL for debt securities, see Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) to Financial Statements in this Report.

Table 30 presents the allocation of the ACL for loans by loan portfolio segment and class.

Risk Management – Credit Risk Management (continued)

Table 30: Allocation of the ACL for Loans

(\$ in millions)	Dec 31, 2022			Dec 31, 2021		
	ACL	ACL as % of loan class	Loans as % of total loans	ACL	ACL as % of loan class	Loans as % of total loans
Commercial and industrial	\$ 4,507	1.17 %	40	\$ 4,873	1.39 %	39
Commercial real estate	2,231	1.43	16	2,516	1.70	17
Lease financing	218	1.46	2	402	2.71	2
Total commercial	6,956	1.25	58	7,791	1.52	58
Residential mortgage (1)	1,096	0.41	28	1,286	0.50	29
Credit card	3,567	7.71	5	3,290	8.56	4
Auto	1,380	2.57	6	928	1.64	6
Other consumer	610	2.08	3	493	1.74	3
Total consumer	6,653	1.67	42	5,997	1.57	42
Total	\$ 13,609	1.42 %	100	\$ 13,788	1.54 %	100
Components:						
Allowance for loan losses			\$ 12,985			12,490
Allowance for unfunded credit commitments			624			1,298
Allowance for credit losses			\$ 13,609			13,788
Ratio of allowance for loan losses to total net loan charge-offs			8.08x			7.94
Ratio of allowance for loan losses to total nonaccrual loans			2.31			1.73
Allowance for loan losses as a percentage of total loans			1.36 %			1.39

(1) Includes negative allowance for expected recoveries of amounts previously charged off.

The ratios for the allowance for loan losses and the ACL for loans presented in Table 30 may fluctuate from period to period due to such factors as the mix of loan types in the portfolio, borrower credit strength, and the value and marketability of collateral.

The ACL for loans decreased \$179 million, or 1%, from December 31, 2021, reflecting reduced uncertainty around the economic impact of the COVID-19 pandemic on our loan portfolio. This decrease was partially offset by loan growth and a less favorable economic environment. The detail of the changes in the ACL for loans by portfolio segment (including charge-offs and recoveries by loan class) is included in Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

We consider multiple economic scenarios to develop our estimate of the ACL for loans, which generally include a base scenario, along with an optimistic (upside) and one or more pessimistic (downside) scenarios. We weighted the base scenario and the downside scenarios in our estimate of the ACL for loans at December 31, 2022. The base scenario assumed elevated inflation and economic contraction in the near term, reflecting increased unemployment rates from historically low levels. The downside scenarios assumed a more substantial economic contraction due to high inflation, declining property values, and lower business and consumer confidence.

Additionally, we consider qualitative factors that represent the risk of limitations inherent in our processes and assumptions such as economic environmental factors, modeling assumptions and performance, and other subjective factors, including industry trends and emerging risk assessments.

The forecasted key economic variables used in our estimate of the ACL for loans at December 31 and September 30, 2022, are presented in Table 31.

Table 31: Forecasted Key Economic Variables

	2Q 2023	4Q 2023	2Q 2024
Weighted blend of economic scenarios:			
U.S. unemployment rate (1):			
December 31, 2022	4.3 %	5.5	6.2
September 30, 2022	5.4	6.1	6.4
U.S. real GDP (2):			
December 31, 2022	(2.5)	(1.0)	1.1
September 30, 2022	(1.1)	1.0	1.9
Home price index (3):			
December 31, 2022	(4.7)	(7.0)	(6.2)
September 30, 2022	(2.2)	(3.7)	(3.7)
Commercial real estate asset prices (3):			
December 31, 2022	(3.8)	(6.7)	(5.8)
September 30, 2022	(1.7)	(4.7)	(4.2)

(1) Quarterly average.

(2) Percent change from the preceding period, seasonally adjusted annualized rate.

(3) Percent change year over year of national average; outlook differs by geography and property type.

Future amounts of the ACL for loans will be based on a variety of factors, including loan balance changes, portfolio credit quality and mix changes, and changes in general economic conditions and expectations (including for unemployment and real GDP), among other factors.

We believe the ACL for loans of \$13.6 billion at December 31, 2022, was appropriate to cover expected credit losses, including unfunded credit commitments, at that date. The entire allowance is available to absorb credit losses from the total loan portfolio. The ACL for loans is subject to change and reflects existing factors as of the date of determination, including economic or market conditions and ongoing internal and external examination processes. Due to the sensitivity of the ACL for loans to changes in the economic and business environment, it is possible that we will incur incremental credit losses not anticipated as of the balance sheet date. Our process for determining the ACL is discussed in the “Critical Accounting Policies – Allowance for Credit Losses” section and Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

MORTGAGE BANKING ACTIVITIES We sell residential and commercial mortgage loans to various parties, including (1) government-sponsored entities (GSEs), Federal Home Loan Mortgage Corporation (FHLMC) and Federal National Mortgage Association (FNMA), who include the mortgage loans in GSE-guaranteed mortgage securitizations, (2) SPEs that issue private label MBS, and (3) other financial institutions that purchase mortgage loans for investment or private label securitization. In addition, we pool FHA-insured and VA-guaranteed residential mortgage loans that are then used to back securities guaranteed by the Government National Mortgage Association (GNMA). We may be required to repurchase these mortgage loans, indemnify the securitization trust, investor or insurer, or reimburse the securitization trust, investor or insurer for credit losses incurred on loans (collectively, repurchase) in the event of a breach of contractual representations or warranties that is not remedied within a period (usually 90 days or less) after we receive notice of the breach.

In connection with our sales and securitization of residential mortgage loans, we have established a mortgage repurchase liability, initially at fair value, related to various representations and warranties that reflect management’s estimate of losses for loans for which we could have a repurchase obligation, whether or not we currently service those loans, based on a combination of factors. See Note 16 (Securitizations and Variable Interest Entities) to Financial Statements in this Report for additional information about our liability for mortgage loan repurchase losses.

We provide recourse to GSEs for commercial mortgage loans sold under various programs and arrangements. The terms of these programs require that we incur a pro-rata share of actual losses in the event of borrower default. See Note 17 (Guarantees and Other Commitments) to Financial Statements in this Report for additional information about our exposure to loss related to these programs.

In addition to servicing loans in our portfolio, we act as servicer and/or master servicer of residential and commercial mortgage loans included in GSE-guaranteed mortgage securitizations, GNMA-guaranteed mortgage securitizations of FHA-insured/VA-guaranteed mortgages and private label mortgage securitizations, as well as for unsecuritized loans owned by institutional investors.

The loans we service were originated by us or by other mortgage loan originators. As servicer, our primary duties are typically to (1) collect payments due from borrowers, (2) advance certain delinquent payments of principal and interest on the mortgage loans, (3) maintain and administer any hazard, title or primary mortgage insurance policies relating to the mortgage loans, (4) maintain any required escrow accounts for payment of

taxes and insurance and administer escrow payments, and (5) foreclose on defaulted mortgage loans or, to the extent consistent with the related servicing agreement, consider alternatives to foreclosure, such as loan modifications or short sales, and for certain investors, manage the foreclosed property through liquidation. As master servicer, our primary duties are typically to (1) supervise, monitor and oversee the servicing of the mortgage loans by the servicer, and (2) advance delinquent amounts required by non-affiliated servicers who fail to perform their advancing obligations. The amount and timing of reimbursement for advances of delinquent payments vary by investor and the applicable servicing agreements. See Note 6 (Mortgage Banking Activities) to Financial Statements in this Report for additional information about residential and commercial servicing rights, servicer advances and servicing fees.

In accordance with applicable servicing guidelines, upon transfer as servicer, we retain the option to repurchase loans from GNMA loan securitization pools, which generally becomes exercisable when three scheduled loan payments remain unpaid by the borrower. We generally repurchase these loans for cash and as a result, our total consolidated assets do not change. At December 31, 2022 and 2021, these repurchased loan balances were \$9.8 billion and \$17.3 billion, respectively, which included \$8.6 billion and \$12.9 billion, respectively, in loans held for investment, with the remainder in loans held for sale.

Repurchased loans that regain current status or are otherwise modified in accordance with applicable servicing guidelines may be included in future GNMA loan securitization pools. However, in accordance with guidance issued by GNMA, certain loans repurchased after June 30, 2020, are ineligible for inclusion in future GNMA loan securitization pools until the borrower has timely made six consecutive payments. This requirement may delay our ability to transfer loans into the securitization market. See Note 16 (Securitizations and Variable Interest Entities) to Financial Statements in this Report for additional information about our involvement with mortgage loan securitizations.

Each agreement under which we act as servicer or master servicer generally specifies a standard of responsibility for actions we take in such capacity. We are required to indemnify the securitization trustee against any failure by us, as servicer or master servicer, to perform our servicing obligations. In addition, if we commit a breach of our obligations as servicer or master servicer, we may be subject to termination if the breach is not cured within a specified period. The standards governing servicing in GSE-guaranteed securitizations, and the possible remedies for violations of such standards, vary, and those standards and remedies are determined by servicing guides maintained by the GSEs, contracts between the GSEs and individual servicers and topical guides published by the GSEs from time to time. Such remedies could include indemnification or repurchase of an affected mortgage loan. In addition, in connection with our servicing activities, we could become subject to consent orders and settlement agreements with federal and state regulators for alleged servicing issues and practices. In general, these can require us to provide customers with loan modification relief, refinancing relief, and foreclosure prevention and assistance, and can result in business restrictions or the imposition of certain monetary penalties on us. For example, on September 9, 2021, the Company entered into a consent order with the OCC requiring the Company to improve the execution, risk management, and oversight of loss mitigation activities in its Home Lending business. For additional information on certain consent orders applicable to the Company, see the “Overview” section in this Report.

Asset/Liability Management

Asset/liability management involves evaluating, monitoring and managing interest rate risk, market risk, liquidity and funding. Primary oversight of interest rate risk and market risk resides with the Finance Committee of the Board, which oversees the administration and effectiveness of financial risk management policies and processes used to assess and manage these risks. Primary oversight of liquidity and funding resides with the Risk Committee of the Board.

At the management level, the Corporate Asset/Liability Committee (Corporate ALCO), which consists of management from finance, risk and business groups, oversees these risks and supports periodic reports provided to the Board's Finance Committee and Risk Committee as appropriate. As discussed in more detail for market risk activities below, we employ separate management level oversight specific to market risk.

INTEREST RATE RISK Interest rate risk is the risk that market fluctuations in interest rates, credit spreads, or foreign exchange can cause a loss of the Company's earnings and capital stemming from mismatches in the Company's asset and liability cash flows primarily arising from customer-related activities such as lending and deposit-taking. We are subject to interest rate risk because:

- assets and liabilities may mature or reprice at different times. If assets reprice faster than liabilities and interest rates are generally rising, earnings will initially increase;
- assets and liabilities may reprice at the same time but by different amounts;
- short-term and long-term market interest rates may change by different amounts. For example, the shape of the yield curve may affect yield for new loans and funding costs differently;
- the remaining maturity for various assets or liabilities may shorten or lengthen as interest rates change. For example, if long-term mortgage interest rates increase sharply, mortgage-related products may pay down at a slower rate than anticipated, which could impact portfolio income; or
- interest rates may have a direct or indirect effect on loan demand, collateral values, credit losses, mortgage origination volume, and the fair value of MSRs and other financial instruments.

We assess interest rate risk by comparing outcomes under various net interest income simulations using many interest rate scenarios that differ in the direction of interest rate changes, the degree of change over time, the speed of change and the projected shape of the yield curve. These simulations require assumptions regarding drivers of earnings and balance sheet composition such as loan originations, prepayment rates on loans and debt securities, deposit flows and mix, as well as pricing strategies.

Our most recent simulations, as presented in Table 32, estimate net interest income sensitivity over the next 12 months using instantaneous movements across the yield curve with both lower and higher interest rates relative to our base scenario. Steeper and flatter scenarios measure non-parallel changes in the yield curve, with long-term interest rates defined as all tenors three years and longer and short-term interest rates defined as all tenors less than three years. Where applicable, U.S. dollar interest rates are floored at 0.00%. The following describes the simulation assumptions for the scenarios presented in Table 32:

- Simulations are dynamic and reflect anticipated changes to our assets and liabilities.
- Other macroeconomic variables that could be correlated with the changes in interest rates are held constant.

- Mortgage prepayment and origination assumptions vary across scenarios and reflect only the impact of the higher or lower interest rates.
- Our base scenario deposit forecast incorporates mix changes consistent with the base interest rate trajectory. Deposit mix is modeled to be the same in the base scenario and the alternative scenarios. In higher interest rate scenarios, customer deposit activity that shifts balances into higher yielding products could impact expected net interest income.
- The interest rate sensitivity of deposits is modeled using the historical behavior of our deposits portfolio and reflects the expectations of deposit products repricing as market interest rates change (referred to as deposit betas). Our actual experience in base and alternative scenarios may differ from expectations due to the lag or acceleration of deposit repricing, changes in consumer behavior, and other factors.
- We hold the size of the projected debt and equity securities portfolios constant across scenarios.

Table 32: Net Interest Income Sensitivity Over the Next 12 Months Using Instantaneous Movements

(\$ in billions)	Dec 31, 2022	Dec 31, 2021
Parallel shift:		
+100 bps shift in interest rates	\$ 2.3	7.1
-100 bps shift in interest rates	(1.7)	(3.3)
Steeper yield curve: (1)		
+100 bps shift in long-term interest rates	0.8	n/a
-100 bps shift in short-term interest rates	(1.0)	n/a
+50 bps shift in long-term interest rates	0.4	1.2
-50 bps shift in short-term interest rates	(0.5)	(0.9)
Flatter yield curve: (1)		
+100 bps shift in short-term interest rates	1.5	n/a
-100 bps shift in long-term interest rates	(0.7)	n/a
+50 bps shift in short-term interest rates	0.7	2.6
-50 bps shift in long-term interest rates	(0.4)	(1.0)

(1) In fourth quarter 2022, given the higher levels of interest rates and volatility, we presented 100 bps shifts in our steeper and flatter scenarios.

The changes in our interest rate sensitivity from December 31, 2021, to December 31, 2022, in Table 32 reflected updates to our base scenario, including expectations for balance sheet composition and interest rates. Our interest rate sensitivity indicates that we would expect to benefit from higher interest rates as our assets would reprice faster and to a greater degree than our liabilities, while in the case of lower interest rates, our assets would reprice downward and to a greater degree than our liabilities resulting in lower net interest income. For the December 31, 2021, simulations with downward shifts in interest rates, the 0.00% interest rate floor limited the amount of the decline in net interest income.

The sensitivity results above do not capture noninterest income or expense impacts. Our interest rate sensitive noninterest income and expense are impacted by mortgage banking activities that may have sensitivity impacts that move in the opposite direction of our net interest income. See the "Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk" section in this Report for additional information.

Interest rate sensitive noninterest income is also impacted by changes in earnings credit for noninterest-bearing deposits that reduce treasury management deposit-related service fees

on commercial accounts, and by trading assets. In addition, the impact to net interest income does not include the fair value changes of trading securities, which, along with the effects of related economic hedges, are recorded in noninterest income. In addition to changes in interest rates, net interest income and noninterest income from trading securities may be impacted by the actual composition of the trading portfolio. For additional information on our trading assets and liabilities, see Note 2 (Trading Activities) to Financial Statements in this Report.

We use the debt securities portfolio and exchange-traded and over-the-counter (OTC) interest rate derivatives to manage our interest rate exposures. As interest rates increase, changes in the fair value of AFS debt securities may negatively affect accumulated other comprehensive income (AOCI), which lowers the amount of our regulatory capital. AOCI also includes unrealized gains or losses related to the transfer of debt securities from AFS to HTM, which are subsequently amortized into earnings over the life of the security with no further impact from interest rate changes. See Note 1 (Summary of Significant Accounting Policies) and Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) to Financial Statements in this Report for additional information on the debt securities portfolios. We use derivatives for asset/liability management in two main ways:

- to convert the cash flows from selected asset and/or liability instruments/portfolios including investments, commercial loans and long-term debt, from floating-rate payments to fixed-rate payments, or vice versa; and
- to economically hedge our mortgage origination pipeline, funded mortgage loans, and MSRs.

In 2022, we entered into interest rate swap hedges to reduce AOCI sensitivity of our AFS debt securities portfolio. Additionally, we entered into interest rate swaps to convert the interest cash flows of some floating-rate assets, such as commercial loans and certain interest-earning deposits with banks, to fixed-rates. Derivatives used to hedge our interest rate risk exposures are presented in Note 14 (Derivatives) to Financial Statements in this Report.

MORTGAGE BANKING INTEREST RATE AND MARKET RISK We originate, fund and service mortgage loans, which subjects us to various risks, including market, interest rate, credit, and liquidity risks that can be substantial. Based on market conditions and other factors, we reduce credit and liquidity risks by selling or securitizing mortgage loans. We determine whether mortgage loans will be held for investment or held for sale at the time of commitment, but may change our intent to hold loans for investment or sale as part of our corporate asset/liability management activities. We may also retain securities in our investment portfolio at the time we securitize mortgage loans.

Changes in interest rates may impact mortgage banking noninterest income, including origination and servicing fees, and the fair value of our residential MSRs, LHFS, and derivative loan commitments (interest rate “locks”) extended to mortgage applicants. Interest rate changes will generally impact our mortgage banking noninterest income on a lagging basis due to the time it takes for the market to reflect a shift in customer demand, as well as the time required for processing a new application, providing the commitment, and securitizing and selling the loan. The amount and timing of the impact will depend on the magnitude, speed and duration of the changes in interest rates.

The valuation of our residential MSRs can be highly subjective and involve complex judgments by management about matters that are inherently unpredictable. Changes in

interest rates influence a variety of significant assumptions captured in the periodic valuation of residential MSRs, including prepayment rates, expected returns and potential risks on the servicing asset portfolio, costs to service, the value of escrow balances and other servicing valuation elements. See the “Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights” section in this Report for additional information on the valuation of our residential MSRs.

An increase in interest rates generally reduces the propensity for refinancing, extends the expected duration of the servicing portfolio, and therefore increases the estimated fair value of the MSRs. However, an increase in interest rates can also reduce mortgage loan demand, including refinancing activity, which reduces noninterest income from origination activities. A decline in interest rates would generally have an opposite impact.

To reduce our exposure to changes in interest rates, our residential MSRs are economically hedged with a combination of derivative instruments, including interest rate swaps, Eurodollar futures, highly liquid mortgage forward contracts and interest rate options. Hedging the various sources of interest rate risk in mortgage banking is a complex process that requires sophisticated modeling and constant monitoring. There are several potential risks to earnings from mortgage banking related to origination volumes and mix, valuation of MSRs and associated hedging results, the relationship and degree of volatility between short-term and long-term interest rates, and changes in servicing and foreclosures costs. While we attempt to balance our mortgage banking interest rate and market risks, the financial instruments we use may not perfectly correlate with the values and income being hedged.

The size of the hedge and the particular combination of hedging instruments at any point in time is designed to reduce the volatility of our earnings over various time frames within a range of mortgage interest rates. Market factors, the composition of the mortgage servicing portfolio, and the relationship between the origination and servicing sides of our mortgage businesses change continually, and therefore the types of instruments used in our hedging are reviewed daily and rebalanced based on our evaluation of current market factors and the interest rate risk inherent in our portfolio.

For additional information on mortgage banking, including key assumptions and the sensitivity of the fair value of MSRs, see Note 6 (Mortgage Banking Activities), Note 14 (Derivatives), and Note 15 (Fair Values of Assets and Liabilities) to Financial Statements in this Report.

MARKET RISK Market risk is the risk of possible economic loss from adverse changes in market risk factors such as interest rates, credit spreads, foreign exchange rates, equity and commodity prices, and the risk of possible loss due to counterparty exposure. This applies to implied volatility risk, basis risk, and market liquidity risk. It includes price risk in the trading book, mortgage servicing rights and the hedge effectiveness risk associated with mortgage loans held at fair value, and impairment of private equity investments.

The Board’s Finance Committee has primary oversight responsibility for market risk and oversees the Company’s market risk exposure and market risk management strategies. In addition, the Board’s Risk Committee has certain oversight responsibilities with respect to market risk, including counterparty risk. The Finance Committee reports key market risk matters to the Risk Committee.

At the management level, the Market and Counterparty Risk Management function, which is part of IRM, has oversight responsibility for market risk across the enterprise. The Market

Risk Management – Asset/Liability Management (continued)

and Counterparty Risk Management function reports into Corporate and Investment Banking Risk and provides periodic reports related to market risk to the Board's Finance Committee.

MARKET RISK – TRADING ACTIVITIES We engage in trading activities to accommodate the investment and risk management activities of our customers and to execute economic hedging to manage certain balance sheet risks. These trading activities predominantly occur within our CIB businesses and, to a lesser extent, other businesses of the Company. Debt securities held for trading, equity securities held for trading, trading loans and trading derivatives are financial instruments used in our trading activities, and all are carried at fair value. Income earned on the financial instruments used in our trading activities include net interest income, changes in fair value and realized gains and losses. Net interest income earned from our trading activities is reflected in the interest income and interest expense components of our consolidated statement of income. Changes in fair value of the financial instruments used in our trading activities are reflected in net gains from trading activities. For additional information on the financial instruments used in our trading activities and the income from these trading activities, see Note 2 (Trading Activities) to Financial Statements in this Report.

Value-at-risk (VaR) is a statistical risk measure used to estimate the potential loss from adverse moves in the financial markets. The Company uses VaR metrics complemented with sensitivity analysis and stress testing in measuring and monitoring market risk. These market risk measures are monitored at both the business unit level and at aggregated levels on a daily basis. Our corporate market risk management

function aggregates and monitors exposures against our established risk appetite. Changes to the market risk profile are analyzed and reported on a daily basis. The Company monitors various market risk exposure measures from a variety of perspectives, including line of business, product, risk type, and legal entity.

Trading VaR is the measure used to provide insight into the market risk exhibited by the Company's trading positions. The Company calculates Trading VaR for risk management purposes to establish line of business and Company-wide risk limits. Trading VaR is calculated based on all trading positions on our consolidated balance sheet.

Table 33 shows the Company's Trading General VaR by risk category. Our Trading General VaR uses a historical simulation model which assumes that historical changes in market values are representative of the potential future outcomes and measures the expected earnings loss of the Company over a 1-day time interval at a 99% confidence level. Our historical simulation model is based on equally weighted data from a 12-month historical look-back period. We believe using a 12-month look-back period helps ensure the Company's VaR is responsive to current market conditions. The 99% confidence level equates to an expectation that the Company would incur single-day trading losses in excess of the VaR estimate on average once every 100 trading days.

Average Company Trading General VaR was \$35 million for the year ended December 31, 2022, compared with \$49 million for the year ended December 31, 2021. The decrease in average Company Trading General VaR for the year ended December 31, 2022, compared with the year ended December 31, 2021, was primarily driven by changes in portfolio composition.

Table 33: Trading 1-Day 99% General VaR by Risk Category

(in millions)	Year ended December 31,							
	2022				2021			
	Period end	Average	Low	High	Period end	Average	Low	High
Company Trading General VaR Risk Categories								
Credit	\$ 29	32	19	85	19	38	12	112
Interest rate	25	25	9	88	15	25	4	120
Equity	27	23	13	38	15	30	13	72
Commodity	4	6	2	20	10	7	2	28
Foreign exchange	1	1	0	2	1	1	0	1
Diversification benefit (1)	(47)	(52)			(40)	(52)		
Company Trading General VaR	\$ 39	35			20	49		

(1) The period-end VaR was less than the sum of the VaR components described above, which is due to portfolio diversification. The diversification effect arises because the risks are not perfectly correlated causing a portfolio of positions to usually be less risky than the sum of the risks of the positions alone. The diversification benefit is not meaningful for low and high metrics since they may occur on different days.

Sensitivity Analysis Given the inherent limitations of the VaR models, the Company uses other measures, including sensitivity analysis, to measure and monitor risk. Sensitivity analysis is the measure of exposure to a single risk factor, such as a 0.01% increase in interest rates or a 1% increase in equity prices. We conduct and monitor sensitivity on interest rates, credit spreads, volatility, equity, commodity, and foreign exchange exposure. Sensitivity analysis complements VaR as it provides an indication of risk relative to each factor irrespective of historical market moves.

Stress Testing While VaR captures the risk of loss due to adverse changes in markets using recent historical market data, stress testing is designed to capture the Company's exposure to extreme but low probability market movements. Stress scenarios

estimate the risk of losses based on management's assumptions of abnormal but severe market movements such as severe credit spread widening or a large decline in equity prices. These scenarios assume that the market moves happen instantaneously and no repositioning or hedging activity takes place to mitigate losses as events unfold (a conservative approach since experience demonstrates otherwise).

An inventory of scenarios is maintained representing both historical and hypothetical stress events that affect a broad range of market risk factors with varying degrees of correlation and differing time horizons. Hypothetical scenarios assess the impact of large movements in financial variables on portfolio values. Typical examples include a 1% (100 basis point) increase across the yield curve or a 10% decline in equity market indexes. Historical scenarios utilize an event-driven approach: the stress

scenarios are based on plausible but rare events, and the analysis addresses how these events might affect the risk factors relevant to a portfolio.

The Company's stress testing framework is also used in calculating results in support of the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) and internal stress tests. Stress scenarios are regularly reviewed and updated to address potential market events or concerns. For more detail on the CCAR process, see the "Capital Management" section in this Report.

MARKET RISK – EQUITY SECURITIES We are directly and indirectly affected by changes in the equity markets. We make and manage direct investments in start-up businesses, emerging growth companies, management buy-outs, acquisitions and corporate recapitalizations. We also invest in non-affiliated funds that make similar private equity investments. These private equity investments are made within capital allocations approved by management and the Board. The Board reviews business developments, key risks and historical returns for the private equity investment portfolio at least annually. Management reviews these investments at least quarterly to assess them for impairment and observable price changes. For nonmarketable equity securities, the analysis is based on facts and circumstances of each individual investment and the expectations for that investment's cash flows, capital needs, the viability of its business model, our exit strategy, and observable price changes that are similar to the investments held. Investments in nonmarketable equity securities include private equity investments accounted for under the equity method, fair value through net income, and the measurement alternative.

As part of our business to support our customers, we trade public equities, listed/OTC equity derivatives and convertible bonds. We have parameters that govern these activities. We also have marketable equity securities that include investments relating to our venture capital activities. We manage these marketable equity securities within capital risk limits approved by management and the Board and monitored by Corporate ALCO and the Market Risk Committee. The fair value changes in these marketable equity securities are recognized in net income. For additional information, see Note 4 (Equity Securities) to Financial Statements in this Report.

Changes in equity market prices may also indirectly affect our net income by (1) the value of third-party assets under management and, hence, fee income, (2) borrowers whose ability to repay principal and/or interest may be affected by the stock market, or (3) brokerage activity, related commission income and other business activities. Each business line monitors and manages these indirect risks.

LIQUIDITY RISK AND FUNDING Liquidity risk is the risk arising from the inability of the Company to meet obligations when they come due, or roll over funds at a reasonable cost, without incurring heightened costs. In the ordinary course of business, we enter into contractual obligations that may require future cash payments, including funding for customer loan requests, customer deposit maturities and withdrawals, debt service, leases for premises and equipment, and other cash commitments. The objective of effective liquidity management is to ensure that we can meet our contractual obligations and other cash commitments efficiently under both normal operating conditions and under periods of Wells Fargo-specific and/or market stress. For additional information on these obligations, see the following sections and Notes to Financial Statements in this Report:

- "Unfunded Credit Commitments" section within Loans and Related Allowance for Credit Losses (Note 5)
- Leasing Activity (Note 8)
- Deposits (Note 9)
- Long-Term Debt (Note 10)
- Guarantees and Other Commitments (Note 17)
- Employee Benefits (Note 21)
- Income Taxes (Note 22)

To help achieve this objective, the Board establishes liquidity guidelines that require sufficient asset-based liquidity to cover potential funding requirements and to avoid over-dependence on volatile, less reliable funding markets. These guidelines are monitored on a monthly basis by the Corporate ALCO and on a quarterly basis by the Board. These guidelines are established and monitored for both the Company and the Parent on a stand-alone basis so that the Parent is a source of strength for its banking subsidiaries.

Liquidity Stress Tests Liquidity stress tests are performed to help ensure that the Company has sufficient liquidity to meet contractual and contingent outflows modeled under a variety of stress scenarios. Our scenarios utilize market-wide as well as corporate-specific events, including a range of stress conditions and time horizons. Stress testing results facilitate evaluation of the Company's projected liquidity position during stress and inform future needs in the Company's funding plan.

Contingency Funding Plan Our contingency funding plan (CFP), which is approved by Corporate ALCO and the Board's Risk Committee, sets out the Company's strategies and action plans to address potential liquidity needs during market-wide or idiosyncratic liquidity events. The CFP establishes measures for monitoring emerging liquidity events and describes the processes for communicating and managing stress events should they occur. The CFP also identifies alternate funding and liquidity strategies available to the Company in a period of stress.

Liquidity Standards We are subject to a rule issued by the FRB, OCC and FDIC that establishes a quantitative minimum liquidity requirement consistent with the liquidity coverage ratio (LCR) established by the Basel Committee on Banking Supervision (BCBS). The rule requires a covered banking organization to hold high-quality liquid assets (HQLA) in an amount equal to or greater than its projected net cash outflows during a 30-day stress period. Our HQLA under the rule predominantly consists of central bank deposits, government debt securities, and mortgage-backed securities of federal agencies. The LCR applies to the Company and to our insured depository institutions (IDIs) with total assets of \$10 billion or more. In addition, rules issued by the FRB impose enhanced liquidity risk management standards on large bank holding companies (BHCs), such as Wells Fargo.

The FRB, OCC and FDIC have also issued a rule implementing a stable funding requirement, known as the net stable funding ratio (NSFR), which requires a covered banking organization, such as Wells Fargo, to maintain a minimum amount of stable funding, including common equity, long-term debt and most types of deposits, in relation to its assets, derivative exposures and commitments over a one-year horizon period. The NSFR applies to the Company and to our IDIs with total assets of \$10 billion or more. As of December 31, 2022, we were compliant with the NSFR requirement.

Risk Management – Asset/Liability Management (continued)

Liquidity Coverage Ratio As of December 31, 2022, the Company, Wells Fargo Bank, N.A., and Wells Fargo National Bank West exceeded the minimum LCR requirement of 100%.

Table 34 presents the Company's quarterly average values for the daily-calculated LCR and its components calculated pursuant

to the LCR rule requirements. The LCR represents average HQLA divided by average projected net cash outflows, as each is defined under the LCR rule.

Table 34: Liquidity Coverage Ratio

(in millions, except ratio)	Average for quarter ended		
	Dec 31, 2022	Sep 30, 2022	Dec 31, 2021
HQLA (1):			
Eligible cash	\$ 123,446	125,576	210,527
Eligible securities (2)	231,337	238,678	172,761
Total HQLA	354,783	364,254	383,288
Projected net cash outflows (3)	292,001	296,495	325,015
LCR	122%	123	118

(1) Excludes excess HQLA at certain subsidiaries that are not transferable to other Wells Fargo entities.

(2) Net of applicable haircuts required under the LCR rule.

(3) Projected net cash outflows are calculated by applying a standardized set of outflow and inflow assumptions, defined by the LCR rule, to various exposures and liability types, such as deposits and unfunded loan commitments, which are prescribed based on a number of factors including the type of customer and the nature of the account.

Liquidity Sources We maintain liquidity in the form of cash, interest-earning deposits with banks, and unencumbered high-quality, liquid debt securities. These assets make up our primary sources of liquidity. Our primary sources of liquidity are substantially the same in composition as HQLA under the LCR rule; however, our primary sources of liquidity will generally exceed HQLA calculated under the LCR rule due to the applicable haircuts to HQLA and the exclusion of excess HQLA at our subsidiary IDIs required under the LCR rule. Our primary sources of liquidity are presented in Table 35 at fair value, which also includes encumbered securities that are not included as available HQLA in the calculation of the LCR.

Our cash is predominantly on deposit with the Federal Reserve. Debt securities included as part of our primary sources of liquidity are comprised of U.S. Treasury and federal agency debt, and MBS issued by federal agencies within our debt securities portfolio. We believe these debt securities provide quick sources of liquidity through sales or by pledging to obtain financing, regardless of market conditions. Some of these debt securities are within our HTM portfolio and, as such, are not intended for sale but may be pledged to obtain financing.

Table 35: Primary Sources of Liquidity

(in millions)	December 31, 2022			December 31, 2021		
	Total	Encumbered	Unencumbered	Total	Encumbered	Unencumbered
Interest-earning deposits with banks	\$ 124,561	—	124,561	209,614	—	209,614
Debt securities of U.S. Treasury and federal agencies	59,570	12,080	47,490	56,486	4,066	52,420
Federal agency mortgage-backed securities	230,881	34,151	196,730	293,870	58,955	234,915
Total	\$ 415,012	46,231	368,781	559,970	63,021	496,949

In addition to our primary sources of liquidity shown in Table 35, liquidity is also available through the sale or financing of other debt securities including trading and/or AFS debt securities as well as through the sale, securitization or financing of loans, to the extent such debt securities and loans are not encumbered.

Funding Sources The Parent acts as a source of funding for the Company through the issuance of long-term debt and equity. WFC Holdings, LLC (the "IHC") is an intermediate holding company and subsidiary of the Parent, which provides funding support for the ongoing operational requirements of the Parent and certain of its direct and indirect subsidiaries. For additional information on the IHC, see the "Regulatory Matters – 'Living Will' Requirements and Related Matters" section in this Report. Additional subsidiary funding is provided by deposits, short-term borrowings and long-term debt.

Deposits have historically provided a sizable source of relatively low-cost funds. Deposits were 145% and 166% of total loans at December 31, 2022 and 2021, respectively.

As of December 31, 2022, we had approximately \$209.0 billion of available borrowing capacity at various Federal Home Loan Banks and the Federal Reserve Discount Window. Although available, we do not view the borrowing capacity at the Federal Reserve Discount Window as a primary source of liquidity. Table 36 presents a summary of our short-term borrowings, which generally mature in less than 30 days. For additional information on the classification of our short-term borrowings, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report. We pledge certain financial instruments that we own to collateralize repurchase agreements and other securities financings. For additional information, see the "Pledged Assets" section of Note 18 (Pledged Assets and Collateral) to Financial Statements in this Report.

Table 36: Short-Term Borrowings

(in millions)	December 31, 2022	December 31, 2021
Federal funds purchased and securities sold under agreements to repurchase	\$ 30,623	21,191
Other short-term borrowings (1)	20,522	13,218
Total	\$ 51,145	34,409

(1) Includes \$7.0 billion and \$0 of Federal Home Loan Bank (FHLB) advances at December 31, 2022 and 2021, respectively.

We access domestic and international capital markets for long-term funding through issuances of registered debt securities, private placements and asset-backed secured funding. We issue long-term debt in a variety of maturities and currencies to achieve cost-efficient funding and to maintain an appropriate maturity profile. Proceeds from securities issued were used for general corporate purposes unless otherwise specified in the applicable prospectus or prospectus supplement, and we expect the proceeds from securities issued in the future will be used for the same purposes. Depending on market conditions and our

liquidity position, we may redeem or repurchase, and subsequently retire, our outstanding debt securities in privately negotiated or open market transactions, by tender offer, or otherwise.

Table 37 presents a summary of our long-term debt. For additional information on our long-term debt, including contractual maturities, see Note 10 (Long-Term Debt), and for information on the classification of our long-term debt, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

Table 37: Long-Term Debt

(in millions)	December 31, 2022	December 31, 2021
Wells Fargo & Company (Parent Only)	\$ 134,401	146,286
Wells Fargo Bank, N.A., and other bank entities (Bank) (1)	39,189	12,858
Other consolidated subsidiaries	1,280	1,545
Total	\$ 174,870	160,689

(1) Includes \$27.0 billion and \$0 of FHLB advances at December 31, 2022 and 2021, respectively. For additional information, see Note 10 (Long-Term Debt) to Financial Statements in this Report.

Credit Ratings Investors in the long-term capital markets, as well as other market participants, generally will consider, among other factors, a company's debt rating in making investment decisions. Rating agencies base their ratings on many quantitative and qualitative factors, including capital adequacy, liquidity, asset quality, business mix, the level and quality of earnings, and rating agency assumptions regarding the probability and extent of federal financial assistance or support for certain large financial institutions. Adverse changes in these factors could result in a reduction of our credit rating; however, our debt securities do not contain credit rating covenants.

There were no actions undertaken by the rating agencies with regard to our credit ratings during fourth quarter 2022.

See the "Risk Factors" section in this Report for additional information regarding our credit ratings and the potential impact a credit rating downgrade would have on our liquidity and operations as well as Note 14 (Derivatives) to Financial Statements in this Report for information regarding additional collateral and funding obligations required for certain derivative instruments in the event our credit ratings were to fall below investment grade.

The credit ratings of the Parent and Wells Fargo Bank, N.A., as of December 31, 2022, are presented in Table 38.

Table 38: Credit Ratings as of December 31, 2022

	Wells Fargo & Company		Wells Fargo Bank, N.A.	
	Senior debt	Short-term borrowings	Long-term deposits	Short-term borrowings
Moody's	A1	P-1	Aa1	P-1
S&P Global Ratings	BBB+	A-2	A+	A-1
Fitch Ratings	A+	F1	AA	F1+
DBRS Morningstar	AA (low)	R-1 (middle)	AA	R-1 (high)

Capital Management

We have an active program for managing capital through a comprehensive process for assessing the Company's overall capital adequacy. Our objective is to maintain capital at an amount commensurate with our risk profile and risk tolerance objectives, and to meet both regulatory and market expectations. We primarily fund our capital needs through the retention of earnings net of both dividends and share repurchases, as well as through the issuance of preferred stock and long- and short-term debt. Retained earnings at December 31, 2022, increased \$7.3 billion from December 31, 2021, predominantly as a result of \$13.2 billion of Wells Fargo net income, partially offset by \$5.4 billion of common and preferred stock dividends. During 2022, we issued \$1.8 billion of common stock, substantially all of which was issued in connection with employee compensation and benefits. In 2022, we repurchased 110 million shares of common stock at a cost of \$6 billion. In 2022, our AOCI decreased \$11.7 billion, predominantly due to net unrealized losses on AFS debt securities. As interest rates increase, changes in the fair value of AFS debt securities may negatively affect AOCI, which lowers the amount of our risk-based capital. For additional information about capital planning, see the "Capital Planning and Stress Testing" section below.

In 2022, we redeemed \$609 million of preferred stock. For additional information, see Note 11 (Preferred Stock) to Financial Statements in this Report.

Regulatory Capital Requirements

The Company and each of our IDIs are subject to various regulatory capital adequacy requirements administered by the FRB and the OCC. Risk-based capital rules establish risk-adjusted ratios relating regulatory capital to different categories of assets and off-balance sheet exposures as discussed below.

RISK-BASED CAPITAL AND RISK-WEIGHTED ASSETS The Company is subject to rules issued by federal banking regulators to implement Basel III capital requirements for U.S. banking organizations. The rules contain two frameworks for calculating capital requirements, a Standardized Approach and an Advanced Approach applicable to certain institutions, including Wells Fargo, and we must calculate our risk-based capital ratios under both approaches. The Company is required to satisfy the risk-based capital ratio requirements to avoid restrictions on capital distributions and discretionary bonus payments. Table 39 and Table 40 present the risk-based capital requirements applicable to the Company under the Standardized Approach and Advanced Approach, respectively, as of December 31, 2022.

Table 39: Risk-Based Capital Requirements – Standardized Approach as of December 31, 2022

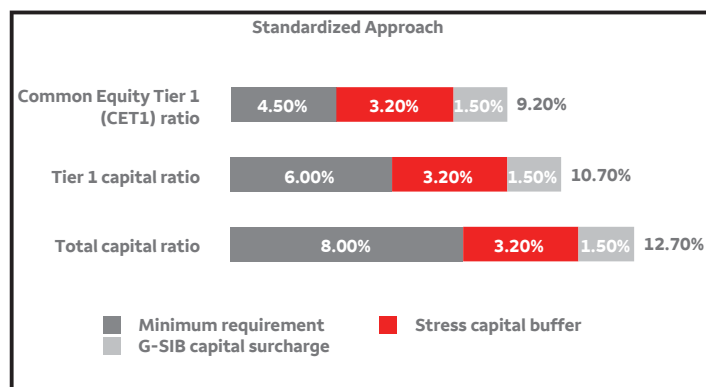
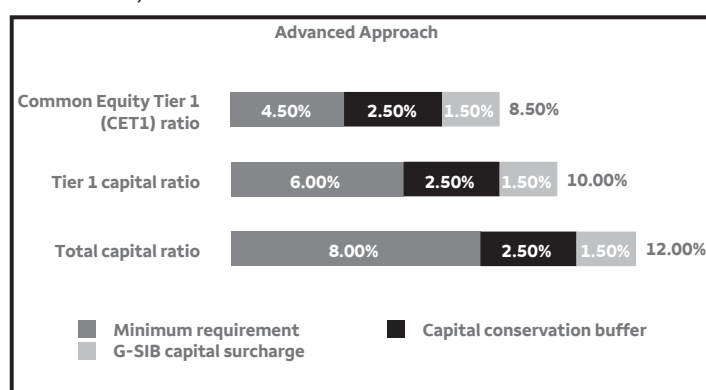


Table 40: Risk-Based Capital Requirements – Advanced Approach as of December 31, 2022



In addition to the risk-based capital requirements described in Table 39 and Table 40, if the FRB determines that a period of excessive credit growth is contributing to an increase in systemic risk, a countercyclical buffer of up to 2.50% could be added to the risk-based capital ratio requirements under federal banking regulations. The countercyclical buffer in effect at December 31, 2022, was 0.00%.

The capital conservation buffer is applicable to certain institutions, including Wells Fargo, under the Advanced Approach and is intended to absorb losses during times of economic or financial stress.

The stress capital buffer is calculated based on the decrease in a BHC's risk-based capital ratios under the severely adverse scenario in the FRB's annual supervisory stress test and related Comprehensive Capital Analysis and Review (CCAR), plus four quarters of planned common stock dividends. Because the stress capital buffer is calculated annually based on data that can differ over time, our stress capital buffer, and thus our risk-based capital ratio requirements under the Standardized Approach, are subject to change in future periods. Our stress capital buffer for the period October 1, 2022, through September 30, 2023, is 3.20%.

As a global systemically important bank (G-SIB), we are also subject to the FRB's rule implementing an additional capital surcharge between 1.00-4.50% on the risk-based capital ratio requirements of G-SIBs. Under the rule, we must annually calculate our surcharge under two methods and use the higher of the two surcharges. The first method (method one) considers our size, interconnectedness, cross-jurisdictional activity, substitutability, and complexity, consistent with the methodology developed by the BCBS and the Financial Stability Board (FSB). The second method (method two) uses similar inputs, but replaces substitutability with use of short-term

wholesale funding and will generally result in higher surcharges than under method one. Because the G-SIB capital surcharge is calculated annually based on data that can differ over time, the amount of the surcharge is subject to change in future years. If our annual calculation results in a decrease to our G-SIB capital surcharge, the decrease takes effect the next calendar year. If our annual calculation results in an increase to our G-SIB capital surcharge, the increase takes effect in two calendar years. Our G-SIB capital surcharge will continue to be 1.50% in 2023.

Under the risk-based capital rules, on-balance sheet assets and credit equivalent amounts of derivatives and off-balance sheet items are assigned to one of several broad risk categories according to the obligor, or, if relevant, the guarantor or the nature of any collateral. The aggregate dollar amount in each risk category is then multiplied by the risk weight associated with that category. The resulting weighted values from each of the risk categories are aggregated for determining total risk-weighted assets (RWAs).

The tables that follow provide information about our risk-based capital and related ratios as calculated under Basel III capital rules. Table 41 summarizes our CET1, Tier 1 capital, total capital, RWAs and capital ratios.

Table 41: Capital Components and Ratios

(\$ in millions)		Standardized Approach			Advanced Approach		
		Required Capital Ratios (1)	Dec 31, 2022	Dec 31, 2021	Required Capital Ratios (1)	Dec 31, 2022	Dec 31, 2021
Common Equity Tier 1	(A)	\$	133,527	140,643		133,527	140,643
Tier 1 capital	(B)		152,567	159,671		152,567	159,671
Total capital	(C)		186,747	196,281		177,258	186,553
Risk-weighted assets	(D)		1,259,889	1,239,026		1,112,307	1,116,068
Common Equity Tier 1 capital ratio	(A)/(D)	9.20 %	10.60 *	11.35	8.50	12.00	12.60
Tier 1 capital ratio	(B)/(D)	10.70	12.11 *	12.89	10.00	13.72	14.31
Total capital ratio	(C)/(D)	12.70	14.82 *	15.84	12.00	15.94	16.72

* Denotes the binding ratio under the Standardized and Advanced Approaches at December 31, 2022.

(1) Represents the minimum ratios required to avoid restrictions on capital distributions and discretionary bonus payments at December 31, 2022.

Capital Management (continued)

Table 42 provides information regarding the calculation and composition of our risk-based capital under the Standardized and Advanced Approaches.

Table 42: Risk-Based Capital Calculation and Components

(in millions)	Dec 31, 2022	Dec 31, 2021
Total equity	\$ 181,875	190,110
Adjustments:		
Preferred stock (1)	(19,448)	(20,057)
Additional paid-in capital on preferred stock (1)	173	136
Unearned Employee Stock Ownership Plan (ESOP) shares (1)	—	646
Noncontrolling interests	(1,986)	(2,504)
Total common stockholders' equity	\$ 160,614	168,331
Adjustments:		
Goodwill	(25,173)	(25,180)
Certain identifiable intangible assets (other than MSRs)	(152)	(225)
Goodwill and other intangibles on investments in consolidated portfolio companies (included in other assets)	(2,427)	(2,437)
Applicable deferred taxes related to goodwill and other intangible assets (2)	890	765
CECL transition provision (3)	180	241
Other	(405)	(852)
Common Equity Tier 1 under the Standardized and Advanced Approaches	\$ 133,527	140,643
Preferred stock (1)	19,448	20,057
Additional paid-in capital on preferred stock (1)	(173)	(136)
Unearned ESOP shares (1)	—	(646)
Other	(235)	(247)
Total Tier 1 capital under the Standardized and Advanced Approaches	(A) \$ 152,567	159,671
Long-term debt and other instruments qualifying as Tier 2	20,503	22,740
Qualifying allowance for credit losses (4)	13,959	14,149
Other	(282)	(279)
Total Tier 2 capital under the Standardized Approach	(B) \$ 34,180	36,610
Total qualifying capital under the Standardized Approach	(A)+(B) \$ 186,747	196,281
Long-term debt and other instruments qualifying as Tier 2	20,503	22,740
Qualifying allowance for credit losses (4)	4,470	4,421
Other	(282)	(279)
Total Tier 2 capital under the Advanced Approach	(C) \$ 24,691	26,882
Total qualifying capital under the Advanced Approach	(A)+(C) \$ 177,258	186,553

- (1) In fourth quarter 2022, we redeemed all outstanding shares of our ESOP Cumulative Convertible Preferred Stock in exchange for shares of the Company's common stock. For additional information, see Note 11 (Preferred Stock) to Financial Statements in this Report.
- (2) Determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period-end.
- (3) In second quarter 2020, the Company elected to apply a modified transition provision issued by federal banking regulators related to the impact of the current expected credit loss accounting standard (CECL) on regulatory capital. The rule permits certain banking organizations to exclude from regulatory capital the initial adoption impact of CECL, plus 25% of the cumulative changes in the allowance for credit losses (ACL) under CECL for each period until December 31, 2021, followed by a three-year phase-out period in which the benefit is reduced by 25% in year one, 50% in year two and 75% in year three.
- (4) Differences between the approaches are driven by the qualifying amounts of ACL includable in Tier 2 capital. Under the Advanced Approach, eligible credit reserves represented by the amount of qualifying ACL in excess of expected credit losses (using regulatory definitions) is limited to 0.60% of Advanced credit RWAs, whereas the Standardized Approach includes ACL in Tier 2 capital up to 1.25% of Standardized credit RWAs. Under both approaches, any excess ACL is deducted from the respective total RWAs.

Table 43 provides the composition of our RWAs under the Standardized and Advanced Approaches.

Table 43: Risk-Weighted Assets

(in millions)	Standardized Approach		Advanced Approach (1)	
	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021
Risk-weighted assets (RWAs):				
Credit risk	\$ 1,218,006	1,186,810	757,436	747,714
Market risk	41,883	52,216	41,883	52,216
Operational risk	—	—	312,988	316,138
Total RWAs	\$ 1,259,889	1,239,026	1,112,307	1,116,068

- (1) RWAs calculated under the Advanced Approach utilize a risk-sensitive methodology, which relies upon the use of internal credit models based upon our experience with internal rating grades. Advanced Approach also includes an operational risk component, which reflects the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.

Table 44 provides an analysis of the changes in CET1.

Table 44: Analysis of Changes in Common Equity Tier 1

(in millions)	
Common Equity Tier 1 at December 31, 2021	\$ 140,643
Net income applicable to common stock	12,067
Common stock dividends	(4,184)
Common stock issued, repurchased, and stock compensation-related items	(3,930)
Changes in accumulated other comprehensive income	(11,677)
Goodwill	7
Certain identifiable intangible assets (other than MSRs)	73
Goodwill and other intangibles on investments in consolidated portfolio companies (included in other assets)	10
Applicable deferred taxes related to goodwill and other intangible assets (1)	125
CECL transition provision (2)	(61)
Other	454
Change in Common Equity Tier 1	(7,116)
Common Equity Tier 1 at December 31, 2022	\$ 133,527

- (1) Determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period-end.
- (2) In second quarter 2020, the Company elected to apply a modified transition provision issued by federal banking regulators related to the impact of CECL on regulatory capital. The rule permits certain banking organizations to exclude from regulatory capital the initial adoption impact of CECL, plus 25% of the cumulative changes in the allowance for credit losses (ACL) under CECL for each period until December 31, 2021, followed by a three-year phase-out period in which the benefit is reduced by 25% in year one, 50% in year two and 75% in year three.

Table 45 presents net changes in the components of RWAs under the Standardized and Advanced Approaches.

Table 45: Analysis of Changes in RWAs

(in millions)	Standardized Approach	Advanced Approach
Risk-weighted assets (RWAs) at December 31, 2021	\$ 1,239,026	1,116,068
Net change in credit risk RWAs	31,196	9,722
Net change in market risk RWAs	(10,333)	(10,333)
Net change in operational risk RWAs	—	(3,150)
Total change in RWAs	20,863	(3,761)
RWAs at December 31, 2022	\$ 1,259,889	1,112,307

Capital Management (continued)

TANGIBLE COMMON EQUITY We also evaluate our business based on certain ratios that utilize tangible common equity. Tangible common equity is a non-GAAP financial measure and represents total equity less preferred equity, noncontrolling interests, goodwill, certain identifiable intangible assets (other than MSRs) and goodwill and other intangibles on investments in consolidated portfolio companies, net of applicable deferred taxes. The ratios are (i) tangible book value per common share, which represents tangible common equity divided by common shares outstanding; and (ii) return on average tangible common

equity (ROTCE), which represents our annualized earnings as a percentage of tangible common equity. The methodology of determining tangible common equity may differ among companies. Management believes that tangible book value per common share and return on average tangible common equity, which utilize tangible common equity, are useful financial measures because they enable management, investors, and others to assess the Company's use of equity.

Table 46 provides a reconciliation of these non-GAAP financial measures to GAAP financial measures.

Table 46: Tangible Common Equity

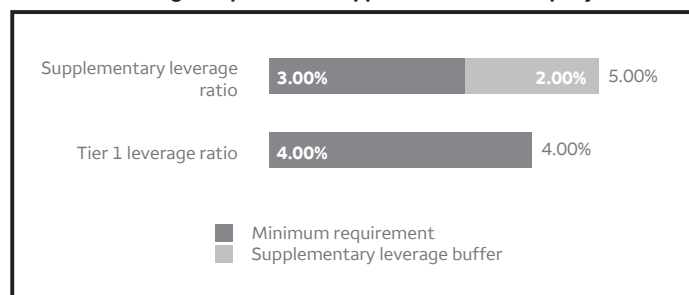
(in millions, except ratios)		Balance at period-end			Average balance		
		Quarter ended			Year ended		
		Dec 31, 2022	Dec 31, 2021	Dec 31, 2020	Dec 31, 2022	Dec 31, 2021	Dec 31, 2020
Total equity		\$ 181,875	190,110	185,712	183,224	191,219	184,689
Adjustments:							
Preferred stock (1)		(19,448)	(20,057)	(21,136)	(19,930)	(21,151)	(21,364)
Additional paid-in capital on preferred stock (1)		173	136	152	143	137	148
Unearned ESOP shares (1)		—	646	875	512	874	1,007
Noncontrolling interests		(1,986)	(2,504)	(1,033)	(2,323)	(1,601)	(769)
Total common stockholders' equity	(A)	160,614	168,331	164,570	161,626	169,478	163,711
Adjustments:							
Goodwill		(25,173)	(25,180)	(26,392)	(25,177)	(26,087)	(26,387)
Certain identifiable intangible assets (other than MSRs)		(152)	(225)	(342)	(190)	(294)	(389)
Goodwill and other intangibles on investments in consolidated portfolio companies (included in other assets)		(2,427)	(2,437)	(1,965)	(2,359)	(2,226)	(2,002)
Applicable deferred taxes related to goodwill and other intangible assets (2)		890	765	856	864	867	834
Tangible common equity	(B)	\$ 133,752	141,254	136,727	134,764	141,738	135,767
Common shares outstanding	(C)	3,833.8	3,885.8	4,144.0	N/A	N/A	N/A
Net income applicable to common stock	(D)	N/A	N/A	N/A	\$ 12,067	20,256	1,786
Book value per common share	(A)/(C)	\$ 41.89	43.32	39.71	N/A	N/A	N/A
Tangible book value per common share	(B)/(C)	34.89	36.35	32.99	N/A	N/A	N/A
Return on average common stockholders' equity (ROE)	(D)/(A)	N/A	N/A	N/A	7.47 %	11.95	1.09
Return on average tangible common equity (ROTCE)	(D)/(B)	N/A	N/A	N/A	8.95	14.29	1.32

(1) In fourth quarter 2022, we redeemed all outstanding shares of our ESOP Cumulative Convertible Preferred Stock in exchange for shares of the Company's common stock. For additional information, see Note 11 (Preferred Stock) to Financial Statements in this Report.

(2) Determined by applying the combined federal statutory rate and composite state income tax rates to the difference between book and tax basis of the respective goodwill and intangible assets at period-end.

LEVERAGE REQUIREMENTS As a BHC, we are required to maintain a supplementary leverage ratio (SLR) to avoid restrictions on capital distributions and discretionary bonus payments and maintain a minimum Tier 1 leverage ratio. Table 47 presents the leverage requirements applicable to the Company as of December 31, 2022.

Table 47: Leverage Requirements Applicable to the Company



In addition, our IDIs are required to maintain an SLR of at least 6.00% to be considered well capitalized under applicable regulatory capital adequacy rules and maintain a minimum Tier 1 leverage ratio of 4.00%.

The FRB and OCC have proposed amendments to the SLR rules (Proposed SLR rules) that would replace the 2.00% supplementary leverage buffer with a buffer equal to one-half of our G-SIB capital surcharge. The Proposed SLR rules would similarly tailor the current 6.00% SLR requirement for our IDIs.

At December 31, 2022, the Company's SLR was 6.86%, and each of our IDIs exceeded their applicable SLR requirements. Table 48 presents information regarding the calculation and components of the Company's SLR and Tier 1 leverage ratio.

Table 48: Leverage Ratios for the Company

(\$ in millions)		Quarter ended December 31, 2022
Tier 1 capital	(A)	\$ 152,567
Total average assets		1,875,396
Less: Goodwill and other permitted Tier 1 capital deductions (net of deferred tax liabilities)		28,442
Total adjusted average assets		1,846,954
Plus adjustments for off-balance sheet exposures:		
Derivatives (1)		63,277
Repo-style transactions (2)		3,250
Other (3)		311,308
Total off-balance sheet exposures		377,835
Total leverage exposure	(B)	\$ 2,224,789
Supplementary leverage ratio	(A)/(B)	6.86%
Tier 1 leverage ratio (4)		8.26%

- (1) Adjustment represents derivatives and collateral netting exposures as defined for supplementary leverage ratio determination purposes.
- (2) Adjustment represents counterparty credit risk for repo-style transactions where Wells Fargo & Company is the principal counterparty facing the client.
- (3) Adjustment represents credit equivalent amounts of other off-balance sheet exposures not already included as derivatives and repo-style transactions exposures.
- (4) The Tier 1 leverage ratio consists of Tier 1 capital divided by total average assets, excluding goodwill and certain other items as determined under the rule.

TOTAL LOSS ABSORBING CAPACITY As a G-SIB, we are required to have a minimum amount of equity and unsecured long-term debt for purposes of resolvability and resiliency, often referred to as Total Loss Absorbing Capacity (TLAC). U.S. G-SIBs are required to have a minimum amount of TLAC (consisting of CET1 capital and additional Tier 1 capital issued directly by the top-tier or covered BHC plus eligible external long-term debt) to avoid restrictions on capital distributions and discretionary bonus payments as well as a minimum amount of eligible unsecured long-term debt. The components used to calculate our minimum TLAC and eligible unsecured long-term debt requirements as of December 31, 2022, are presented in Table 49.

Table 49: Components Used to Calculate TLAC and Eligible Unsecured Long-Term Debt Requirements

TLAC requirement	
Greater of:	
18.00% of RWAs	7.50% of total leverage exposure (the denominator of the SLR calculation)
+	+
TLAC buffer (equal to 2.50% of RWAs + method one G-SIB capital surcharge + any countercyclical buffer)	External TLAC leverage buffer (equal to 2.00% of total leverage exposure)
Minimum amount of eligible unsecured long-term debt	
Greater of:	
6.00% of RWAs	4.50% of total leverage exposure
+	
Greater of method one and method two G-SIB capital surcharge	

Under the Proposed SLR rules, the 2.00% external TLAC leverage buffer would be replaced with a buffer equal to one-half of our applicable G-SIB capital surcharge, and the leverage

component for calculating the minimum amount of eligible unsecured long-term debt would be modified from 4.50% of total leverage exposure to 2.50% of total leverage exposure plus one-half of our applicable G-SIB capital surcharge.

Table 50 provides our TLAC and eligible unsecured long-term debt and related ratios.

Table 50: TLAC and Eligible Unsecured Long-Term Debt

(\$ in millions)	TLAC (1)	Regulatory Minimum (2)	Eligible Unsecured Long-term Debt	Regulatory Minimum
Total eligible amount	\$ 293,152		134,521	
Percentage of RWAs (3)	23.27 %	21.50	10.68	7.50
Percentage of total leverage exposure	13.18	9.50	6.05	4.50

- (1) TLAC ratios are calculated using the CECL transition provision issued by federal banking regulators.
- (2) Represents the minimum required to avoid restrictions on capital distributions and discretionary bonus payments.
- (3) Our minimum TLAC and eligible unsecured long-term debt requirements are calculated based on the greater of RWAs determined under the Standardized and Advanced Approaches.

OTHER REGULATORY CAPITAL AND LIQUIDITY MATTERS For information regarding the U.S. implementation of the Basel III LCR and NSFR, see the "Risk Management – Asset/ Liability Management – Liquidity Risk and Funding – Liquidity Standards" section in this Report.

Our principal U.S. broker-dealer subsidiaries, Wells Fargo Securities, LLC, and Wells Fargo Clearing Services, LLC, are subject to regulations to maintain minimum net capital requirements. As of December 31, 2022, these broker-dealer subsidiaries were in compliance with their respective regulatory minimum net capital requirements.

Capital Planning and Stress Testing

Our planned long-term capital structure is designed to meet regulatory and market expectations. We believe that our long-term targeted capital structure enables us to invest in and grow our business, satisfy our customers' financial needs in varying environments, access markets, and maintain flexibility to return capital to our shareholders. Our long-term targeted capital structure also considers capital levels sufficient to exceed capital requirements, including the G-SIB capital surcharge and the stress capital buffer, as well as potential changes to regulatory requirements for our capital ratios, planned capital actions, changes in our risk profile and other factors. Accordingly, our long-term target capital levels are set above their respective regulatory minimums plus buffers.

The FRB capital plan rule establishes capital planning and other requirements that govern capital distributions, including dividends and share repurchases, by certain BHCs, including Wells Fargo. The FRB assesses, among other things, the overall financial condition, risk profile, and capital adequacy of BHCs when evaluating their capital plans.

As part of the annual Comprehensive Capital Analysis and Review, the FRB generates a supervisory stress test. The FRB reviews the supervisory stress test results as required under the Dodd-Frank Act using a common set of capital actions for all large BHCs and also reviews the Company's proposed capital actions.

Federal banking regulators also require large BHCs and banks to conduct their own stress tests to evaluate whether the institution has sufficient capital to continue to operate during periods of adverse economic and financial conditions.

Capital Management (continued)

Securities Repurchases

From time to time the Board authorizes the Company to repurchase shares of our common stock. Although we announce when the Board authorizes share repurchases, we typically do not give any public notice before we repurchase our shares. Various factors determine the amount of our share repurchases, including our capital requirements, the number of shares we expect to issue for employee benefit plans and any acquisitions, market conditions (including the trading price of our stock), and regulatory and legal considerations, including under the FRB's capital plan rule. Due to the various factors that may impact the

amount of our share repurchases and the fact that we tend to be in the market regularly to satisfy repurchase considerations under our capital plan, our share repurchases occur at various price levels. We may suspend share repurchase activity at any time.

At December 31, 2022, we had remaining Board authority to repurchase approximately 250 million shares, subject to regulatory and legal conditions. For additional information about share repurchases during fourth quarter 2022, see Part II, Item 5 in our 2022 Form 10-K.

Regulatory Matters

The U.S. financial services industry is subject to significant regulation and regulatory oversight initiatives. This regulation and oversight may continue to impact how U.S. financial services companies conduct business and may continue to result in increased regulatory compliance costs. The following highlights the more significant regulations and regulatory oversight initiatives that have affected or may affect our business. For additional information about the regulatory matters discussed below and other regulations and regulatory oversight matters, see Part I, Item 1 "Regulation and Supervision" of our 2022 Form 10-K, and the "Overview," "Capital Management," "Forward-Looking Statements" and "Risk Factors" sections and Note 25 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report.

Dodd-Frank Act

The Dodd-Frank Act is the most significant financial reform legislation since the 1930s. The following provides additional information on the Dodd-Frank Act, including certain of its rulemaking initiatives.

- *Enhanced supervision and regulation of systemically important firms.* The Dodd-Frank Act grants broad authority to federal banking regulators to establish enhanced supervisory and regulatory requirements for systemically important firms. The FRB has finalized a number of regulations implementing enhanced prudential requirements for large bank holding companies (BHCs) like Wells Fargo regarding risk-based capital and leverage, risk and liquidity management, single counterparty credit limits, and imposing debt-to-equity limits on any BHC that regulators determine poses a grave threat to the financial stability of the United States. The FRB and OCC have also finalized rules implementing stress testing requirements for large BHCs and national banks. In addition, the FRB has proposed a rule to establish remediation requirements for large BHCs experiencing financial distress. Furthermore, to promote a BHC's safety and soundness and the financial and operational resilience of its operations, the FRB has finalized guidance regarding effective boards of directors of large BHCs and has proposed related guidance identifying core principles for effective senior management. The OCC, under separate authority, has finalized guidelines establishing heightened governance and risk management standards for large national banks such as Wells Fargo Bank, N.A. The OCC guidelines require covered banks to establish and adhere to a written risk governance framework to manage and control their risk-taking activities. The guidelines also formalize roles and responsibilities for risk management practices within covered banks and create certain risk oversight responsibilities for their boards of directors. In addition to

the authorization of enhanced supervisory and regulatory requirements for systemically important firms, the Dodd-Frank Act also established the Financial Stability Oversight Council and the Office of Financial Research, which may recommend new systemic risk management requirements and require new reporting of systemic risks.

- *Regulation of consumer financial products.* The Dodd-Frank Act established the Consumer Financial Protection Bureau (CFPB) to ensure that consumers receive clear and accurate disclosures regarding financial products and are protected from unfair, deceptive or abusive practices. The CFPB has issued a number of rules impacting consumer financial products, including rules regarding the origination, servicing, notification, disclosure and other requirements with respect to residential mortgage lending, as well as rules impacting prepaid cards, credit cards, and other financial products and banking-related activities. In addition to these rulemaking activities, the CFPB is continuing its ongoing supervisory examination activities of the financial services industry with respect to a number of consumer businesses and products, including mortgage lending and servicing, fair lending requirements, and auto finance.
- *Regulation of swaps and other derivatives activities.* The Dodd-Frank Act established a comprehensive framework for regulating over-the-counter derivatives, and, pursuant to authority granted by the Dodd-Frank Act, the Commodity Futures Trading Commission (CFTC) and the Securities and Exchange Commission (SEC) have adopted comprehensive sets of rules regulating swaps and security-based swaps, respectively, and the OCC and other federal regulatory agencies have adopted margin requirements for uncleared swaps and security-based swaps. As a provisionally-registered swap dealer and a conditionally-registered security-based swap dealer, Wells Fargo Bank, N.A., is subject to these rules. These rules, as well as others adopted or under consideration by regulators in the United States and other jurisdictions, may negatively impact customer demand for over-the-counter derivatives, impact our ability to offer customers new derivatives or amendments to existing derivatives, and may increase our costs for engaging in swaps, security-based swaps, and other derivatives activities.

Regulatory Capital, Leverage, and Liquidity Requirements

The Company and each of our IDIs are subject to various regulatory capital adequacy requirements administered by the FRB and the OCC. For example, the Company is subject to rules issued by federal banking regulators to implement Basel III risk-based capital requirements for U.S. banking organizations. The Company and its IDIs are also required to maintain specified

leverage and supplementary leverage ratios. In addition, the Company is required to have a minimum amount of total loss absorbing capacity for purposes of resolvability and resiliency. Federal banking regulators have also issued final rules requiring a liquidity coverage ratio and a net stable funding ratio. For additional information on the final risk-based capital, leverage and liquidity rules, and additional capital requirements applicable to us, see the “Capital Management” and “Risk Management – Asset/Liability Management – Liquidity Risk and Funding – Liquidity Standards” sections in this Report.

“Living Will” Requirements and Related Matters

Rules adopted by the FRB and the FDIC under the Dodd-Frank Act require large financial institutions, including Wells Fargo, to prepare and periodically submit resolution plans, also known as “living wills,” that would facilitate their rapid and orderly resolution in the event of material financial distress or failure. Under the rules, rapid and orderly resolution means a reorganization or liquidation of the covered company under the U.S. Bankruptcy Code that can be accomplished in a reasonable period of time and in a manner that substantially mitigates the risk that failure would have serious adverse effects on the financial stability of the United States. In addition to the Company’s resolution plan, our national bank subsidiary, Wells Fargo Bank, N.A. (the “Bank”), is also required to prepare and periodically submit a resolution plan. If the FRB and/or FDIC determine that our resolution plan has deficiencies, they may impose more stringent capital, leverage or liquidity requirements on us or restrict our growth, activities or operations until we adequately remedy the deficiencies. If the FRB and/or FDIC ultimately determine that we have been unable to remedy any deficiencies, they could require us to divest certain assets or operations. On November 23, 2022, the FRB and FDIC announced that the Company’s most recent resolution plan did not have any shortcomings or deficiencies.

If Wells Fargo were to fail, it may be resolved in a bankruptcy proceeding or, if certain conditions are met, under the resolution regime created by the Dodd-Frank Act known as the “orderly liquidation authority.” The orderly liquidation authority allows for the appointment of the FDIC as receiver for a systemically important financial institution that is in default or in danger of default if, among other things, the resolution of the institution under the U.S. Bankruptcy Code would have serious adverse effects on financial stability in the United States. If the FDIC is appointed as receiver for the Parent, then the orderly liquidation authority, rather than the U.S. Bankruptcy Code, would determine the powers of the receiver and the rights and obligations of our security holders. The FDIC’s orderly liquidation authority requires that security holders of a company in receivership bear all losses before U.S. taxpayers are exposed to any losses. There are substantial differences in the rights of creditors between the orderly liquidation authority and the U.S. Bankruptcy Code, including the right of the FDIC to disregard the strict priority of creditor claims under the U.S. Bankruptcy Code in certain circumstances and the use of an administrative claims procedure instead of a judicial procedure to determine creditors’ claims.

The strategy described in our most recent resolution plan is a single point of entry strategy, in which the Parent would be the only material legal entity to enter resolution proceedings. However, the strategy described in our resolution plan is not binding in the event of an actual resolution of Wells Fargo, whether conducted under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority. The FDIC has announced that a single point of entry strategy may be a

desirable strategy under its implementation of the orderly liquidation authority, but not all aspects of how the FDIC might exercise this authority are known and additional rulemaking is possible.

To facilitate the orderly resolution of systemically important financial institutions in case of material distress or failure, federal banking regulations require that institutions, such as Wells Fargo, maintain a minimum amount of equity and unsecured debt to absorb losses and recapitalize operating subsidiaries. Federal banking regulators have also required measures to facilitate the continued operation of operating subsidiaries notwithstanding the failure of their parent companies, such as limitations on parent guarantees, and have issued guidance encouraging institutions to take legally binding measures to provide capital and liquidity resources to certain subsidiaries to facilitate an orderly resolution. In response to the regulators’ guidance and to facilitate the orderly resolution of the Company, on June 28, 2017, the Parent entered into a support agreement, as amended and restated on June 26, 2019 (the “Support Agreement”), with WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the “IHC”), the Bank, Wells Fargo Securities, LLC (“WFS”), Wells Fargo Clearing Services, LLC (“WFCS”), and certain other subsidiaries of the Parent designated from time to time as material entities for resolution planning purposes (the “Covered Entities”) or identified from time to time as related support entities in our resolution plan (the “Related Support Entities”). Pursuant to the Support Agreement, the Parent transferred a significant amount of its assets, including the majority of its cash, deposits, liquid securities and intercompany loans (but excluding its equity interests in its subsidiaries and certain other assets), to the IHC and will continue to transfer those types of assets to the IHC from time to time. In the event of our material financial distress or failure, the IHC will be obligated to use the transferred assets to provide capital and/or liquidity to the Bank, WFS, WFCS, and the Covered Entities pursuant to the Support Agreement. Under the Support Agreement, the IHC will also provide funding and liquidity to the Parent through subordinated notes and a committed line of credit, which, together with the issuance of dividends, is expected to provide the Parent, during business as usual operating conditions, with the same access to cash necessary to service its debts, pay dividends, repurchase its shares, and perform its other obligations as it would have had if it had not entered into these arrangements and transferred any assets. If certain liquidity and/or capital metrics fall below defined triggers, or if the Parent’s board of directors authorizes it to file a case under the U.S. Bankruptcy Code, the subordinated notes would be forgiven, the committed line of credit would terminate, and the IHC’s ability to pay dividends to the Parent would be restricted, any of which could materially and adversely impact the Parent’s liquidity and its ability to satisfy its debts and other obligations, and could result in the commencement of bankruptcy proceedings by the Parent at an earlier time than might have otherwise occurred if the Support Agreement were not implemented. The respective obligations under the Support Agreement of the Parent, the IHC, the Bank, and the Related Support Entities are secured pursuant to a related security agreement.

In addition to our resolution plans, we must also prepare and periodically submit to the FRB a recovery plan that identifies a range of options that we may consider during times of idiosyncratic or systemic economic stress to remedy any financial weaknesses and restore market confidence without extraordinary government support. Recovery options include the possible sale, transfer or disposal of assets, securities, loan portfolios or businesses. The Bank must also prepare and

Regulatory Matters (continued)

periodically submit to the OCC a recovery plan that sets forth the Bank's plan to remain a going concern when the Bank is experiencing considerable financial or operational stress, but has not yet deteriorated to the point where liquidation or resolution is imminent. If either the FRB or the OCC determines that our recovery plan is deficient, they may impose fines, restrictions on our business or ultimately require us to divest assets.

Other Regulatory Related Matters

- *Regulatory actions.* The Company is subject to a number of consent orders and other regulatory actions, which may require the Company, among other things, to undertake certain changes to its business, operations, products and services, and risk management practices, and include the following:
 - *Consent Orders Discussed in the "Overview" Section in this Report.* For a discussion of certain consent orders applicable to the Company, see the "Overview" section in this Report.
 - *OCC approval of director and senior executive officer appointments and certain post-termination payments.* Under the April 2018 consent order with the OCC, Wells Fargo Bank, N.A., remains subject to requirements that were originally imposed in November 2016 to provide prior written notice to, and obtain non-objection from, the OCC with respect to changes in directors and senior executive officers, and remains subject to certain regulatory limitations on post-termination payments to certain individuals and employees.
- *Regulatory Developments Related to COVID-19.* In response to the COVID-19 pandemic and related events, federal banking regulators undertook a number of measures to help stabilize the banking sector, support the broader economy, and facilitate the ability of banking organizations like Wells Fargo to continue lending to consumers and businesses. In addition, the OCC and the FRB issued guidelines for banks and BHCs related to working with customers affected by the COVID-19 pandemic, including guidance with respect to waiving fees, offering repayment accommodations, and providing payment deferrals. Any current or future rules, regulations, and guidance related to the COVID-19 pandemic and its impacts could require us to change certain of our business practices, reduce our revenue and earnings, impose additional costs on us, or otherwise adversely affect our business operations and/or competitive position.
- *Regulatory Developments in Response to Climate Change.* Federal and state governments and government agencies have demonstrated increased attention to the impacts and potential risks associated with climate change. For example, federal banking regulators are reviewing the implications of climate change on the financial stability of the United States and the identification and management by large banks of climate-related financial risks. In addition, the SEC has proposed rules that would require public companies to disclose certain climate-related information, including greenhouse gas emissions, climate-related targets and goals, and governance of climate-related risks and relevant risk management processes. The approaches taken by various governments and government agencies can vary significantly, evolve over time, and sometimes conflict. Any current or future rules, regulations, and guidance related to climate change and its impacts could require us to change certain of our business practices, reduce our revenue and earnings, impose additional costs on us, or otherwise adversely affect our business operations and/or competitive position.

Critical Accounting Policies

Our significant accounting policies (see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report) are fundamental to understanding our results of operations and financial condition because they require that we use estimates and assumptions that may affect the value of our assets or liabilities and financial results. Six of these policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. These policies govern:

- the allowance for credit losses;
- the valuation of residential MSRs;
- the fair value of financial instruments;
- income taxes;
- liability for contingent litigation losses; and
- goodwill impairment.

Management has discussed these critical accounting policies and the related estimates and judgments with the Board's Audit Committee.

Allowance for Credit Losses

We maintain an allowance for credit losses (ACL) for loans, which is management's estimate of the expected credit losses in the loan portfolio and unfunded credit commitments, at the balance sheet date, excluding loans and unfunded credit commitments carried at fair value or held for sale. Additionally, we maintain an ACL for debt securities classified as either HTM or AFS, other financial assets measured at amortized cost, net investments in leases, and other off-balance sheet credit exposures. For additional information, see Note 1 (Summary of Significant Accounting Policies) and Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

For loans and HTM debt securities, the ACL is measured based on the remaining contractual term of the financial asset (including off-balance sheet credit exposures) adjusted, as appropriate, for prepayments and permitted extension options using historical experience, current conditions, and forecasted information. For AFS debt securities, the ACL is measured using a discounted cash flow approach and is limited to the difference between the fair value of the security and its amortized cost.

Changes in the ACL and, therefore, in the related provision for credit losses can materially affect net income. In applying the judgment and review required to determine the ACL, management considerations include the evaluation of past events, historical experience, changes in economic forecasts and conditions, customer behavior, collateral values, the length of the initial loss forecast period, and other influences. From time to time, changes in economic factors or assumptions, business strategy, products or product mix, or debt security investment strategy, may result in a corresponding increase or decrease in our ACL. While our methodology attributes portions of the ACL to specific financial asset classes (loan and debt security portfolios) or loan portfolio segments (commercial and consumer), the entire ACL is available to absorb credit losses of the Company.

Judgment is specifically applied in:

- *Economic assumptions and the length of the initial loss forecast period.* We forecast a wide range of economic variables to estimate expected credit losses. Our key economic variables include gross domestic product (GDP), unemployment rate,

and collateral asset prices. While many of these economic variables are evaluated at the macro-economy level, some economic variables are forecasted at more granular levels, for example, using the metro statistical area (MSA) level for unemployment rates, home prices and commercial real estate prices. At least annually, we assess the length of the initial loss forecast period and have currently set the period to two years. For the initial loss forecast period, we forecast multiple economic scenarios that generally include a base scenario with an optimistic (upside) and one or more pessimistic (downside) scenarios. Management exercises judgment when assigning weight to the economic scenarios that are used to estimate future credit losses.

- *Reversion to historical loss expectations.* Our long-term average loss expectations are estimated by reverting to the long-term average, on a linear basis, for each of the forecasted economic variables. These long-term averages are based on observations over multiple economic cycles. The reversion period, which may be up to two years, is assessed on a quarterly basis.
- *Credit risk ratings applied to individual commercial loans, unfunded credit commitments, and debt securities.* Individually assessed credit risk ratings are considered key credit variables in our modeled approaches to help assess probability of default and loss given default. Borrower quality ratings are aligned to the borrower's financial strength and contribute to forecasted probability of default curves. Collateral quality ratings combined with forecasted collateral prices (as applicable) contribute to the forecasted severity of loss in the event of default. These credit risk ratings are reviewed by experienced senior credit officers and subjected to reviews by an internal team of credit risk specialists.
- *Usage of credit loss estimation models.* We use internally developed models that incorporate credit attributes and economic variables to generate credit loss estimates. Management uses judgment and quantitative analytics in the determination of segmentation, modeling approach, and variables that are leveraged in the models. These models are independently validated in accordance with the Company's policies. We routinely assess our model performance and apply adjustments when necessary to improve the accuracy of loss estimation. We also assess our models for limitations against the company-wide risk inventory to help appropriately capture known and emerging risks in our estimate of expected credit losses and apply overlays as needed.
- *Valuation of collateral.* The current fair value of collateral is utilized to assess the expected credit losses when a financial asset is considered to be collateral dependent. We apply judgment when valuing the collateral either through appraisals, evaluation of the cash flows of the property, or other quantitative techniques. Decreases in collateral valuations support incremental charge-downs and increases in collateral valuation are included in the ACL as a negative allowance when the financial asset has been previously written-down below current recovery value.
- *Contractual term considerations.* The remaining contractual term of a loan is adjusted for expected prepayments and certain expected extensions, renewals, or modifications. We extend the contractual term when we are not able to unconditionally cancel contractual renewals or extension

Critical Accounting Policies (continued)

options. We also incorporate any scenarios where we reasonably expect to provide an extension through a troubled debt restructuring (TDR). Credit card loans have indeterminate maturities, which requires that we determine a contractual life by estimating the application of future payments to the outstanding loan amount.

- *Qualitative factors which may not be adequately captured in the loss models.* These amounts represent management's judgment of risks inherent in the processes and assumptions used in establishing the ACL. We also consider economic environmental factors, modeling assumptions and performance, process risk, and other subjective factors, including industry trends and emerging risk assessments.

Sensitivity The ACL for loans is sensitive to changes in key assumptions which requires significant management judgment. Future amounts of the ACL for loans will be based on a variety of factors, including loan balance changes, portfolio credit quality, and general forecasted economic conditions. The forecasted economic variables used could have varying impacts on different financial assets or portfolios. Additionally, throughout numerous credit cycles, there are observed changes in economic variables such as the unemployment rate, GDP and real estate prices which may not move in a correlated manner as variables may move in opposite directions or differ across portfolios or geography.

Our sensitivity analysis does not represent management's view of expected credit losses at the balance sheet date. We applied a 100% weight to a more severe downside scenario in our sensitivity analysis to reflect the potential for further economic deterioration. The outcome of the scenario was influenced by the duration, severity, and timing of changes in economic variables within the scenario. The sensitivity analysis resulted in a hypothetical increase in the ACL for loans of approximately \$7.0 billion at December 31, 2022. The hypothetical increase in our ACL for loans does not incorporate the impact of management judgment for qualitative factors applied in the current ACL for loans, which may have a positive or negative effect on the results. It is possible that others performing similar sensitivity analyses could reach different conclusions or results.

The sensitivity analysis excludes the ACL for debt securities and other financial assets given its size relative to the overall ACL. Management believes that the estimate for the ACL for loans was appropriate at the balance sheet date.

Valuation of Residential Mortgage Servicing Rights (MSRs)

MSRs are assets that represent the rights to service mortgage loans for others. We recognize MSRs when we retain servicing rights in connection with the sale or securitization of loans we originate (asset transfers), or purchase servicing rights from third parties. We also have acquired MSRs in the past under co-issuer agreements that provide for us to service loans that were originated and securitized by third-party correspondents.

We carry our MSRs related to residential mortgage loans at fair value. Periodic changes in our residential MSRs and the economic hedges used to hedge our residential MSRs are reflected in earnings.

We use a model to estimate the fair value of our residential MSRs. The model is validated in accordance with Company policies by an internal model validation group. The model calculates the present value of estimated future net servicing income and incorporates inputs and assumptions that market participants use in estimating fair value. Certain significant inputs and assumptions generally are not observable in the market and require judgment to determine.

If observable market indications do become available, these are factored into the estimates as appropriate:

- *The mortgage loan prepayment rate used to estimate future net servicing income.* The prepayment rate is the annual rate at which borrowers are forecasted to repay their mortgage loan principal; this rate also includes estimated borrower defaults. We use models to estimate prepayment rate and borrower defaults which are influenced by changes in mortgage interest rates and borrower behavior.
- *The discount rate used to present value estimated future net servicing income.* The discount rate is the required rate of return investors in the market would expect for an asset with similar risk. To determine the discount rate, we consider the risk premium for uncertainties in the cash flow estimates such as from servicing operations (e.g., possible changes in future servicing costs, ancillary income and earnings on escrow accounts). In 2022, we enhanced our approach for estimating the discount rate to a more dynamic methodology for market curves and volatility.
- *The expected cost to service loans used to estimate future net servicing income.* The cost to service loans includes estimates for unreimbursed expenses, such as delinquency and foreclosure costs, which considers the number of defaulted loans as well as the incremental cost to service loans in default and foreclosure. We use a market participant's view for our estimated cost to service and our actual costs may vary from that estimate.

Both prepayment rate and discount rate assumptions can, and generally will, change quarterly as market conditions and mortgage interest rates change. For example, an increase in either the prepayment rate or discount rate assumption results in a decrease in the fair value of the MSRs, while a decrease in either assumption would result in an increase in the fair value of the MSRs. In recent years, there have been significant market-driven fluctuations in loan prepayment rate and the discount rate. These fluctuations can be rapid and may be significant in the future. Additionally, future regulatory or investor changes in servicing standards as well as changes in individual state foreclosure legislation or changes in market participant information regarding servicing cost assumptions, may have an impact on our servicing cost assumption and our MSR valuation in future periods. We periodically benchmark our MSR fair value estimate to independent appraisals.

For a description of our valuation and sensitivity of MSRs, see Note 1 (Summary of Significant Accounting Policies), Note 6 (Mortgage Banking Activities), Note 15 (Fair Values of Assets and Liabilities) and Note 16 (Securitizations and Variable Interest Entities) to Financial Statements in this Report.

Fair Value of Financial Instruments

Fair value represents the price that would be received to sell a financial asset or paid to transfer a financial liability in an orderly transaction between market participants at the measurement date.

We use fair value measurements to record fair value adjustments to certain financial instruments and to fulfill fair value disclosure requirements. For example, assets and liabilities held for trading purposes, marketable equity securities, AFS debt securities, derivatives and a majority of our LHFS are carried at fair value each period. Other financial instruments, such as certain LHFS, substantially all nonmarketable equity securities, and loans held for investment, are not carried at fair value each period but may require nonrecurring fair value adjustments through the application of an accounting method

such as lower-of-cost-or-fair value (LOCOM), write-downs of individual assets, or application of the measurement alternative for certain nonmarketable equity securities. We also disclose our estimate of fair value for financial instruments not carried at fair value, such as HTM debt securities, loans held for investment, and long-term debt.

The accounting requirements for fair value measurements include a three-level hierarchy for disclosure of assets and liabilities recorded at fair value. The classification of assets and liabilities within the hierarchy is based on whether the inputs to the valuation methodology used for measurement are observable or unobservable. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs reflect our estimates about market data.

When developing fair value measurements, we maximize the use of observable inputs and minimize the use of unobservable inputs. When available, we use quoted prices in active markets to measure fair value. If quoted prices in active markets are not available, fair value measurement is based upon models that generally use market-based or independently sourced market parameters, including interest rate yield curves, prepayment rates, option volatilities and currency rates. However, when observable market data is limited or not available, fair value estimates are typically determined using internal models based on unobservable inputs. Internal models used to determine fair value are validated in accordance with Company policies by an internal model validation group. Additionally, we use third-party pricing services to obtain fair values, which are used to either record the price of an instrument or to corroborate internal prices. Third-party price validation procedures are performed over the reasonableness of the fair value measurements.

When using internal models based on unobservable inputs, management judgment is necessary as we make judgments about significant assumptions that market participants would use to estimate fair value. Determination of these assumptions includes consideration of many factors, including market conditions and liquidity levels. Changes in the market conditions, such as reduced liquidity in the capital markets or changes in secondary market activities, may reduce the availability and reliability of quoted prices or observable data used to determine fair value. In such cases, it may be appropriate to adjust available quoted prices or observable market data. For example, we may adjust a price received from a third-party pricing service using internal models based on discounted cash flows when the impact of illiquid markets has not already been incorporated in the fair value measurement. Additionally, for certain residential LHFS and certain debt and equity securities where the significant inputs have become unobservable due to illiquid markets and a third-party pricing service is not used, our discounted cash flow model uses a discount rate that reflects what we believe a market participant would require in light of the illiquid market.

We continually assess the level and volume of market activity in our debt and equity security classes in determining adjustments, if any, to quoted prices. Given market conditions can change over time, our determination of which securities markets are considered active or inactive can change. If we determine a market to be inactive, the degree to which quoted prices require adjustment, can also change.

Significant judgment is also applied in the determination of whether certain assets measured at fair value are classified as Level 2 or Level 3 of the fair value hierarchy. When making this judgment, we consider available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques

and significant inputs used to estimate fair value. The classification as Level 2 or Level 3 is based upon the specific facts and circumstances of each instrument or instrument category and judgments are made regarding the significance of unobservable inputs to each instrument's fair value measurement in its entirety. If unobservable inputs are considered significant to the fair value measurement, the instrument is classified as Level 3.

Table 51 presents our (1) assets and liabilities recorded at fair value on a recurring basis and (2) Level 3 assets and liabilities recorded at fair value on a recurring basis, both presented as a percentage of our total assets and total liabilities.

Table 51: Fair Value Level 3 Summary

(\$ in billions)	December 31, 2022		December 31, 2021	
	Total balance	Level 3 (1)	Total balance	Level 3 (1)
Assets recorded at fair value on a recurring basis	\$ 264.4	11.5	348.9	19.6
As a percentage of total assets	14 %	*	18	1
Liabilities recorded at fair value on a recurring basis	\$ 41.7	4.7	30.1	2.6
As a percentage of total liabilities	2 %	*	2	*

* Less than 1%.

(1) Before derivative netting adjustments.

See Note 15 (Fair Values of Assets and Liabilities) to Financial Statements in this Report for a complete discussion on our fair value of financial instruments, our related measurement techniques and the impact to our financial statements.

Income Taxes

We file income tax returns in the jurisdictions in which we operate and evaluate income tax expense in two components: current and deferred income tax expense. Current income tax expense represents our estimated taxes to be paid or refunded for the current period and includes income tax expense related to uncertain tax positions. Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement. Tax benefits not meeting our realization criteria represent unrecognized tax benefits.

Deferred income taxes are based on the balance sheet method and deferred income tax expense results from changes in deferred tax assets and liabilities between periods. Under the balance sheet method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax basis of assets and liabilities, and recognizes enacted changes in tax rates and laws in the period in which they occur. Deferred tax assets are recognized subject to management's judgment that realization is more likely than not. A valuation allowance reduces deferred tax assets to the realizable amount.

The income tax laws of the jurisdictions in which we operate are complex and subject to different interpretations by management and the relevant government taxing authorities. In establishing a provision for income tax expense, we must make judgments about the application of these inherently complex tax laws. We must also make estimates about when in the future certain items will affect taxable income in the various tax jurisdictions. Our interpretations may be subjected to review during examination by taxing authorities and disputes may arise

Critical Accounting Policies (continued)

over the respective tax positions. We attempt to resolve these disputes during the tax examination and audit process and ultimately through the court systems when applicable.

We monitor relevant tax authorities and revise our estimate of accrued income taxes due to changes in income tax laws and their interpretation by the courts and regulatory authorities on a quarterly basis. Revisions of our estimate of accrued income taxes also may result from our own income tax planning and from the resolution of income tax controversies. Such revisions in our estimates may be material to our operating results for any given quarter.

See Note 22 (Income Taxes) to Financial Statements in this Report for a further description of our provision for income taxes and related income tax assets and liabilities.

Liability for Contingent Litigation Losses

The Company is involved in a number of judicial, regulatory, governmental, arbitration and other proceedings or investigations concerning matters arising from the conduct of its business activities, and many of those proceedings and investigations expose the Company to potential financial loss or other adverse consequences. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. The actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

We apply judgment when establishing an accrual for potential losses associated with legal actions and in establishing the range of reasonably possible losses in excess of the accrual. Our judgment in establishing accruals and the range of reasonably possible losses in excess of the Company's accrual for probable and estimable losses is influenced by our understanding of information currently available related to the legal evaluation and potential outcome of actions, including input and advice on these matters from our internal counsel, external counsel and senior management. These matters may be in various stages of investigation, discovery or proceedings. They may also involve a wide variety of claims across our businesses, legal entities and jurisdictions. The eventual outcome may be a scenario that was not considered or was considered remote in anticipated occurrence. Accordingly, our estimate of potential losses will change over time and the actual losses may vary significantly.

The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss.

See Note 13 (Legal Actions) to Financial Statements in this Report for additional information.

Goodwill Impairment

We test goodwill for impairment annually in the fourth quarter or more frequently as macroeconomic and other business factors warrant. These factors may include trends in short-term or long-term interest rates, negative trends from reduced revenue generating activities or increased costs, adverse actions by

regulators, or company specific factors such as a decline in market capitalization.

We identify reporting units to be assessed for goodwill impairment at the reportable operating segment level or one level below. We calculate reporting unit carrying amounts as allocated capital plus assigned goodwill and other intangible assets. We allocate capital to the reporting units under a risk-sensitive framework driven by our regulatory capital requirements. We estimate fair value of the reporting units based on a balanced weighting of fair values estimated using both an income approach and a market approach which are intended to reflect Company performance and expectations as well as external market conditions. The methodologies for calculating carrying amounts and estimating fair values are periodically assessed by senior management and revised as necessary.

The income approach is a discounted cash flow (DCF) analysis, which estimates the present value of future cash flows associated with each reporting unit. A DCF analysis requires significant judgment to model financial forecasts for our reporting units, which includes future expectations of economic conditions and balance sheet changes, as well as considerations related to future business activities. The forecasts are reviewed by senior management. For periods after our financial forecasts, we incorporate a terminal value estimate based on an assumed long-term growth rate. We discount these forecasted cash flows using a consistent rate derived from the capital asset pricing model which produces an estimated cost of equity for our reporting units, which reflects risks and uncertainties in the financial markets and in our internally generated business projections.

The market approach utilizes observable market data from comparable publicly traded companies, such as price-to-earnings or price-to-tangible book value ratios, to estimate a reporting unit's fair value. The results of the market approach include a control premium to represent our expectation of a hypothetical acquisition of the reporting unit. Management uses judgment in the selection of comparable companies and includes those with the most similar business activities.

The aggregate fair value of our reporting units exceeded our market capitalization for our fourth quarter 2022 assessment. Factors that we considered in our assessment and contributed to this difference included: (i) an overall premium that would be paid to gain control of the operating and financial decisions of the Company, (ii) synergies that we believe may not be reflected in the price of the Company's common stock, and (iii) risks or benefits at the Company level that may not be reflected in the aggregated fair value of the individual reporting units, such as the impacts of a variety of historical matters, including litigation, regulatory, and customer remediation matters.

Based on our fourth quarter 2022 assessment, there was no impairment of goodwill at December 31, 2022. The fair values of each reporting unit exceeded their carrying amounts by substantial amounts, with the exception of our Consumer Lending reporting unit. Although the fair value of our Consumer Lending reporting unit exceeded its carrying amount by more than 10%, it was the most sensitive to changes in valuation assumptions, particularly related to the financial forecasts of the supporting businesses. The home lending business may experience uncertainty related to the current mortgage origination market and the outcome of planned changes to the business model. The credit card business has forecasted higher loan balances driven by growth from new products. Adverse changes to these forecasts may result in an impairment. Using our fourth quarter 2022 assessment, we would need to

experience a substantial decrease in forecasted earnings of the Consumer Lending reporting unit or have a significant increase in the discount rate used for the DCF analysis to result in an impairment. The amount of goodwill assigned to the Consumer Lending reporting unit was \$7.1 billion at December 31, 2022.

Declines in our ability to generate revenue, significant increases in credit losses or other expenses, or adverse actions

from regulators are factors that could result in material goodwill impairment of any reporting unit in a future period.

For additional information on goodwill and our reportable operating segments, see Note 1 (Summary of Significant Accounting Policies), Note 7 (Intangible Assets and Other Assets), and Note 19 (Operating Segments) to Financial Statements in this Report.

Current Accounting Developments

Table 52 provides the significant accounting updates applicable to us that have been issued by the Financial Accounting Standards Board (FASB) but are not yet effective.

Table 52: Current Accounting Developments – Issued Standards

Description and Effective Date	Financial statement impact
Accounting Standards Update (ASU) 2018-12 – Financial Services – Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts and subsequent related updates	
The Update, effective January 1, 2023, requires market risk benefits (features of insurance contracts that protect the policyholder from other-than-nominal capital market risk and expose the insurer to that risk) to be measured at fair value through earnings with changes in fair value attributable to our own credit risk recognized in other comprehensive income. The Update also requires more frequent updates for insurance assumptions, mandates the use of a standardized discount rate for traditional long-duration contracts, and simplifies the amortization of deferred acquisition costs.	<p>We adopted the Update on January 1, 2023, with retroactive application to prior periods. The most significant impact of adoption relates to reinsurance of variable annuity products for a limited number of our insurance clients. Our reinsurance business is no longer entering into new contracts. These variable annuity products contain guaranteed minimum benefits that require us to make benefit payments for the remainder of the policyholder's life once the account values are exhausted. These guaranteed minimum benefits meet the definition of market risk benefits and are measured at fair value.</p> <p>At adoption, the effect of the difference between fair value and the carrying value of our market risk benefits, net of income tax adjustments and excluding the impact of our own credit risk, was approximately \$325 million as of January 1, 2023. The adjustment increased our retained earnings and regulatory capital amounts and ratios. The adjustment for the impact of our own credit risk recorded as an increase to other comprehensive income was approximately \$15 million, net of tax, as of January 1, 2023. We expect future earnings volatility from changes in the fair value of market risk benefits, which are sensitive to changes in equity and fixed income markets, as well as policyholder behavior and changes in mortality assumptions. We economically hedge the market volatility, where feasible.</p> <p>Changes in the accounting for the liability of future policy benefits for traditional long-duration contracts and deferred acquisition costs did not have a material impact upon adoption.</p>
ASU 2022-01, Derivatives and Hedging (Topic 815): Fair Value Hedging – Portfolio Layer Method	
The Update, effective January 1, 2023 (with early adoption permitted), establishes the portfolio layer method, which expands an entity's ability to achieve fair value hedge accounting for interest rate risk hedges of closed portfolios of financial assets. The Update also provides guidance on the accounting for hedged item basis adjustments under the portfolio layer method.	<p>We adopted the Update on January 1, 2023 on a prospective basis. No cumulative effect adjustment to the opening balance of stockholders' equity was required upon adoption, as impacts to us were reflected prospectively. The Update improves our ability to use derivatives to hedge interest rate risk exposures associated with portfolios of financial assets, such as fixed-rate available-for-sale debt securities and loans. The Update allows us to hedge a larger proportion of these portfolios by expanding the number and type of derivatives permitted as eligible hedges, as well as by increasing the scope of eligible hedged items to include both prepayable and nonprepayable assets.</p> <p>Upon adoption, any election to designate portfolio layer method hedges is applied prospectively. Additionally, the Update permits a one-time reclassification of debt securities from held-to-maturity to available-for-sale classification as long as the securities are designated in a portfolio layer method hedge no later than 30 days after the adoption date.</p> <p>In January 2023, we reclassified fixed-rate debt securities with an aggregate fair value of \$23.2 billion and amortized cost of \$23.9 billion from held-to-maturity to available-for-sale and designated interest rate swaps with notional amounts of \$20.1 billion as fair value hedges using the portfolio layer method. The transfer of debt securities was recorded at fair value and resulted in approximately \$566 million of unrealized losses associated with available-for-sale debt securities being recorded to other comprehensive income, net of deferred taxes.</p>

(continued on following page)

Current Accounting Developments (continued)

(continued from previous page)

Description and Effective Date	Financial statement impact
ASU 2022-02, Financial Instruments-Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures	
The Update, effective January 1, 2023 (with early adoption permitted), eliminates the accounting and reporting for TDRs by creditors and introduces new required disclosures for loan modifications made to borrowers experiencing financial difficulty. The Update also amends the guidance for vintage disclosures to require disclosure of current period gross charge-offs by year of origination.	<p>We adopted the Update on January 1, 2023. The Update will impact the measurement of the ACL for loans and require new enhanced disclosures related to loan modifications and credit quality, specifically the Update:</p> <ul style="list-style-type: none">Eliminates the requirement to use a discounted cash flow (DCF) approach to measure the ACL for TDRs and instead allows for the use of an expected loss approach for all loans. On January 1, 2023, we removed the interest concession component recognized in the ACL for TDRs using a DCF approach. The cumulative effect adjustment reflected the difference between the pre-modification and post-modification effective interest rates, which would have been recognized over the remaining life of the loans as interest income. The adjustment was a reduction to the ACL for loans of approximately \$430 million, and an increase to retained earnings of approximately \$320 million, after-tax. This adjustment to retained earnings impacts regulatory capital amounts and ratios.Eliminates TDR disclosures and requires new disclosures for modifications made to borrowers experiencing financial difficulty in the form of principal forgiveness, interest rate reduction, other than insignificant payment delay, term extension, or a combination of these modifications.Requires us to provide current period gross charge-offs by origination date (vintage) in our credit quality disclosures on a prospective basis beginning as of the adoption date.

Other Accounting Developments

The following Updates are applicable to us but are not expected to have a material impact on our consolidated financial statements:

- ASU 2021-08 – Business Combinations (Topic 805): *Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*
- ASU 2022-03 – Fair Value Measurement (Topic 820): *Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions*

Forward-Looking Statements

This document contains forward-looking statements. In addition, we may make forward-looking statements in our other documents filed or furnished with the Securities and Exchange Commission, and our management may make forward-looking statements orally to analysts, investors, representatives of the media and others. Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “target,” “projects,” “outlook,” “forecast,” “will,” “may,” “could,” “should,” “can” and similar references to future periods. In particular, forward-looking statements include, but are not limited to, statements we make about: (i) the future operating or financial performance of the Company, including our outlook for future growth; (ii) our noninterest expense and efficiency ratio; (iii) future credit quality and performance, including our expectations regarding future loan losses, our allowance for credit losses, and the economic scenarios considered to develop the allowance; (iv) our expectations regarding net interest income and net interest margin; (v) loan growth or the reduction or mitigation of risk in our loan portfolios; (vi) future capital or liquidity levels, ratios or targets; (vii) the performance of our mortgage business and any related exposures; (viii) the expected outcome and impact of legal, regulatory and legislative developments, as well as our expectations regarding compliance therewith; (ix) future common stock dividends, common share repurchases and other uses of capital; (x) our targeted range for return on assets, return on equity, and return on tangible common equity; (xi) expectations regarding our effective income tax rate; (xii) the outcome of contingencies, such as legal proceedings; (xiii) environmental, social and governance related goals or commitments; and (xiv) the Company’s plans, objectives and strategies.

Forward-looking statements are not based on historical facts but instead represent our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you, therefore, against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. While there is no assurance that any list of risks and uncertainties or risk factors is complete, important factors that could cause actual results to differ materially from those in the forward-looking statements include the following, without limitation:

- current and future economic and market conditions, including the effects of declines in housing prices, high unemployment rates, U.S. fiscal debt, budget and tax matters, geopolitical matters (including the conflict in Ukraine), and any slowdown in global economic growth;
- the effect of the COVID-19 pandemic, including on our credit quality and business operations, as well as its impact on general economic and financial market conditions;
- our capital and liquidity requirements (including under regulatory capital standards, such as the Basel III capital standards) and our ability to generate capital internally or raise capital on favorable terms;
- current, pending or future legislation or regulation that could have a negative effect on our revenue and businesses,

including rules and regulations relating to bank products and financial services;

- developments in our mortgage banking business, including the extent of the success of our mortgage loan modification efforts, the amount of mortgage loan repurchase demands that we receive, any negative effects relating to our mortgage servicing, loan modification or foreclosure practices, and the effects of regulatory or judicial requirements or guidance impacting our mortgage banking business and any changes in industry standards or our strategic plans for the business;
- our ability to realize any efficiency ratio or expense target as part of our expense management initiatives, including as a result of business and economic cyclicalities, seasonality, changes in our business composition and operating environment, growth in our businesses and/or acquisitions, and unexpected expenses relating to, among other things, litigation and regulatory matters;
- the effect of the current interest rate environment or changes in interest rates or in the level or composition of our assets or liabilities on our net interest income, net interest margin and our mortgage originations, mortgage servicing rights and mortgage loans held for sale;
- significant turbulence or a disruption in the capital or financial markets, which could result in, among other things, reduced investor demand for mortgage loans, a reduction in the availability of funding or increased funding costs, and declines in asset values and/or recognition of impairments of securities held in our debt securities and equity securities portfolios;
- the effect of a fall in stock market prices on our investment banking business and our fee income from our brokerage and wealth management businesses;
- negative effects from the retail banking sales practices matter and from instances where customers may have experienced financial harm, including on our legal, operational and compliance costs, our ability to engage in certain business activities or offer certain products or services, our ability to keep and attract customers, our ability to attract and retain qualified employees, and our reputation;
- resolution of regulatory matters, litigation, or other legal actions, which may result in, among other things, additional costs, fines, penalties, restrictions on our business activities, reputational harm, or other adverse consequences;
- a failure in or breach of our operational or security systems or infrastructure, or those of our third-party vendors or other service providers, including as a result of cyber attacks;
- the effect of changes in the level of checking or savings account deposits on our funding costs and net interest margin;
- fiscal and monetary policies of the Federal Reserve Board;
- changes to U.S. tax guidance and regulations as well as the effect of discrete items on our effective income tax rate;
- our ability to develop and execute effective business plans and strategies; and
- the other risk factors and uncertainties described under “Risk Factors” in this Report.

Forward-Looking Statements (continued)

In addition to the above factors, we also caution that the amount and timing of any future common stock dividends or repurchases will depend on the earnings, cash requirements and financial condition of the Company, market conditions, capital requirements (including under Basel capital standards), common stock issuance requirements, applicable law and regulations (including federal securities laws and federal banking regulations), and other factors deemed relevant by the Company, and may be subject to regulatory approval or conditions.

For additional information about factors that could cause actual results to differ materially from our expectations, refer to our reports filed with the Securities and Exchange Commission, including the discussion under “Risk Factors” in this Report, as filed with the Securities and Exchange Commission and available on its website at www.sec.gov.¹

Any forward-looking statement made by us speaks only as of the date on which it is made. Factors or events that could cause our actual results to differ may emerge from time to time, and it is not possible for us to predict all of them. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Forward-looking Non-GAAP Financial Measures. From time to time management may discuss forward-looking non-GAAP financial measures, such as forward-looking estimates or targets for return on average tangible common equity. We are unable to provide a reconciliation of forward-looking non-GAAP financial measures to their most directly comparable GAAP financial measures because we are unable to provide, without unreasonable effort, a meaningful or accurate calculation or estimation of amounts that would be necessary for the reconciliation due to the complexity and inherent difficulty in forecasting and quantifying future amounts or when they may occur. Such unavailable information could be significant to future results.

¹ We do not control this website. Wells Fargo has provided this link for your convenience, but does not endorse and is not responsible for the content, links, privacy policy, or security policy of this website.

Risk Factors

An investment in the Company involves risk, including the possibility that the value of the investment could fall substantially and that dividends or other distributions on the investment could be reduced or eliminated. We discuss below risk factors that could adversely affect our financial results and condition, and the value of, and return on, an investment in the Company.

ECONOMIC, FINANCIAL MARKETS, INTEREST RATES, AND LIQUIDITY RISKS

Our financial results have been, and will continue to be, materially affected by general economic conditions, and a deterioration in economic conditions or in the financial markets may materially adversely affect our lending and other businesses and our financial results and condition. We generate revenue from the interest and fees we charge on the loans and other products and services we sell, and a substantial amount of our revenue and earnings comes from the net interest income and fee income that we earn from our consumer and commercial lending and banking businesses. These businesses have been, and will continue to be, materially affected by the state of the U.S. economy, particularly unemployment levels and home prices. The negative effects and continued uncertainty stemming from U.S. fiscal, monetary and political matters, including concerns about deficit and debt levels, inflation, taxes and U.S. debt ratings, have impacted and may continue to impact the global economy. Moreover, geopolitical matters, including international political unrest or disturbances, such as the conflict in Ukraine, as well as continued concerns over commodity prices, restrictions on international trade and corresponding retaliatory measures, and global economic difficulties, may impact the stability of financial markets and the global economy. Any impacts to the global economy could have a similar impact to the U.S. economy. A prolonged period of slow growth in the global economy or any deterioration in general economic conditions and/or the financial markets resulting from the above matters or any other events or factors that may disrupt or weaken the U.S. or global economy, could materially adversely affect our financial results and condition.

A weakening in business or economic conditions, including higher unemployment levels or declines in home prices, as well as higher interest rates, can also adversely affect our customers' ability to repay their loans or other obligations, which can negatively impact our credit performance. If unemployment levels worsen or if home prices fall we would expect to incur elevated charge-offs and provision expense from increases in our allowance for credit losses. These conditions may adversely affect not only consumer loan performance but also commercial and CRE loans, especially for those business borrowers that rely on the health of industries that may experience deteriorating economic conditions. The ability of these and other borrowers to repay their loans may deteriorate, causing us, as one of the largest commercial and CRE lenders in the U.S., to incur significantly higher credit losses. In addition, weak or deteriorating economic conditions make it more challenging for us to increase our consumer and commercial loan portfolios by making loans to creditworthy borrowers at attractive yields. Furthermore, weak economic conditions, as well as competition and/or increases in interest rates, could soften demand for our loans resulting in our retaining a much higher amount of lower yielding liquid assets on our consolidated balance sheet. If

economic conditions do not continue to improve or if the economy worsens and unemployment rises, which also would likely result in a decrease in consumer and business confidence and spending, the demand for our products, including our consumer and commercial loans, may fall, reducing our interest and noninterest income and our earnings.

A deterioration in business and economic conditions, which may erode consumer and investor confidence levels, and/or increased volatility of financial markets, also could adversely affect financial results for our fee-based businesses, including our investment advisory, securities brokerage, wealth management, markets and investment banking businesses. For example, because investment advisory fees are often based on the value of assets under management, a fall in the market prices of those assets could reduce our fee income. Changes in stock market prices could affect the trading activity of investors, reducing commissions and other fees we earn from our brokerage business. In addition, adverse market conditions may negatively affect the performance of products we have provided to customers, which may expose us to legal actions or additional costs. Poor economic conditions and volatile or unstable financial markets also can negatively affect our debt and equity underwriting and advisory businesses, as well as our venture capital business and trading activities, including through heightened counterparty credit risk. Any deterioration in global financial markets and economies, including as a result of any international political unrest or disturbances, may adversely affect the revenue and earnings of our international operations, particularly our global financial institution and correspondent banking services.

For additional information, see the "Risk Management – Asset/Liability Management" and "– Credit Risk Management" sections in this Report.

The COVID-19 pandemic has adversely impacted our business and financial results and any further impact will depend on future developments, which are highly uncertain and cannot be predicted. The COVID-19 pandemic has negatively impacted the global economy; disrupted global supply chains; affected equity market valuations; and created significant volatility and disruption in financial markets and unemployment levels. As a result of the pandemic, the demand for our products and services has, at times, been significantly impacted, which adversely affected our revenue. The pandemic also resulted in the recognition of credit losses in our loan portfolios and increases in our allowance for credit losses, particularly for industries most directly and adversely affected by the pandemic, such as travel and entertainment.

Moreover, the pandemic created additional operational and compliance risks, including the need to quickly implement and execute new pandemic-related programs and procedures, comply with rapidly changing regulatory requirements, address any increased risk of fraudulent activity, and protect the integrity and functionality of our systems, networks, and operations while a larger number of our employees and those of our third-party service providers may spend more time working remotely than prior to the pandemic. In response to the pandemic, we previously suspended certain mortgage foreclosure activities and provided fee waivers, payment deferrals, and other assistance for certain consumer and commercial lending customers. Furthermore, our participation in governmental measures taken to address the economic impact from the pandemic could

Risk Factors (continued)

continue to result in litigation and government investigations and proceedings. In addition, we previously reduced our common stock dividend and temporarily suspended share repurchases. The pandemic also increased the likelihood and/or magnitude of the other risks described herein, including credit, market and operational related risks.

The extent to which the COVID-19 pandemic further impacts our business, results of operations, and financial condition, as well as our regulatory capital and liquidity ratios, depends on future developments, which are highly uncertain and cannot be predicted, including the scope and duration of the pandemic and actions taken by governmental authorities and other third parties in response to the pandemic. Depending on future developments, the COVID-19 pandemic or any new pandemic could result in the occurrence of new, unanticipated adverse effects on us or the recurrence of adverse effects similar to those already experienced.

Changes in interest rates and financial market values could reduce our net interest income and earnings, as well as our other comprehensive income, including as a result of recognizing losses on the debt and equity securities that we hold in our portfolio or trade for our customers.

Changes in either our net interest margin or the amount or mix of earning assets we hold, including as a result of the asset cap under the February 2018 consent order with the FRB, could affect our net interest income and our earnings. Changes in interest rates can affect our net interest margin. Although the yield we earn on our assets and our funding costs tend to move in the same direction in response to changes in interest rates, one can rise or fall faster than the other, causing our net interest margin to expand or contract. If our funding costs rise faster than the yield we earn on our assets or if the yield we earn on our assets falls faster than our funding costs, our net interest margin could contract.

The amount and type of earning assets we hold can affect our yield and net interest income. We hold earning assets in the form of loans and debt and equity securities, among other assets. As noted above, if the economy worsens we may see lower demand for loans by creditworthy customers, reducing our yield and net interest income. In addition, our net interest income and net interest margin can be negatively affected by a prolonged period of low interest rates as it may result in us holding lower yielding loans and securities on our consolidated balance sheet, particularly if we are unable to replace the maturing higher yielding assets with similar higher yielding assets. Increases in interest rates, however, may continue to negatively affect loan demand and could result in higher credit losses as borrowers may have more difficulty making higher interest payments. As described below, changes in interest rates also affect our mortgage business, including the value of our MSR. In an effort to address high inflation, the FRB significantly raised its target range for the federal funds rate and has indicated it may continue to raise it in 2023.

Changes in the slope of the yield curve – or the spread between short-term and long-term interest rates – could also reduce our net interest income and net interest margin. Normally, the yield curve is upward sloping, meaning short-term rates are lower than long-term rates. When the yield curve flattens or inverts, our net interest income and net interest margin could decrease if the cost of our short-term funding increases relative to the yield we can earn on our long-term assets. Moreover, a negative interest rate environment, in which interest rates drop below zero, could reduce our net interest income and net interest margin due to a likely decline in the

interest we could earn on loans and other earning assets, while also likely requiring us to pay to maintain our deposits with the FRB.

We assess our interest rate risk by estimating the effect on our earnings under various scenarios that differ based on assumptions about the direction, magnitude and speed of interest rate changes and the slope of the yield curve. We may hedge some of that interest rate risk with interest rate derivatives. We also rely on the “natural hedge” that our mortgage loan originations and servicing rights can provide as their revenue impact tends to move in opposite directions based on changes in interest rates.

We generally do not hedge all of our interest rate risk. There is always the risk that changes in interest rates, credit spreads or option volatility could reduce our net interest income and earnings, as well as our other comprehensive income, in material amounts, especially if actual conditions turn out to be materially different than what we assumed. For example, if interest rates rise or fall faster than we assumed or the slope of the yield curve changes, we may incur significant losses on debt securities we hold as investments. To reduce our interest rate risk, we may rebalance our portfolios of debt securities, equity securities and loans, refinance our debt and take other strategic actions. We may incur losses when we take such actions. In addition, changes in interest rates can result in increased basis risk, which could limit the effectiveness of our hedging activities.

Because of changing economic and market conditions, as well as credit ratings, affecting issuers and the performance of any underlying collateral, we may be required to recognize other-than-temporary impairment (OTTI) in future periods on the securities we hold. Furthermore, the value of the debt securities we hold can fluctuate due to changes in interest rates, issuer creditworthiness, and other factors. Our net income also is exposed to changes in interest rates, credit spreads, foreign exchange rates, and equity and commodity prices in connection with our trading activities, which are conducted primarily to accommodate the investment and risk management activities of our customers, as well as when we execute economic hedging to manage certain balance sheet risks. Trading debt securities and equity securities held for trading are carried at fair value with realized and unrealized gains and losses recorded in noninterest income. As part of our business to support our customers, we trade public debt and equity securities and other financial instruments that are subject to market fluctuations with gains and losses recognized in net income. In addition, although high market volatility can increase our exposure to trading-related losses, periods of low volatility may have an adverse effect on our businesses as a result of reduced customer activity levels. Although we have processes in place to measure and monitor the risks associated with our trading activities, including stress testing and hedging strategies, there can be no assurance that our processes and strategies will be effective in avoiding losses that could have a material adverse effect on our financial results.

The value of our marketable and nonmarketable equity securities can fluctuate from quarter to quarter. Marketable equity securities are carried at fair value with unrealized gains and losses reflected in earnings. Nonmarketable equity securities are carried under the cost method, equity method, or measurement alternative, while others are carried at fair value with unrealized gains and losses reflected in earnings. Earnings from our equity securities portfolio may be volatile and hard to predict, and may have a significant effect on our earnings from period to period. When, and if, we recognize gains may depend on a number of factors, including general economic and market conditions, the prospects of the companies in which we invest, when a company

goes public, the size of our position relative to the public float, and whether we are subject to any resale restrictions.

Nonmarketable equity securities include our private equity and venture capital investments that could result in significant OTTI losses for those investments carried under the measurement alternative or equity method. If we determine there is OTTI for an investment, we write-down the carrying value of the investment, resulting in a charge to earnings, which could be significant.

For additional information, see the “Risk Management – Asset/Liability Management – Interest Rate Risk”, “– Mortgage Banking Interest Rate and Market Risk”, “– Market Risk – Trading Activities”, and “– Market Risk – Equity Securities” and the “Balance Sheet Analysis – Available-for-Sale and Held-to-Maturity Debt Securities” sections in this Report and Note 2 (Trading Activities), Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) and Note 4 (Equity Securities) to Financial Statements in this Report.

The transition away from the London Interbank Offered Rate (LIBOR) may adversely affect our business, results of operations, and financial condition. The administrator of LIBOR ceased publication of LIBOR settings on a representative basis on December 31, 2021, with the exception of the most commonly used U.S. dollar (USD) LIBOR settings, which will no longer be published on a representative basis after June 30, 2023. Additionally, federal banking regulators issued guidance strongly encouraging banking organizations to cease using USD LIBOR in new contracts. We have a significant number of assets and liabilities, such as legacy commercial loans, adjustable-rate mortgage loans, derivatives, debt securities, and long-term debt, referenced to LIBOR and other interbank offered rates. When any such benchmark rate or other referenced financial metric is significantly changed, replaced or discontinued, or ceases to be recognized as an acceptable market benchmark rate or financial metric, there may be uncertainty or differences in the calculation of the applicable interest rate or payment amount depending on the terms of the governing instrument.

This could impact the financial performance of previously booked transactions, result in losses on financial instruments we hold, require different hedging strategies or result in ineffective or increased basis risk on existing hedges, impact the overall interest rate environment and the availability or cost of floating-rate funding, affect our capital and liquidity planning and management, or have other adverse financial consequences. There can be no assurance that any new benchmark rate, such as the Secured Overnight Financing Rate (SOFR), or other financial metric will be an adequate alternative to LIBOR or produce the economic equivalent of LIBOR. In addition, the transition away from LIBOR will continue to require changes to existing transaction data, products, systems, models, operations, and pricing processes, as well as the modification or renegotiation of contracts that reference USD LIBOR. It may also continue to result in significant operational, systems, or other practical challenges, increased compliance and operational costs, and heightened expectations and scrutiny from regulators, and could result in litigation, reputational harm, or other adverse consequences. Furthermore, the transition away from widely used benchmark rates like LIBOR could result in customers or other market participants challenging the determination of their interest payments, disputing the interpretation or implementation of fallback provisions and other transition related changes, or entering into fewer transactions or postponing their financing needs, which could reduce our revenue and adversely affect our business. Moreover, to the

extent borrowers with loans referenced to LIBOR, such as adjustable-rate mortgage loans, experience higher interest payments as a result of the transition to a new benchmark rate, our customers’ ability to repay their loans may be adversely affected, which can negatively impact our credit performance.

For additional information on the discontinuation of LIBOR and the steps we are taking to address and mitigate the risks we have identified, see the “Overview – Recent Developments – LIBOR Transition” section in this Report.

Effective liquidity management is essential for the operation of our business, and our financial results and condition could be materially adversely affected if we do not effectively manage our liquidity. We primarily rely on customer deposits to be a low-cost and stable source of funding for the loans we make and the operation of our business. In addition to customer deposits, our sources of liquidity include certain debt and equity securities, our ability to sell or securitize loans in secondary markets and to pledge loans to access secured borrowing facilities through the FHLB and the FRB, and our ability to raise funds in domestic and international money through capital markets.

Our liquidity and our ability to fund and run our business could be materially adversely affected by a variety of conditions and factors, including financial and credit market disruption and volatility or a lack of market or customer confidence in financial markets in general similar to what occurred during the financial crisis in 2008 and early 2009, which may result in a loss of customer deposits or outflows of cash or collateral and/or our inability to access capital markets on favorable terms. Market disruption and volatility could impact our credit spreads, which are the amount in excess of the interest rate of U.S. Treasury securities, or other benchmark securities, of the same maturity that we need to pay to our funding providers. Increases in interest rates and our credit spreads could significantly increase our funding costs. Other conditions and factors that could materially adversely affect our liquidity and funding include a lack of market or customer confidence in the Company or negative news about the Company or the financial services industry generally which also may result in a loss of deposits and/or negatively affect our ability to access the capital markets; our inability to sell or securitize loans or other assets; disruptions or volatility in the repurchase market which also may increase our short-term funding costs; regulatory requirements or restrictions; unexpectedly high or accelerated customer draws on lines of credit; and, as described below, reductions in one or more of our credit ratings. Many of the above conditions and factors may be caused by events over which we have little or no control. There can be no assurance that significant disruption and volatility in the financial markets will not occur in the future. For example, concerns over geopolitical issues, commodity and currency prices, as well as global economic conditions, may cause financial market volatility.

In addition, concerns regarding U.S. government debt levels, including any potential failure to raise the debt limit, and any associated downgrade of U.S. government debt ratings may cause uncertainty and volatility as well. A downgrade of the sovereign debt ratings of the U.S. government or the debt ratings of related institutions, agencies or instrumentalities, as well as other fiscal or political events could, in addition to causing economic and financial market disruptions, materially adversely affect the market value of the U.S. government securities that we hold, the availability of those securities as collateral for borrowing, and our ability to access capital markets on favorable terms, as well as have other material adverse effects on the operation of our business and our financial results and condition.

Risk Factors (continued)

As noted above, we rely heavily on customer deposits for our funding and liquidity. We compete with banks and other financial services companies for deposits. If our competitors raise the rates they pay on deposits our funding costs may increase, either because we raise our rates to avoid losing deposits or because we lose deposits and must rely on more expensive sources of funding. Checking and savings account balances and other forms of customer deposits may decrease when customers perceive other investment opportunities, such as stocks, bonds, or money market mutual funds, as providing a better risk/return tradeoff. When customers move money out of bank deposits and into other investments, we may lose a relatively low-cost source of funds, increasing our funding costs and negatively affecting our liquidity. In addition, we may continue to reduce certain deposit balances in order to manage under the asset cap.

If we are unable to continue to fund our assets through customer deposits or access capital markets on favorable terms or if we suffer an increase in our borrowing costs or otherwise fail to manage our liquidity effectively (including on an intra-day or intra-affiliate basis), our liquidity, net interest margin, financial results and condition may be materially adversely affected. As we did during the financial crisis, we may also need, or be required by our regulators, to raise additional capital through the issuance of common stock, which could dilute the ownership of existing stockholders, or reduce or even eliminate our common stock dividend to preserve capital or to raise additional capital.

For additional information, see the “Risk Management – Asset/Liability Management” section in this Report.

Adverse changes in our credit ratings could have a material adverse effect on our liquidity, cash flows, financial results and condition. Our borrowing costs and ability to obtain funding are influenced by our credit ratings. Reductions in one or more of our credit ratings could adversely affect our ability to borrow funds and raise the costs of our borrowings substantially and could cause creditors and business counterparties to raise collateral requirements or take other actions that could adversely affect our ability to raise funding. Credit ratings and credit ratings agencies’ outlooks are based on the ratings agencies’ analysis of many quantitative and qualitative factors, such as our capital adequacy, liquidity, asset quality, business mix, the level and quality of our earnings, rating agency assumptions regarding the probability and extent of federal financial assistance or support, and other rating agency specific criteria. In addition to credit ratings, our borrowing costs are affected by various other external factors, including market volatility and concerns or perceptions about the financial services industry generally. There can be no assurance that we will maintain our credit ratings and outlooks and that credit ratings downgrades in the future would not materially affect our ability to borrow funds and borrowing costs. Downgrades in our credit ratings also may trigger additional collateral or funding obligations which, depending on the severity of the downgrade, could have a material adverse effect on our liquidity, including as a result of credit-related contingent features in certain of our derivative contracts.

For information on our credit ratings, see the “Risk Management – Asset/Liability Management – Liquidity Risk and Funding – Credit Ratings” section and for information regarding additional collateral and funding obligations required of certain derivative instruments in the event our credit ratings were to fall below investment grade, see Note 14 (Derivatives) to Financial Statements in this Report.

We rely on dividends from our subsidiaries for liquidity, and federal and state law, as well as certain contractual arrangements, can limit those dividends. Wells Fargo & Company, the parent holding company (the “Parent”), is a separate and distinct legal entity from its subsidiaries. It receives substantially all of its funding and liquidity from dividends and other distributions from its subsidiaries. We generally use these dividends and distributions, among other things, to pay dividends on our common and preferred stock and interest and principal on our debt. Federal and state laws limit the amount of dividends and distributions that our bank and some of our nonbank subsidiaries, including our broker-dealer subsidiaries, may pay to the Parent. In addition, under a Support Agreement dated June 28, 2017, as amended and restated on June 26, 2019, among the Parent, WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (the “IHC”), Wells Fargo Bank, N.A. (the “Bank”), Wells Fargo Securities, LLC, Wells Fargo Clearing Services, LLC, and certain other subsidiaries of the Parent designated from time to time as material entities for resolution planning purposes or identified from time to time as related support entities in our resolution plan, the IHC may be restricted from making dividend payments to the Parent if certain liquidity and/or capital metrics fall below defined triggers or if the Parent’s board of directors authorizes it to file a case under the U.S. Bankruptcy Code. Also, our right to participate in a distribution of assets upon a subsidiary’s liquidation or reorganization is subject to the prior claims of the subsidiary’s creditors.

For additional information, see the “Regulation and Supervision – Dividend Restrictions” and “– Holding Company Structure” sections in our 2022 Form 10-K and to Note 25 (Regulatory Capital Requirements and Other Restrictions) to Financial Statements in this Report.

REGULATORY RISKS

Current and future legislation and/or regulation could require us to change certain of our business practices, reduce our revenue and earnings, impose additional costs on us or otherwise adversely affect our business operations and/or competitive position. Our parent company, our subsidiary banks and many of our nonbank subsidiaries such as those related to our brokerage business, are subject to significant and extensive regulation under state and federal laws in the U.S., as well as the applicable laws of the various jurisdictions outside of the U.S. where they conduct business. These regulations generally protect depositors, federal deposit insurance funds, consumers, investors, employees, or the banking and financial system as a whole, not necessarily our security holders. Economic, market and political conditions during the past few years have led to a significant amount of legislation and regulation in the U.S. and abroad affecting the financial services industry, as well as heightened expectations and scrutiny of financial services companies from banking regulators. These laws and regulations may continue to affect the manner in which we do business and the products and services that we provide, affect or restrict our ability to compete in our current businesses or our ability to enter into or acquire new businesses, reduce or limit our revenue, affect our compliance and risk management activities, increase our capital requirements, impose additional fees, assessments or taxes on us, intensify the regulatory supervision of us and the financial services industry, and adversely affect our business operations or have other negative consequences. Our businesses and revenue in non-U.S. jurisdictions are also subject to risks from political, economic and social developments in

those jurisdictions, including sanctions or business restrictions, asset freezes or confiscation, unfavorable political or diplomatic developments, or financial or social instability. In addition, greater government oversight and scrutiny of Wells Fargo, as well as financial services companies generally, has increased our operational and compliance costs as we must continue to devote substantial resources to enhancing our procedures and controls and meeting heightened regulatory standards and expectations. Any failure to meet regulatory requirements, standards or expectations, either in the U.S. or in non-U.S. jurisdictions, could continue to result in significant fees, penalties, restrictions on our ability to engage in certain business activities, or other adverse consequences.

Our consumer businesses, including our mortgage, auto, credit card and other consumer lending and non-lending businesses, are subject to numerous and, in many cases, highly complex consumer protection laws and regulations, as well as enhanced regulatory scrutiny and more and expanded regulatory examinations and/or investigations. In particular, the CFPB's rules may continue to increase our compliance costs and require changes in our business practices, which could limit or negatively affect the products and services that we offer our customers. If we fail to meet enhanced regulatory requirements and expectations with respect to our consumer businesses, we may be subject to increased costs, fines, penalties, restrictions on our business activities including the products and services we can provide, and/or harm to our reputation.

In addition, the Dodd-Frank Act established a comprehensive framework for regulating over-the-counter derivatives, and the CFTC, SEC, and other federal regulatory agencies have adopted rules regulating swaps, security-based swaps, and derivatives activities. These rules may continue to negatively impact customer demand for over-the-counter derivatives, impact our ability to offer customers new derivatives or amendments to existing derivatives, and increase our costs for engaging in swaps, security-based swaps, and other derivatives activities.

We are also subject to various rules and regulations related to the prevention of financial crimes and combating terrorism, including the USA PATRIOT Act of 2001. These rules and regulations require us to, among other things, implement policies and procedures related to anti-money laundering, anti-bribery and corruption, economic sanctions, suspicious activities, currency transaction reporting and due diligence on customers. Although we have policies and procedures designed to comply with these rules and regulations, to the extent they are not fully effective or do not meet heightened regulatory standards or expectations, we may be subject to fines, penalties, restrictions on certain activities, reputational harm, or other adverse consequences.

Our businesses are also subject to laws and regulations enacted by U.S. and non-U.S. regulators and governmental authorities relating to the privacy of the information of customers, employees and others. These laws and regulations, among other things, increase our compliance obligations; have a significant impact on our businesses' collection, processing, sharing, use, and retention of personal data and reporting of data breaches; and provide for significantly increased penalties for non-compliance.

In addition, we are subject to a number of consent orders and other regulatory actions, including a February 2018 consent order with the FRB regarding the Board's governance and oversight of the Company, and the Company's compliance and operational risk management program. This consent order limits the Company's total consolidated assets as defined under the

consent order to the level as of December 31, 2017, until certain conditions are met. This limitation could continue to adversely affect our results of operations or financial condition. We are also subject to April 2018 consent orders with the CFPB and OCC regarding the Company's compliance risk management program and past practices involving certain automobile collateral protection insurance policies and certain mortgage interest rate lock extensions. In addition, we are subject to a September 2021 consent order with the OCC regarding loss mitigation activities in the Company's Home Lending business. Similarly, we are subject to a December 2022 consent order with the CFPB regarding multiple matters related to automobile lending, consumer deposit accounts, and mortgage lending.

Under the April 2018 consent order with the OCC, the Bank remains subject to requirements that were originally imposed in November 2016 to provide prior written notice to, and obtain non-objection from, the OCC with respect to changes in directors and senior executive officers, and remains subject to certain regulatory limitations on post-termination payments to certain individuals and employees.

The Company may be subject to further actions, including the imposition of additional consent orders, regulatory agreements or civil money penalties, by federal regulators regarding similar or other issues. Furthermore, issues or delays in satisfying the requirements of a regulatory action could affect our progress on others, and failure to satisfy the requirements of a regulatory action on a timely basis could result in additional penalties, enforcement actions, and other negative consequences, which could be significant. For example, in September 2021, the OCC assessed a \$250 million civil money penalty against the Company related to insufficient progress in addressing requirements under the OCC's April 2018 consent order and loss mitigation activities in the Company's Home Lending business. Compliance with the February 2018 FRB consent order, the April 2018 CFPB and OCC consent orders, the September 2021 OCC consent order, the December 2022 CFPB consent order, and any other consent orders or regulatory actions, as well as the implementation of their requirements, may continue to increase the Company's costs, require the Company to reallocate resources away from growing its existing businesses, subject the Company to business restrictions, negatively impact the Company's capital and liquidity, and require the Company to undergo significant changes to its business, operations, products and services, and risk management practices. For additional information on the Company's consent orders, see the "Overview" section in this Report.

Other future regulatory initiatives that could significantly affect our business include proposals to reform the housing finance market in the United States. These proposals, among other things, consider ending the conservatorships of the GSEs and reducing or eliminating over time the role of the GSEs in buying mortgage loans or guaranteeing mortgage-backed securities (MBS), as well as the implementation of reforms relating to borrowers, lenders, and investors in the mortgage market. The extent and timing of any regulatory reform or the adoption of any legislation regarding the GSEs and/or the home mortgage market, as well as any effect on the Company's business and financial results, are uncertain.

Any other future legislation and/or regulation, if adopted, also could significantly change our regulatory environment and increase our cost of doing business, limit the activities we may pursue or affect the competitive balance among banks, savings associations, credit unions, and other financial services

Risk Factors (continued)

companies, and have a material adverse effect on our financial results and condition.

For additional information on the significant regulations and regulatory oversight initiatives that have affected or may affect our business, see the “Regulatory Matters” section in this Report and the “Regulation and Supervision” section in our 2022 Form 10-K.

We could be subject to more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations if regulators determine that our resolution or recovery plan is deficient. Pursuant to rules adopted by the FRB and the FDIC, Wells Fargo prepares and periodically submits resolution plans, also known as “living wills,” designed to facilitate our rapid and orderly resolution in the event of material financial distress or failure. There can be no assurance that the FRB or FDIC will respond favorably to the Company’s resolution plans. If the FRB and/or FDIC determine that a resolution plan has deficiencies, they may impose more stringent capital, leverage or liquidity requirements on us or restrict our growth, activities or operations until we adequately remedy the deficiencies. If the FRB and/or FDIC ultimately determine that we have been unable to remedy any deficiencies, they could require us to divest certain assets or operations.

In addition to our resolution plans, we must also prepare and periodically submit to the FRB a recovery plan that identifies a range of options that we may consider during times of idiosyncratic or systemic economic stress to remedy any financial weaknesses and restore market confidence without extraordinary government support. The Bank must also prepare and periodically submit to the OCC a recovery plan. If either the FRB or the OCC determines that our recovery plan is deficient, they may impose fines, restrictions on our business or ultimately require us to divest assets.

Our security holders may suffer losses in a resolution of Wells Fargo even if creditors of our subsidiaries are paid in full.

If Wells Fargo were to fail, it may be resolved in a bankruptcy proceeding or, if certain conditions are met, under the resolution regime created by the Dodd-Frank Act known as the “orderly liquidation authority,” which allows for the appointment of the FDIC as receiver. The FDIC’s orderly liquidation authority requires that security holders of a company in receivership bear all losses before U.S. taxpayers are exposed to any losses. There are substantial differences in the rights of creditors between the orderly liquidation authority and the U.S. Bankruptcy Code, including the right of the FDIC to disregard the strict priority of creditor claims under the U.S. Bankruptcy Code in certain circumstances and the use of an administrative claims procedure instead of a judicial procedure to determine creditors’ claims.

The strategy described in our most recent resolution plan is a single point of entry strategy, in which the Parent would be the only material legal entity to enter resolution proceedings. However, the strategy described in our resolution plan is not binding in the event of an actual resolution of Wells Fargo.

To facilitate the orderly resolution of the Company, we entered into the Support Agreement, pursuant to which the Parent transferred a significant amount of its assets to the IHC and will continue to transfer assets to the IHC from time to time. In the event of our material financial distress or failure, the IHC will be obligated to use the transferred assets to provide capital and/or liquidity to the Bank and certain other direct and indirect subsidiaries of the Parent. Under the Support Agreement, the IHC will provide funding and liquidity to the Parent through subordinated notes and a committed line of credit. If certain

liquidity and/or capital metrics fall below defined triggers, or if the Parent’s board of directors authorizes it to file a case under the U.S. Bankruptcy Code, the subordinated notes would be forgiven, the committed line of credit would terminate, and the IHC’s ability to pay dividends to the Parent would be restricted, any of which could materially and adversely impact the Parent’s liquidity and its ability to satisfy its debts and other obligations, and could result in the commencement of bankruptcy proceedings by the Parent at an earlier time than might have otherwise occurred if the Support Agreement were not implemented.

Any resolution of the Company will likely impose losses on shareholders, unsecured debt holders and other creditors of the Parent, while the Parent’s subsidiaries may continue to operate. Creditors of some or all of our subsidiaries may receive significant or full recoveries on their claims, while the Parent’s security holders could face significant or complete losses. This outcome may arise whether the Company is resolved under the U.S. Bankruptcy Code or by the FDIC under the orderly liquidation authority, and whether the resolution is conducted using a single point of entry strategy or using a multiple point of entry strategy, in which the Parent and one or more of its subsidiaries would each undergo separate resolution proceedings. Furthermore, in a single point of entry or multiple point of entry strategy, losses at some or all of our subsidiaries could be transferred to the Parent and borne by the Parent’s security holders. Moreover, if either resolution strategy proved to be unsuccessful, our security holders could face greater losses than if the strategy had not been implemented.

For additional information, see the “Regulatory Matters – ‘Living Will’ Requirements and Related Matters” section in this Report.

Bank regulations and rules may require higher capital and liquidity levels, limiting our ability to pay common stock dividends, repurchase our common stock, invest in our business, or provide loans or other products and services to our customers.

The Company and each of our insured depository institutions are subject to various regulatory capital adequacy requirements administered by federal banking regulators. In particular, the Company is subject to rules issued by federal banking regulators to implement Basel III risk-based capital requirements for U.S. banking organizations. These capital rules, among other things, establish required minimum ratios relating capital to different categories of assets and exposures. Federal banking regulators have also imposed a leverage ratio and a supplementary leverage ratio on large BHCs like Wells Fargo and our insured depository institutions. The FRB has also finalized rules to address the amount of equity and unsecured long-term debt a U.S. G-SIB must hold to improve its resolvability and resiliency, often referred to as total loss absorbing capacity (TLAC). Similarly, federal banking regulators have issued final rules that implement a liquidity coverage ratio and a net stable funding ratio.

In addition, as part of its obligation to impose enhanced capital and risk-management standards on large financial firms pursuant to the Dodd-Frank Act, the FRB has issued a capital plan rule that establishes capital planning and other requirements that govern capital distributions, including dividends and share repurchases, by certain BHCs, including Wells Fargo. The FRB has also finalized a number of regulations implementing enhanced prudential requirements for large BHCs like Wells Fargo regarding risk-based capital and leverage, risk and liquidity management, single counterparty credit limits, and

imposing debt-to-equity limits on any BHC that regulators determine poses a grave threat to the financial stability of the United States. The FRB and OCC have also finalized rules implementing stress testing requirements for large BHCs and national banks. In addition, the FRB has proposed a rule to establish remediation requirements for large BHCs experiencing financial distress and has proposed additional requirements regarding effective risk management practices at large BHCs, including its expectations for boards of directors and senior management. The OCC, under separate authority, has also established heightened governance and risk management standards for large national banks, such as the Bank.

The Basel standards and federal regulatory capital, leverage, liquidity, TLAC, capital planning, and other requirements may limit or otherwise restrict how we utilize our capital, including common stock dividends and stock repurchases, and may require us to increase our capital and/or liquidity. Any requirement that we increase our regulatory capital, regulatory capital ratios or liquidity, including due to changes in regulatory requirements, such as through the adoption or implementation of new or revised Basel standards, or as a result of business growth, acquisitions or a change in our risk profile, could require us to liquidate assets or otherwise change our business, product offerings and/or investment plans, which may negatively affect our financial results. Although not currently anticipated, new capital requirements and/or our regulators may require us to raise additional capital in the future. Issuing additional common stock may dilute the ownership of existing stockholders. In addition, federal banking regulations may continue to increase our compliance costs as well as limit our ability to invest in our business or provide loans or other products and services to our customers.

For additional information, see the “Capital Management,” “Risk Management – Asset/Liability Management – Liquidity Risk and Funding – Liquidity Standards,” and “Regulatory Matters” sections in this Report and the “Regulation and Supervision” section in our 2022 Form 10-K.

FRB policies, including policies on interest rates, can significantly affect business and economic conditions and our financial results and condition. The FRB regulates the supply of money in the United States. Its policies determine in large part our cost of funds for lending and investing and the return we earn on those loans and investments, both of which affect our net interest income and net interest margin. The FRB’s interest rate policies also can materially affect the value of financial instruments we hold, such as debt securities and MSRs. In addition, its policies can affect our borrowers, potentially increasing the risk that they may fail to repay their loans. Changes in FRB policies, including its target range for the federal funds rate or actions taken to increase or decrease the size of its balance sheet, are beyond our control and can be hard to predict. The FRB significantly raised its target range for the federal funds rate and has indicated it may continue to raise it in 2023 to address high inflation. As noted above, changes in the interest rate environment and yield curve which may result from the FRB’s actions could negatively affect our net interest income and net interest margin.

CREDIT RISKS

Increased credit risk, including as a result of a deterioration in economic conditions or changes in market conditions, could require us to increase our provision for credit losses and allowance for credit losses and could have a material adverse

effect on our results of operations and financial condition.

When we loan money or commit to loan money we incur credit risk, or the risk of losses if our borrowers do not repay their loans. As one of the largest lenders in the U.S., the credit performance of our loan portfolios significantly affects our financial results and condition. We also incur credit risk in connection with trading and other activities. As noted above, if the current economic environment were to deteriorate, more of our customers and counterparties may have difficulty in repaying their loans or other obligations which could result in a higher level of credit losses and provision for credit losses. We reserve for credit losses by establishing an allowance through a charge to earnings. The amount of this allowance is based on our assessment of credit losses inherent in our loan portfolio (including unfunded credit commitments). The process for determining the amount of the allowance is critical to our financial results and condition. It requires difficult, subjective and complex judgments about the future, including forecasts of economic or market conditions that might impair the ability of our borrowers to repay their loans. We might increase the allowance because of changing economic conditions, including falling home prices, higher unemployment or inflation, significant loan growth, changes in consumer behavior, or other market conditions that adversely affect borrowers, or other factors. Additionally, the regulatory environment or external factors, such as natural disasters, disease pandemics, political or social matters, or trade policies, also can influence recognition of credit losses in our loan portfolios and impact our allowance for credit losses.

Future allowance levels may increase or decrease based on a variety of factors, including loan balance changes, portfolio credit quality and mix changes, and changes in general economic conditions. While we believe that our allowance for credit losses was appropriate at December 31, 2022, there is no assurance that it will be sufficient to cover future credit losses. In the event of significant deterioration in economic conditions or if we experience significant loan growth, we may be required to build reserves in future periods, which would reduce our earnings.

For additional information, see the “Risk Management – Credit Risk Management” and “Critical Accounting Policies – Allowance for Credit Losses” sections in this Report.

We may have more credit risk and higher credit losses to the extent our loans are concentrated by loan type, industry segment, borrower type, or location of the borrower or collateral. Our credit risk and credit losses can increase if our loans are concentrated to borrowers engaged in the same or similar activities or to borrowers who individually or as a group may be uniquely or disproportionately affected by economic or market conditions. Similarly, challenging economic or market conditions, or trade policies, affecting a particular industry or geography may also impact related or dependent industries or the ability of borrowers living in such affected areas or working in such industries to meet their financial obligations. We experienced the effect of concentration risk in 2009 and 2010 when we incurred greater than expected losses in our residential real estate loan portfolio due to a housing slowdown and greater than expected deterioration in residential real estate values in many markets, including the Central Valley California market and several Southern California metropolitan statistical areas. As California is our largest banking state in terms of loans and deposits, deterioration in real estate values and underlying economic conditions in those markets or elsewhere in California could result in materially higher credit losses. In addition, changes in consumer behavior or other market conditions may adversely affect borrowers in certain industries or sectors, which may

Risk Factors (continued)

increase our credit risk and reduce the demand by these borrowers for our products and services. Moreover, deterioration in macro-economic conditions generally across the country could result in materially higher credit losses, including for our residential real estate loan portfolio, which includes nonconforming mortgage loans we retain on our balance sheet. We may experience higher delinquencies and higher loss rates as our consumer real estate secured lines of credit reach their contractual end of draw period and begin to amortize.

We are currently one of the largest CRE lenders in the U.S. A deterioration in economic conditions that negatively affects the business performance of our CRE borrowers, including increases in interest rates, declines in commercial property values, and/or changes in consumer behavior or other market conditions, such as a continued decrease in the demand for office space, could result in materially higher credit losses and have a material adverse effect on our financial results and condition.

Challenges and/or changes in non-U.S. economic conditions may increase our non-U.S. credit risk. Economic difficulties in non-U.S. jurisdictions could also indirectly have a material adverse effect on our credit performance and results of operations and financial condition to the extent they negatively affect the U.S. economy and/or our borrowers who have non-U.S. operations.

Due to regulatory requirements, we must clear certain derivative transactions through central counterparty clearinghouses (CCPs), which results in credit exposure to these CCPs. Similarly, because we are a member of various CCPs, we may be required to pay a portion of any losses incurred by the CCP in the event that one or more members of the CCP defaults on its obligations. In addition, we are exposed to the risk of non-performance by our clients for which we clear transactions through CCPs to the extent such non-performance is not sufficiently covered by available collateral.

For additional information regarding credit risk, see the “Risk Management – Credit Risk Management” section and Note 5 (Loans and Related Allowance for Credit Losses) to Financial Statements in this Report.

OPERATIONAL, STRATEGIC AND LEGAL RISKS

A failure in or breach of our operational or security systems, controls or infrastructure, or those of our third-party vendors and other service providers, could disrupt our businesses, damage our reputation, increase our costs and cause losses.

As a large financial institution that serves customers through numerous physical locations, ATMs, the internet, mobile banking and other distribution channels across the U.S. and internationally, we depend on our ability to process, record and monitor a large number of customer transactions on a continuous basis. As our customer base and locations have expanded throughout the U.S. and internationally, as we have increasingly used the internet and mobile banking to provide products and services to our customers, as customer, public, legislative and regulatory expectations regarding operational and information security have increased, and as cyber and other information security attacks have become more prevalent and complex, our operational systems, controls and infrastructure must continue to be safeguarded and monitored for potential failures, disruptions and breakdowns. Our business, financial, accounting, data processing systems or other operating systems and facilities may stop operating properly, become insufficient based on our evolving business needs, or become disabled or damaged as a result of a number of factors including events that are wholly or partially beyond our control. For example, there

have been and could in the future be sudden increases in customer transaction volume; electrical or telecommunications outages; degradation or loss of internet, website or mobile banking availability; natural disasters such as earthquakes, tornados, and hurricanes; disease pandemics; events arising from local or larger scale political or social matters, including terrorist acts; and, as described below, cyber attacks or other information security incidents. Furthermore, enhancements and upgrades to our infrastructure or operating systems may be time-consuming, entail significant costs, and create risks associated with implementing new systems and integrating them with existing ones. Due to the complexity and interconnectedness of our systems, the process of enhancing our infrastructure and operating systems, including their security measures and controls, can itself create a risk of system disruptions and security issues. Similarly, we may not be able to timely recover critical business processes or operations that have been disrupted, which may further increase any associated costs and consequences of such disruptions. Although we have business continuity plans and other safeguards in place to help provide operational resiliency, our business operations may be adversely affected by significant and widespread disruption to our physical infrastructure or operating systems that support our businesses and customers. For example, on February 7, 2019, we experienced system issues caused by an automatic power shutdown at one of our main data center facilities. Although applications and related workloads were systematically re-routed to back-up data centers throughout the day, certain of our services, including our online and mobile banking systems, certain mortgage origination systems, and certain ATM functions, experienced disruptions that delayed service to our customers.

As a result of financial institutions and technology systems becoming more interconnected and complex, any operational incident at a third party may increase the risk of loss or material impact to us or the financial industry as a whole. Furthermore, third parties on which we rely, including those that facilitate our business activities or to which we outsource operations, such as exchanges, clearing houses, financial intermediaries or vendors that provide services or security solutions for our operations, could continue to be sources of operational risk to us, including from information breaches or loss, breakdowns, disruptions or failures of their own systems or infrastructure, or any deficiencies in the performance of their responsibilities. These risks are heightened to the extent we rely on a single third party or on third parties in a single geographic area. We are also exposed to the risk that a disruption or other operational incident at a common service provider to our third parties could impede their ability to provide services or perform their responsibilities for us. In addition, we must meet regulatory requirements and expectations regarding our use of third-party service providers, and any failure by our third-party service providers to meet their obligations to us or to comply with applicable laws, rules, regulations, or Wells Fargo policies could result in fines, penalties, restrictions on our business, or other negative consequences.

Disruptions or failures in the physical infrastructure, controls or operating systems that support our businesses and customers, failures of the third parties on which we rely to adequately or appropriately provide their services or perform their responsibilities, or our failure to effectively manage or oversee our third-party relationships, could result in business disruptions, loss of revenue or customers, legal or regulatory proceedings, compliance and other costs, violations of applicable privacy and other laws, reputational damage, or other adverse

consequences, any of which could materially adversely affect our results of operations or financial condition.

A cyber attack or other information security incident could have a material adverse effect on our results of operations, financial condition, or reputation. Information security risks for large financial institutions such as Wells Fargo have generally increased in recent years in part because of the proliferation of new technologies, the use of the internet, mobile devices, and cloud technologies to conduct financial transactions, the increase in remote work arrangements, and the increased sophistication and activities of organized crime, hackers, terrorists, activists, and other external parties, including foreign state-sponsored parties. Those parties also may continue to attempt to misrepresent personal or financial information to commit fraud, obtain loans or other financial products from us, or attempt to fraudulently induce employees, customers, or other users of our systems to disclose confidential, proprietary, or other information to gain access to our data or that of our customers. Geopolitical matters, such as the conflict in Ukraine, may also elevate the risk of an information security threat, particularly by foreign state-sponsored parties or their supporters. As noted above, our operations rely on the secure processing, transmission and storage of confidential, proprietary, and other information in our computer systems and networks. Our banking, brokerage, investment advisory, and capital markets businesses rely on our digital technologies, computer and email systems, software, hardware, and networks to conduct their operations. In addition, to access our products and services, our customers may use personal smartphones, tablets, and other mobile devices that are beyond our control systems. Our technologies, systems, software, networks, and our customers' devices continue to be the target of cyber attacks or other information security threats, which could materially adversely affect us, including as a result of fraudulent activity, the unauthorized release, gathering, monitoring, misuse, loss or destruction of Wells Fargo's or our customers' confidential, proprietary and other information, or the disruption of Wells Fargo's or our customers' or other third parties' business operations. For example, various retailers have reported they were victims of cyber attacks in which large amounts of their customers' data, including debit and credit card information, was obtained. In these situations, we generally incur costs to replace compromised cards and address fraudulent transaction activity affecting our customers. We are also exposed to the risk that an employee or other person acting on behalf of the Company fails to comply with applicable policies and procedures and inappropriately circumvents information security controls for personal gain or other improper purposes.

Due to the increasing interconnectedness and complexity of financial institutions and technology systems, an information security incident at a third party or a third party's downstream service providers may increase the risk of loss or material impact to us or the financial industry as a whole. In addition, third parties (including their downstream service providers) on which we rely, including those that facilitate our business activities or to which we outsource operations, such as internet, mobile technology, hardware, software, and cloud service providers, continue to be sources of information security risk to us. We could suffer material harm, including business disruptions, losses or remediation costs, reputational damage, legal or regulatory proceedings, or other adverse consequences as a result of the failure of those third parties to adequately or appropriately safeguard their technologies, systems, networks, hardware, and software, or as a result of our or our customers' data being

compromised due to information security incidents affecting those third parties.

Our risk and exposure to information security threats remains heightened because of, among other things, the persistent and evolving nature of these threats, the prominent size and scale of Wells Fargo and its role in the financial services industry, our plans to continue to implement our digital and mobile banking channel strategies and develop additional remote connectivity solutions to serve our customers when and how they want to be served, our geographic footprint and international presence, the outsourcing of some of our business operations, and the current global economic and political environment. For example, Wells Fargo and other financial institutions, as well as our third-party service providers, continue to be the target of various evolving and adaptive information security threats, including cyber attacks, malware, ransomware, other malicious software intended to exploit hardware or software vulnerabilities, phishing, credential validation, and distributed denial-of-service, in an effort to disrupt the operations of financial institutions, test their cybersecurity capabilities, commit fraud, or obtain confidential, proprietary or other information. Cyber attacks have also focused on targeting online applications and services, such as online banking, as well as cloud-based and other products and services provided by third parties, and have targeted the infrastructure of the internet, causing the widespread unavailability of websites and degrading website performance. As a result, information security and the continued development and enhancement of our controls, processes and systems designed to protect our networks, computers, software and data from attack, damage or unauthorized access remain a priority for Wells Fargo. We are also proactively involved in industry cybersecurity efforts and working with other parties, including our third-party service providers and governmental agencies, to continue to enhance defenses and improve resiliency to information security threats. As these threats continue to evolve, we expect to continue to be required to expend significant resources to develop and enhance our protective measures or to investigate and remediate any information security vulnerabilities or incidents. Because the investigation of any information security breach is inherently unpredictable and would require time to complete, we may not be able to immediately address the consequences of a breach, which may further increase any associated costs and consequences. Moreover, to the extent our insurance covers aspects of information security risk, such insurance may not be sufficient to cover all liabilities or losses associated with an information security breach.

Cyber attacks or other information security incidents affecting us or third parties (including their downstream service providers) on which we rely, including those that facilitate our business activities or to which we outsource operations, or affecting the networks, systems or devices that our customers use to access our products and services, could result in business disruptions, loss of revenue or customers, legal or regulatory proceedings, compliance, remediation and other costs, violations of applicable privacy and other laws, reputational damage, or other adverse consequences, any of which could materially adversely affect our results of operations or financial condition.

Our framework for managing risks may not be fully effective in mitigating risk and loss to us. Our risk management framework seeks to mitigate risk and loss to us. We have established processes and procedures intended to identify, measure, monitor, report and analyze the types of risk to which we are subject, including liquidity risk, credit risk, market risk, interest

Risk Factors (continued)

rate risk, operational risk, legal and compliance risk, and reputational risk, among others. However, as with any risk management framework, there are inherent limitations to our risk management strategies as there may exist, or develop in the future, risks that we have not appropriately anticipated, identified or managed. Our risk management framework is also dependent on ensuring that effective operational controls and a sound culture exist throughout the Company. The inability to develop effective operational controls or to foster the appropriate culture in each of our lines of business, including the inability to align performance management and compensation to achieve the desired culture, could adversely impact the effectiveness of our risk management framework. Similarly, if we are unable to effectively manage our business or operations, we may be exposed to increased risks or unexpected losses. We process a large number of transactions each day and are exposed to risks or losses if we do not accurately or completely execute a process or transaction, whether due to human error or otherwise; if we are unable to detect and prevent fraudulent activity; or if an employee or third-party service provider fails to comply with applicable policies and procedures, inappropriately circumvents controls, or engages in other misconduct.

In certain instances, we rely on models to measure, monitor and predict risks, such as market, interest rate, liquidity and credit risks, as well as to help inform business decisions; however, there is no assurance that these models will appropriately or sufficiently capture all relevant risks or accurately predict future events or exposures. Furthermore, certain of our models are subject to regulatory review and approval, and any failure to meet regulatory standards or expectations could result in fines, penalties, restrictions on our ability to engage in certain business activities, or other adverse consequences, and any required modifications or changes to these models can impact our capital ratios and requirements and result in increased operational and compliance costs. In addition, we rely on data to aggregate and assess our various risk exposures and business activities, and any issues with the quality or effectiveness of our data, including our aggregation, management, and validation procedures, could result in ineffective risk management practices, business decisions or customer service, inefficient use of resources, or inaccurate regulatory or other risk reporting. We also use artificial intelligence to help further inform or automate our business decisions and risk management practices, but there is no assurance that artificial intelligence will appropriately or sufficiently replicate certain outcomes or human assessment or accurately predict future events or exposures. Previous financial and credit crises and resulting regulatory reforms highlighted both the importance and some of the limitations of managing unanticipated risks, and our regulators remain focused on ensuring that financial institutions, and Wells Fargo in particular, build and maintain robust risk management policies and practices. If our risk management framework proves ineffective, we could suffer unexpected losses which could materially adversely affect our results of operations or financial condition.

We may be exposed to additional legal or regulatory proceedings, costs, and other adverse consequences related to retail sales practices and instances where customers may have experienced financial harm. Various government entities and offices have undertaken formal or informal inquiries or investigations arising out of certain retail sales practices of the Company that were the subject of settlements with the CFPB, the OCC, and the Office of the Los Angeles City Attorney announced by the Company on September 8, 2016, and various non-governmental parties filed lawsuits against us seeking

damages or other remedies related to these retail sales practices. The Company has entered into various settlements to resolve these investigations and proceedings, as a result of which we have incurred monetary penalties, costs, and business restrictions. If we are unable to meet any ongoing obligations under these settlements, we may incur additional monetary or other penalties or be required to make admissions of wrongdoing and comply with other conditions, which can lead to restrictions on our ability to engage in certain business activities or offer certain products or services, limitations on our ability to access capital markets, limitations on capital distributions, the loss of customers, and/or other adverse consequences. Any inability to meet our ongoing obligations under these settlements, depending on the sanctions and remedy sought and granted, could materially adversely affect our results of operations and financial condition. In addition, negative publicity or public opinion resulting from these matters may increase the risk of reputational harm to our business, which can impact our ability to keep and attract customers, affect our ability to attract and retain qualified employees, result in the loss of revenue, or have other material adverse effects on our results of operations and financial condition.

Furthermore, we have identified and may in the future identify areas or instances where customers may have experienced financial harm, including as a result of our continuing efforts to strengthen our risk and control infrastructure. For example, we have identified certain issues related to past practices involving certain automobile collateral protection insurance policies and certain issues related to the unused portion of guaranteed automobile protection waiver or insurance agreements. The identification of such areas or instances where customers may have experienced financial harm could lead to, and in some cases has already resulted in, additional remediation costs, loss of revenue or customers, legal or regulatory proceedings, compliance and other costs, reputational damage, or other adverse consequences.

For additional information, see the “Overview – Retail Sales Practices Matters” and “Overview – Customer Remediation Activities” sections and Note 13 (Legal Actions) to Financial Statements in this Report.

We may incur fines, penalties and other negative consequences from regulatory violations or from any failure to meet regulatory standards or expectations. We maintain systems and procedures designed to ensure that we comply with applicable laws and regulations. However, we are subject to heightened compliance and regulatory oversight and expectations, particularly due to the evolving and increasingly complex regulatory landscape we operate in. We are also subject to consent orders and other regulatory actions that subject us to various conditions and restrictions. In addition, a single event or issue may give rise to numerous and overlapping investigations and proceedings, either by multiple federal and state agencies in the U.S. or by multiple regulators and other governmental entities in different jurisdictions. Similarly, regulators may be more likely to pursue investigations or proceedings against us to the extent that we are or have previously been subject to other regulatory actions. Also, the laws and regulations in jurisdictions in which we operate may be different or even conflict with each other, such as differences between U.S. federal and state law or differences between U.S. and non-U.S. laws as to the products and services we may offer or other business activities we may engage in, which can lead to compliance difficulties or issues. Furthermore, many legal and regulatory regimes require us to report transactions and other information to regulators and

other governmental authorities, self-regulatory organizations, exchanges, clearing houses and customers. We may be subject to fines, penalties, restrictions on our business, or other negative consequences if we do not timely, completely, or accurately provide regulatory reports, customer notices or disclosures. Moreover, some legal/regulatory frameworks provide for the imposition of fines or penalties for noncompliance even though the noncompliance was inadvertent or unintentional and even though there were systems and procedures in place at the time designed to ensure compliance. For example, we are subject to regulations issued by the Office of Foreign Assets Control (OFAC) that prohibit financial institutions from participating in the transfer of property belonging to the governments of certain non-U.S. countries and designated nationals of those countries. OFAC may impose penalties or restrictions on certain activities for inadvertent or unintentional violations even if reasonable processes are in place to prevent the violations. Any violation of these or other applicable laws or regulatory requirements, even if inadvertent or unintentional, or any failure to meet regulatory standards or expectations, including any failure to satisfy the conditions of any consent orders or other regulatory actions, could result in significant fees, penalties, restrictions on our ability to engage in certain business activities, reputational harm, loss of customers, or other negative consequences.

Reputational harm, including as a result of our actual or alleged conduct or public opinion of the financial services industry generally, could adversely affect our business, results of operations, and financial condition.

Reputation risk, or the risk to our business, earnings and capital from negative public opinion, is inherent in our business and has increased substantially because of our size and profile in the financial services industry, sales practices related matters, and instances where customers may have experienced financial harm. Negative public opinion about the financial services industry generally or Wells Fargo specifically could adversely affect our reputation and our ability to keep and attract customers. Negative public opinion could result from our actual or alleged conduct in any number of activities, including sales practices; mortgage, auto or other consumer lending practices; loan origination or servicing activities; mortgage foreclosure actions; management of client accounts or investments; lending, investing or other business relationships; identification and management of potential conflicts of interest from transactions, obligations and interests with and among our customers; environmental, social and governance practices; regulatory compliance; risk management; incentive compensation practices; and disclosure, sharing or inadequate protection or improper use of customer information, and from actions taken by government regulators and community or other organizations in response to that conduct. Although we have policies and procedures in place intended to detect and prevent conduct by employees and third-party service providers that could potentially harm customers or our reputation, there is no assurance that such policies and procedures will be fully effective in preventing such conduct. Furthermore, our actual or perceived failure to address or prevent any such conduct or otherwise to effectively manage our business or operations could result in significant reputational harm. In addition, because we conduct most of our businesses under the “Wells Fargo” brand, negative public opinion about one business also could affect our other businesses. Moreover, actions by the financial services industry generally or by certain members or individuals in the industry also can adversely affect our reputation. The proliferation of social media websites utilized by Wells Fargo and other third parties, as well as the personal use

of social media by our employees and others, including personal blogs and social network profiles, also may increase the risk that negative, inappropriate or unauthorized information may be posted or released publicly that could harm our reputation or have other negative consequences, including as a result of our employees interacting with our customers in an unauthorized manner in various social media outlets.

Wells Fargo and other financial institutions have been targeted from time to time by protests and demonstrations, which have included disrupting the operation of our retail banking locations, and have been subject to negative public commentary, including with respect to the fees charged for various products and services. Wells Fargo and other financial institutions have also been subject to negative publicity as a result of providing or reducing financial services to or making investments in industries or organizations subject to stakeholder concerns. There can be no assurance that continued protests or negative public opinion of the Company specifically or large financial institutions generally will not harm our reputation and adversely affect our business, results of operations, and financial condition.

If we are unable to develop and execute effective business plans or strategies or manage change effectively, our competitive standing and results of operations could suffer.

In order to advance our business goals, we may undertake business plans or strategies related to, among other things, our organizational structure, our compliance and risk management framework, our expenses and efficiency, the types of products and services we offer, the types of businesses we engage in, the geographies in which we operate, the manner in which we serve our clients and customers, the third parties with which we do business, and the methods and distribution channels by which we offer our products and services. Accomplishing these business plans or strategies may be complex, time intensive, require significant financial, technological, management and other resources, may divert management attention and resources away from other areas of the Company, and may impact our expenses and ability to generate revenue. There is no guarantee that any business plans or strategies, including our current efficiency initiatives, will ultimately be successful. To the extent we are unable to develop or execute effective business plans or strategies or manage change effectively, our competitive position, reputation, prospects for growth, and results of operations may be adversely affected.

In addition, from time to time, we may decide to divest certain businesses or assets. Difficulties in executing a divestiture may cause us not to realize any expected cost savings or other benefits from the divestiture, or may result in higher than expected losses of employees or harm our ability to retain customers. The divestiture or winding down of certain businesses or assets may also result in the impairment of goodwill or other long-lived assets related to those businesses or assets.

Similarly, we may explore opportunities to expand our products, services, and assets through strategic acquisitions of companies or businesses in the financial services industry. We generally must receive federal regulatory approvals before we can acquire a bank, bank holding company, or certain other financial services businesses. We cannot be certain when or if, or on what terms and conditions, any required regulatory approvals will be granted. We might be required to sell banks, branches and/or business units or assets or issue additional equity as a condition to receiving regulatory approval for an acquisition. When we do announce an acquisition, our stock price may fall depending on the size of the acquisition, the type of business to

Risk Factors (continued)

be acquired, the purchase price, and the potential dilution to existing stockholders or our earnings per share if we issue common stock in connection with the acquisition. Furthermore, difficulty in integrating an acquired company or business may cause us not to realize expected revenue increases, cost savings, increases in geographic or product presence, and other projected benefits from the acquisition. The integration could result in higher than expected deposit attrition, loss of key employees, an increase in our compliance costs or risk profile, disruption of our business or the acquired business, or otherwise harm our ability to retain customers and employees or achieve the anticipated benefits of the acquisition. Time and resources spent on integration may also impair our ability to grow our existing businesses. Many of the foregoing risks may be increased if the acquired company or business operates internationally or in a geographic location where we do not already have significant business operations and/or employees.

Our operations and business could be adversely affected by the impacts of climate change.

The physical effects of climate change, including the increased prevalence and severity of extreme weather events and natural disasters, such as hurricanes, droughts, and wildfires, could damage or interfere with our operations or those of our third-party service providers, which could disrupt our business, increase our costs, or cause losses. Climate change related impacts could also negatively affect the financial condition of our customers, increase the credit risk associated with those customers, or result in the deterioration of the value of the collateral we hold. In addition, changes in consumer behavior or other market conditions on account of climate considerations or due to the transition to a low carbon economy may adversely affect customers in certain industries, sectors or geographies, which may increase our credit risk and reduce the demand by these customers for our products and services. Furthermore, the transition to a low carbon economy could affect our business practices or result in additional costs or other adverse consequences to our business operations. Legislation and/or regulation in connection with climate change, as well as stakeholder perceptions and expectations related to climate change and its impacts, could require us to change certain of our business and/or risk management practices, impose additional costs on us, or otherwise adversely affect our operations and business. Moreover, our reputation may be damaged as a result of our response to climate change or our strategy for the transition to a low carbon economy, including if we are unable or perceived to be unable to achieve our objectives or if our response is disliked, disfavored, or perceived to be ineffective or insufficient. For additional information on regulatory developments in response to climate change, see the “Regulatory Matters” section in this Report.

We are exposed to potential financial loss or other adverse consequences from legal actions.

Wells Fargo and some of its subsidiaries are involved in judicial, regulatory, governmental, arbitration, and other proceedings or investigations concerning matters arising from the conduct of our business activities, and many of those proceedings and investigations expose Wells Fargo to potential financial loss or other adverse consequences. There can be no assurance as to the ultimate outcome of any of these legal actions. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. We may still incur costs for a legal action even if we have not established an accrual. In addition, the actual cost of resolving a

legal action may be substantially higher than any amounts accrued for that action. The ultimate resolution of a pending legal proceeding or investigation, depending on the remedy sought and granted, could materially adversely affect our results of operations and financial condition.

As noted above, we are subject to heightened regulatory oversight and scrutiny, which may lead to regulatory investigations, proceedings or enforcement actions. In addition to imposing potentially significant monetary penalties, business restrictions, and other sanctions, regulatory authorities may require criminal pleas or other admissions of wrongdoing and compliance with other conditions in connection with settling such matters, which can lead to reputational harm, loss of customers, restrictions on the ability to access capital markets, limitations on capital distributions, the inability to engage in certain business activities or offer certain products or services, and/or other direct and indirect adverse effects.

For additional information, see Note 13 (Legal Actions) to Financial Statements in this Report.

MORTGAGE BUSINESS RISKS

Our mortgage banking revenue can be volatile from quarter to quarter, including from the impact of changes in interest rates, and we rely on the GSEs to purchase our conforming loans to reduce our credit risk and provide liquidity to fund new mortgage loans.

We earn revenue from fees we receive for originating mortgage loans and for servicing mortgage loans. Changes in interest rates can affect these fees, as well as the fair value of our MSR. When rates rise, the demand for mortgage loans usually tends to fall, reducing the revenue we receive from loan originations. Under the same conditions, revenue from our MSR can increase due to a decline in the likelihood of prepayments, which increases the fair value of our MSR. When rates fall, mortgage originations usually tend to increase and the value of our MSR usually tends to decline, also with some offsetting revenue effect. Even though they can act as a “natural hedge,” the hedge is not perfect, either in amount or timing.

We typically use derivatives and other instruments to hedge our mortgage banking interest rate risk. We may not hedge all of our risk, and we may not be successful in hedging any of the risk. Hedging is not a perfect science, and we could incur significant losses from our hedging activities.

We rely on the GSEs to purchase mortgage loans that meet their conforming loan requirements and on government insuring agencies, such as the Federal Housing Administration (FHA) and the Department of Veterans Affairs (VA), to insure or guarantee loans that meet their policy requirements. If the GSEs or government insuring agencies were to limit or reduce their purchasing, insuring or guaranteeing of loans, our ability to fund, and thus originate, new mortgage loans, could be reduced. We cannot assure that the GSEs or government insuring agencies will not materially limit their purchases, insuring or guaranteeing of conforming loans or change their criteria for what constitutes a conforming loan (e.g., maximum loan amount or borrower eligibility). As noted above, there are various proposals to reform the housing finance market in the U.S., including the role of the GSEs in the housing finance market. The impact of any such regulatory reform regarding the housing finance market and the GSEs, as well as any effect on the Company’s business and financial results, are uncertain. In addition, to meet customer needs, we also originate loans that do not conform to either the GSEs’ or government insuring agencies’ standards, which are generally retained on our balance sheet and therefore do not generate sale proceeds that could be used to originate new loans.

For additional information, see the “Risk Management – Asset/Liability Management – Mortgage Banking Interest Rate and Market Risk,” “Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights (MSRs)” and “Critical Accounting Policies – Fair Value of Financial Instruments” sections in this Report.

We may suffer losses, penalties, or other adverse consequences if we fail to satisfy our obligations with respect to the residential mortgage loans we originate or service. For residential mortgage loans that we originate, we could become subject to monetary damages and other civil penalties, including the loss of certain contractual payments or the inability to exercise certain remedies under the loans such as foreclosure proceedings, if it is alleged or determined that the loans were not originated in accordance with applicable laws or regulations.

Additionally, for residential mortgage loans that we originate and sell, we may be required to repurchase the loans or indemnify or reimburse the securitization trust, investor or insurer for credit losses incurred on loans in the event of a breach of contractual representations or warranties in the agreements under which we sell the loans or in the insurance or guaranty agreements that we enter into with the FHA and VA. We establish a mortgage repurchase liability that reflects management’s estimate of losses for loans for which we have a repurchase obligation. Because the level of the liability depends on economic factors and other external conditions, the level of the liability is difficult to estimate, requires considerable management judgment, and is subject to change. If economic conditions or the housing market worsen, we could have increased repurchase obligations and increased loss severity on repurchases, requiring significant additions to the repurchase liability.

Furthermore, if we fail to satisfy our servicing obligations for the mortgage loans we service, we may be terminated as servicer or master servicer, required to indemnify the securitization trustee against losses, and/or contractually obligated to repurchase a mortgage loan or reimburse investors for credit losses, any of which could significantly reduce our net servicing income.

We may also incur costs, liabilities to borrowers and/or securitization investors, legal proceedings, or other adverse consequences if we fail to meet our servicing obligations, including with respect to mortgage foreclosure actions or if we experience delays in the foreclosure process. Our net servicing income and the fair value of our MSRs may be negatively affected to the extent our servicing costs increase because of higher foreclosure or other servicing related costs. In addition, we may continue to be subject to fines, business restrictions, and other sanctions imposed by federal or state regulators as a result of actual or perceived deficiencies in our mortgage servicing practices, including with respect to our foreclosure practices, our loss mitigation activities such as loan modifications or forbearances, or our servicing of flood zone properties. Any of these actions may harm our reputation, negatively affect our residential mortgage origination or servicing business, or result in material fines, penalties, equitable remedies, or other enforcement actions. We may also face risks, including regulatory, compliance, and market risks, as we pursue our previously announced plans to reduce the amount of residential mortgage loans we service.

For additional information, see the “Overview,” “Risk Management – Credit Risk Management – Mortgage Banking Activities,” and “Critical Accounting Policies – Valuation of Residential Mortgage Servicing Rights” sections and Note 13

(Legal Actions) and Note 18 (Pledged Assets and Collateral) to Financial Statements in this Report.

COMPETITIVE RISKS

We face significant and increasing competition in the rapidly evolving financial services industry. We compete with other financial institutions in a highly competitive industry that is undergoing significant changes as a result of financial regulatory reform, technological advances, increased public scrutiny, and current economic conditions. Our success depends on, among other things, our ability to develop and maintain deep and enduring relationships with our customers based on the quality of our customer service, the wide variety of products and services that we can offer our customers and the ability of those products and services to satisfy our customers’ needs and preferences, the pricing of our products and services, the extensive distribution channels available for our customers, our innovation, and our reputation. Continued or increased competition in any one or all of these areas may negatively affect our customer relationships, market share and results of operations and/or cause us to increase our capital investment in our businesses in order to remain competitive. In addition, our ability to reposition or reprice our products and services from time to time may be limited and could be influenced significantly by the current economic, regulatory and political environment for large financial institutions as well as by the actions of our competitors. Furthermore, any changes in the types of products and services that we offer our customers and/or the pricing for those products and services could result in a loss of customer relationships and market share and could materially adversely affect our results of operations.

Continued technological advances and the growth of e-commerce have made it possible for non-depository institutions to offer products and services that traditionally were banking products, and for financial institutions and other companies to provide electronic and internet-based financial solutions, including electronic securities trading, lending and payment solutions. In addition, technological advances, including digital currencies and alternative payment methods, may diminish the importance of depository institutions and other financial intermediaries in the transfer of funds between parties. We may not respond effectively to these and other competitive threats from existing and new competitors and may be forced to sell products at lower prices, increase our investment in our business to modify or adapt our existing products and services, and/or develop new products and services to respond to our customers’ needs and preferences. To the extent we are not successful in developing and introducing new products and services or responding or adapting to the competitive landscape or to changes in customer preferences, we may lose customer relationships and our revenue growth and results of operations may be materially adversely affected.

Our ability to attract and retain qualified employees is critical to the success of our business and failure to do so could adversely affect our business performance, competitive position and future prospects. The success of Wells Fargo is heavily dependent on the talents and efforts of our employees, including our senior leaders, and in many areas of our business, including commercial banking, brokerage, investment advisory, capital markets, risk management and technology, the competition for highly qualified personnel is intense. We also seek to retain a pipeline of employees to provide continuity of succession for our senior leadership positions. In order to attract

Risk Factors (continued)

and retain highly qualified employees, we must provide competitive compensation, benefits and work arrangements, effectively manage employee performance and development, and foster a diverse and inclusive environment. As a large financial institution and additionally to the extent we remain subject to consent orders we may be subject to limitations on compensation by our regulators that may adversely affect our ability to attract and retain these qualified employees, especially if some of our competitors may not be subject to these same compensation limitations. If we are unable to continue to attract and retain qualified employees, including successors for senior leadership positions, our business performance, competitive position and future prospects may be adversely affected.

FINANCIAL REPORTING RISKS

Changes in accounting standards, and changes in how accounting standards are interpreted or applied, could materially affect our financial results and condition. From time to time the FASB and the SEC update the financial accounting and reporting standards that govern the preparation of our external financial statements. In addition, accounting standard setters and those who interpret the accounting standards (such as the FASB, SEC, and banking regulators) may update their previous interpretations or positions on how these standards should be applied. Changes in financial accounting and reporting standards and changes in current interpretations may be beyond our control, can be hard to predict, and could materially affect our financial results and condition, including requiring a retrospective restatement of prior period financial statements. Similarly, any change in our accounting policies could also materially affect our financial statements. For additional information, see the “Current Accounting Developments” section in this Report.

Our financial statements require certain assumptions and estimates and rely on the effectiveness of our internal control over financial reporting. Pursuant to U.S. GAAP, we are required to use certain assumptions and estimates in preparing our financial statements, including, among other items, in determining the allowance for credit losses, the liability for contingent litigation losses, and the fair value of certain assets and liabilities such as debt securities, loans held for sale, MSRs, derivative assets and liabilities, and equity securities. Several of our accounting policies are critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. If the assumptions or estimates underlying our financial results are incorrect or different from actual results, we could experience unexpected losses or other adverse impacts, some of which could be significant. For a description of our critical accounting policies, see the “Critical Accounting Policies” section in this Report.

The Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley) requires our management to evaluate the Company’s disclosure controls and procedures and its internal control over financial reporting and requires our auditors to issue a report on our internal control over financial reporting. We are required to disclose, in our annual report on Form 10-K, the existence of any “material weaknesses” in our internal controls. We cannot assure that we will not identify one or more material weaknesses as of the end of any given quarter or year, nor can we predict the effect on our reputation or stock price of disclosure of a material weakness. We could also be required to devote significant resources to remediate any material weakness. In addition, our customers may rely on the effectiveness of certain of our operational and internal controls as a service provider, and any deficiency in those controls could affect our customers and damage our reputation or business. Sarbanes-Oxley also limits the types of non-audit services our outside auditors may provide to us in order to preserve their independence from us. If our auditors were found not to be independent of us, we could be required to engage new auditors and re-file financial statements and audit reports with the SEC. We could be out of compliance with SEC rules until new financial statements and audit reports were filed, limiting our ability to raise capital and resulting in other adverse consequences.

* * *

Any factor described in this Report or in any of our other SEC filings could by itself, or together with other factors, adversely affect our financial results and condition. Refer to our quarterly reports on Form 10-Q filed with the SEC in 2023 for material changes to the above discussion of risk factors. There are factors not discussed above or elsewhere in this Report that could adversely affect our financial results and condition.

Controls and Procedures

Disclosure Controls and Procedures

The Company's management evaluated the effectiveness, as of December 31, 2022, of the Company's disclosure controls and procedures. The Company's chief executive officer and chief financial officer participated in the evaluation. Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2022.

Internal Control Over Financial Reporting

Internal control over financial reporting is defined in Rule 13a-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles (GAAP) and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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. No change occurred during fourth quarter 2022 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. Management's report on internal control over financial reporting is set forth below and should be read with these limitations in mind.

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control – Integrated Framework (2013)*. Based on this assessment, management concluded that as of December 31, 2022, the Company's internal control over financial reporting was effective.

KPMG LLP, the independent registered public accounting firm that audited the Company's financial statements included in this Annual Report, issued an audit report on the Company's internal control over financial reporting. KPMG's audit report appears on the following page.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Wells Fargo & Company:

Opinion on Internal Control Over Financial Reporting

We have audited Wells Fargo & Company and subsidiaries (the Company) internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company as of December 31, 2022 and 2021, the related consolidated statement of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements), and our report dated February 21, 2023 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

KPMG LLP

Charlotte, North Carolina
February 21, 2023

Financial Statements

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Income

(in millions, except per share amounts)	Year ended December 31,		
	2022	2021	2020
Interest income			
Debt securities	\$ 11,781	9,253	11,234
Loans held for sale	513	865	947
Loans	37,715	28,634	34,230
Equity securities	707	608	554
Other interest income	3,308	334	954
Total interest income	54,024	39,694	47,919
Interest expense			
Deposits	2,349	388	2,804
Short-term borrowings	582	(41)	250
Long-term debt	5,505	3,173	4,471
Other interest expense	638	395	438
Total interest expense	9,074	3,915	7,963
Net interest income	44,950	35,779	39,956
Noninterest income			
Deposit and lending-related fees	6,713	6,920	6,602
Investment advisory and other asset-based fees	9,004	11,011	9,863
Commissions and brokerage services fees	2,242	2,299	2,384
Investment banking fees	1,439	2,354	1,865
Card fees	4,355	4,175	3,544
Mortgage banking	1,383	4,956	3,493
Net gains from trading and securities	1,461	7,264	2,710
Other	2,238	3,734	3,847
Total noninterest income	28,835	42,713	34,308
Total revenue	73,785	78,492	74,264
Provision for credit losses	1,534	(4,155)	14,129
Noninterest expense			
Personnel	34,340	35,541	34,811
Technology, telecommunications and equipment	3,375	3,227	3,099
Occupancy	2,881	2,968	3,263
Operating losses	6,984	1,568	3,523
Professional and outside services	5,188	5,723	6,706
Advertising and promotion	505	600	600
Restructuring charges	5	76	1,499
Other	4,004	4,128	4,129
Total noninterest expense	57,282	53,831	57,630
Income before income tax expense	14,969	28,816	2,505
Income tax expense (benefit)	2,087	5,578	(1,157)
Net income before noncontrolling interests	12,882	23,238	3,662
Less: Net income (loss) from noncontrolling interests	(300)	1,690	285
Wells Fargo net income	\$ 13,182	21,548	3,377
Less: Preferred stock dividends and other	1,115	1,292	1,591
Wells Fargo net income applicable to common stock	\$ 12,067	20,256	1,786
Per share information			
Earnings per common share	\$ 3.17	4.99	0.43
Diluted earnings per common share	3.14	4.95	0.43
Average common shares outstanding	3,805.2	4,061.9	4,118.0
Diluted average common shares outstanding	3,837.0	4,096.2	4,134.2

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Comprehensive Income

(in millions)	Year ended December 31,		
	2022	2021	2020
Net income before noncontrolling interests	\$ 12,882	23,238	3,662
Other comprehensive income (loss), after tax:			
Net change in debt securities	(10,500)	(2,375)	1,487
Net change in derivatives and hedging activities	(1,090)	159	149
Defined benefit plans adjustments	154	349	(181)
Other	(241)	(30)	50
Other comprehensive income (loss), after tax	(11,677)	(1,897)	1,505
Total comprehensive income before noncontrolling interests	1,205	21,341	5,167
Less: Other comprehensive income (loss) from noncontrolling interests	2	(1)	—
Less: Net income (loss) from noncontrolling interests	(300)	1,690	285
Wells Fargo comprehensive income	\$ 1,503	19,652	4,882

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Balance Sheet

(in millions, except shares)	Dec 31, 2022	Dec 31, 2021
Assets		
Cash and due from banks	\$ 34,596	24,616
Interest-earning deposits with banks	124,561	209,614
Total cash, cash equivalents, and restricted cash	159,157	234,230
Federal funds sold and securities purchased under resale agreements	68,036	66,223
Debt securities:		
Trading, at fair value (includes assets pledged as collateral of \$26,932 and \$13,304)	86,155	88,265
Available-for-sale, at fair value (amortized cost of \$121,725 and \$175,463, net of allowance for credit losses)	113,594	177,244
Held-to-maturity, at amortized cost, net of allowance for credit losses (fair value \$255,521 and \$272,386)	297,059	272,022
Loans held for sale (includes \$4,220 and \$15,895 carried at fair value)	7,104	23,617
Loans	955,871	895,394
Allowance for loan losses	(12,985)	(12,490)
Net loans	942,886	882,904
Mortgage servicing rights (includes \$9,310 and \$6,920 carried at fair value)	10,480	8,189
Premises and equipment, net	8,350	8,571
Goodwill	25,173	25,180
Derivative assets	22,774	21,478
Equity securities (includes \$28,383 and \$39,098 carried at fair value; and assets pledged as collateral of \$747 and \$984)	64,414	72,886
Other assets	75,834	67,259
Total assets (1)	\$ 1,881,016	1,948,068
Liabilities		
Noninterest-bearing deposits	\$ 458,010	527,748
Interest-bearing deposits	925,975	954,731
Total deposits	1,383,985	1,482,479
Short-term borrowings (includes \$181 and \$0 carried at fair value)	51,145	34,409
Derivative liabilities	20,085	9,424
Accrued expenses and other liabilities (includes \$20,123 and \$20,685 carried at fair value)	69,056	70,957
Long-term debt (includes \$1,346 and \$0 carried at fair value)	174,870	160,689
Total liabilities (2)	1,699,141	1,757,958
Equity		
Wells Fargo stockholders' equity:		
Preferred stock – aggregate liquidation preference of \$20,216 and \$20,825	19,448	20,057
Common stock – \$1-2/3 par value, authorized 9,000,000,000 shares; issued 5,481,811,474 shares	9,136	9,136
Additional paid-in capital	60,319	60,196
Retained earnings	187,649	180,322
Accumulated other comprehensive loss	(13,381)	(1,702)
Treasury stock, at cost – 1,648,007,022 shares and 1,596,009,977 shares	(82,853)	(79,757)
Unearned ESOP shares	(429)	(646)
Total Wells Fargo stockholders' equity	179,889	187,606
Noncontrolling interests	1,986	2,504
Total equity	181,875	190,110
Total liabilities and equity	\$ 1,881,016	1,948,068

- (1) Our consolidated assets at December 31, 2022 and 2021, include the following assets of certain variable interest entities (VIEs) that can only be used to settle the liabilities of those VIEs: Debt securities, \$71 million and \$71 million; Loans, \$4.8 billion and \$4.5 billion; All other assets, \$191 million and \$234 million; and Total assets, \$5.1 billion and \$4.8 billion, respectively.
- (2) Our consolidated liabilities at December 31, 2022 and 2021, include the following VIE liabilities for which the VIE creditors do not have recourse to Wells Fargo: Long-term debt, \$0 million and \$149 million; All other liabilities, \$201 million and \$259 million; and Total liabilities, \$201 million and \$408 million, respectively.

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Changes in Equity

(\$ and shares in millions)	Wells Fargo stockholders' equity										
	Preferred stock		Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Treasury stock	Unearned ESOP shares	Noncontrolling interests	Total equity
	Shares	Amount	Shares	Amount							
Balance December 31, 2019	7.5	\$ 21,549	4,134.4	\$ 9,136	61,049	166,415	(1,311)	(68,831)	(1,143)	838	187,702
Cumulative effect from change in accounting policies (1)						990					990
Balance January 1, 2020	7.5	21,549	4,134.4	9,136	61,049	167,405	(1,311)	(68,831)	(1,143)	838	188,692
Net income						3,377				285	3,662
Other comprehensive income, net of tax							1,505			—	1,505
Noncontrolling interests										(91)	(91)
Common stock issued			75.6		207	(1,449)		3,961			2,719
Common stock repurchased			(75.7)					(3,415)			(3,415)
Preferred stock issued	0.1	3,183			(67)						3,116
Preferred stock redeemed (2)	(1.9)	(3,347)			46	(301)					(3,602)
Preferred stock issued to ESOP	—	—			—						—
Preferred stock released by ESOP					(19)				268		249
Preferred stock converted to common shares	(0.2)	(249)	9.7		(243)			492			—
Common stock dividends					44	(5,059)					(5,015)
Preferred stock dividends						(1,290)					(1,290)
Stock-based compensation					643						643
Net change in deferred compensation and related plans					(1,463)			2			(1,461)
Net change	(2.0)	(413)	9.6	—	(852)	(4,722)	1,505	1,040	268	194	(2,980)
Balance December 31, 2020	5.5	\$ 21,136	4,144.0	\$ 9,136	60,197	162,683	194	(67,791)	(875)	1,032	185,712
Net income						21,548				1,690	23,238
Other comprehensive loss, net of tax							(1,896)			(1)	(1,897)
Noncontrolling interests										(217)	(217)
Common stock issued			43.8		(8)	(162)		2,265			2,095
Common stock repurchased			(306.4)					(14,464)			(14,464)
Preferred stock issued	0.2	5,810			(54)						5,756
Preferred stock redeemed (3)	(0.2)	(6,676)			87	(87)					(6,676)
Preferred stock issued to ESOP	—	—			—						—
Preferred stock released by ESOP					(16)				229		213
Preferred stock converted to common shares	(0.2)	(213)	4.4		(8)			221			—
Common stock dividends					29	(2,455)					(2,426)
Preferred stock dividends						(1,205)					(1,205)
Stock-based compensation					1,043						1,043
Net change in deferred compensation and related plans					(1,074)			12			(1,062)
Net change	(0.2)	(1,079)	(258.2)	—	(1)	17,639	(1,896)	(11,966)	229	1,472	4,398
Balance December 31, 2021	5.3	\$ 20,057	3,885.8	\$ 9,136	60,196	180,322	(1,702)	(79,757)	(646)	2,504	190,110

- (1) Effective January 1, 2020, we adopted ASU 2016-13 – Financial Instruments – Credit Losses (Topic 326): *Measurement of Credit Losses on Financial Instruments* (CECL). For additional information, see Note 1 (Summary of Significant Accounting Policies) in our Annual Report on Form 10-K for the year ended December 31, 2020.
- (2) Represents the impact of the redemption of the remaining preferred stock, Series K, in first quarter 2020, and Series T and Series V in fourth quarter 2020.
- (3) Represents the impact of the redemption of Preferred Stock, Series I, Series P and Series W, in first quarter 2021; Preferred Stock, Series N, in second quarter 2021; and Preferred Stock, Series O and Series X, in third quarter 2021.

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Changes in Equity

(\$ and shares in millions)	Wells Fargo stockholders' equity										
	Preferred stock		Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income (loss)	Treasury stock	Unearned ESOP shares	Noncontrolling interests	Total equity
	Shares	Amount	Shares	Amount							
Balance December 31, 2021	5.3	\$ 20,057	3,885.8	\$ 9,136	60,196	180,322	(1,702)	(79,757)	(646)	2,504	190,110
Net income (loss)						13,182				(300)	12,882
Other comprehensive income (loss), net of tax							(11,679)			2	(11,677)
Noncontrolling interests										(220)	(220)
Common stock issued			43.5		129	(497)		2,181			1,813
Common stock repurchased			(110.4)					(6,033)			(6,033)
Preferred stock issued	—	—			—						—
Preferred stock redeemed (1)	(0.6)	(609)			(37)	—			646		—
Common stock issued to ESOP (1)			14.9		(129)			747	(618)		—
Common stock released by ESOP (2)					(1)				189		188
Preferred stock converted to common shares	—	—	—		—			—			—
Common stock dividends					59	(4,243)					(4,184)
Preferred stock dividends						(1,115)					(1,115)
Stock-based compensation					1,002						1,002
Net change in deferred compensation and related plans					(900)			9			(891)
Net change	(0.6)	(609)	(52.0)	—	123	7,327	(11,679)	(3,096)	217	(518)	(8,235)
Balance December 31, 2022	4.7	\$ 19,448	3,833.8	\$ 9,136	60,319	187,649	(13,381)	(82,853)	(429)	1,986	181,875

(1) See Note 11 (Preferred Stock) for additional information.

(2) For additional information on our ESOP Plan, see the "Employee Stock Ownership Plan" section of Note 12 (Common Stock and Stock Plans).

The accompanying notes are an integral part of these statements.

Wells Fargo & Company and Subsidiaries

Consolidated Statement of Cash Flows

(in millions)	Year ended December 31,		
	2022	2021	2020
Cash flows from operating activities:			
Net income before noncontrolling interests	\$ 12,882	23,238	3,662
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	1,534	(4,155)	14,129
Changes in fair value of MSRs and LHFS carried at fair value	(1,326)	(1,188)	4,321
Depreciation, amortization and accretion	6,832	7,890	8,219
Deferred income tax expense (benefit)	1,075	(1,292)	(3,289)
Other, net	(14,524)	(12,194)	7,024
Originations and purchases of loans held for sale	(74,910)	(158,923)	(181,961)
Proceeds from sales of and paydowns on loans originally classified as held for sale	65,418	101,293	122,592
Net change in:			
Debt and equity securities, held for trading	31,579	19,334	43,214
Derivative assets and liabilities	7,856	(2,472)	(5,492)
Other assets	(9,137)	15,477	(12,304)
Other accrued expenses and liabilities	(231)	1,467	1,936
Net cash provided (used) by operating activities	27,048	(11,525)	2,051
Cash flows from investing activities:			
Net change in:			
Federal funds sold and securities purchased under resale agreements	(704)	(551)	36,468
Available-for-sale debt securities:			
Proceeds from sales	16,895	17,958	48,638
Paydowns and maturities	19,791	75,701	78,174
Purchases	(40,104)	(110,431)	(91,545)
Held-to-maturity debt securities:			
Paydowns and maturities	27,666	79,517	36,641
Purchases	(2,360)	(71,245)	(46,755)
Equity securities, not held for trading:			
Proceeds from sales and capital returns	4,326	4,933	12,187
Purchases	(6,984)	(7,680)	(8,677)
Loans:			
Loans originated by banking subsidiaries, net of principal collected	(74,861)	(28,809)	53,718
Proceeds from sales of loans originally classified as held for investment	12,446	31,847	9,359
Purchases of loans	(741)	(389)	(1,313)
Principal collected on nonbank entities' loans	5,173	8,985	7,927
Loans originated by nonbank entities	(3,824)	(11,237)	(13,052)
Other, net	805	3,782	784
Net cash provided (used) by investing activities	(42,476)	(7,619)	122,554
Cash flows from financing activities:			
Net change in:			
Deposits	(98,494)	78,582	81,755
Short-term borrowings	16,564	(24,590)	(45,513)
Long-term debt:			
Proceeds from issuance	53,737	1,275	38,136
Repayment	(19,587)	(47,134)	(65,347)
Preferred stock:			
Proceeds from issuance	—	5,756	3,116
Redeemed	—	(6,675)	(3,602)
Cash dividends paid	(1,115)	(1,205)	(1,290)
Common stock:			
Repurchased	(6,033)	(14,464)	(3,415)
Cash dividends paid	(4,178)	(2,422)	(4,852)
Other, net	(539)	(361)	(231)
Net cash used by financing activities	(59,645)	(11,238)	(1,243)
Net change in cash, cash equivalents, and restricted cash	(75,073)	(30,382)	123,362
Cash, cash equivalents, and restricted cash at beginning of period	234,230	264,612	141,250
Cash, cash equivalents, and restricted cash at end of period	\$ 159,157	234,230	264,612
Supplemental cash flow disclosures:			
Cash paid for interest	\$ 8,289	4,384	8,414
Cash paid for income taxes, net	3,376	3,166	1,175

The accompanying notes are an integral part of these statements. See Note 1 (Summary of Significant Accounting Policies) for noncash activities.

Notes to Financial Statements

-See the "Glossary of Acronyms" at the end of this Report for terms used throughout the Financial Statements and related Notes.

Note 1: Summary of Significant Accounting Policies

Wells Fargo & Company is a diversified financial services company. We provide banking, investment and mortgage products and services, as well as consumer and commercial finance, through banking locations and offices, the internet and other distribution channels to individuals, businesses and institutions in all 50 states, the District of Columbia, and in countries outside the U.S. When we refer to "Wells Fargo," "the Company," "we," "our" or "us," we mean Wells Fargo & Company and Subsidiaries (consolidated). Wells Fargo & Company (the Parent) is a financial holding company and a bank holding company. We also hold a majority interest in a real estate investment trust, which has publicly traded preferred stock outstanding.

Our accounting and reporting policies conform with U.S. generally accepted accounting principles (GAAP) and practices in the financial services industry. To prepare the financial statements in conformity with GAAP, management must make estimates based on assumptions about future economic and market conditions (for example, unemployment, market liquidity, real estate prices, etc.) that affect the reported amounts of assets and liabilities at the date of the financial statements, income and expenses during the reporting period and the related disclosures. Although our estimates contemplate current conditions and how we expect them to change in the future, it is reasonably possible that actual conditions could be worse than anticipated in those estimates, which could materially affect our results of operations and financial condition. Management has made significant estimates in several areas, including:

- allowance for credit losses (Note 5 (Loans and Related Allowance for Credit Losses));
- valuations of residential mortgage servicing rights (MSRs) (Note 6 (Mortgage Banking Activities) and Note 16 (Securitizations and Variable Interest Entities));
- valuations of financial instruments (Note 15 (Fair Values of Assets and Liabilities));
- liabilities for contingent litigation losses (Note 13 (Legal Actions));
- income taxes (Note 22 (Income Taxes)); and
- goodwill impairment (Note 7 (Intangible Assets and Other Assets)).

Actual results could differ from those estimates.

Accounting Standards Adopted in 2022

In 2022, we adopted the following new accounting guidance:

- Accounting Standards Update (ASU or Update) 2020-06 – Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity's Own Equity (Subtopic 815-40): *Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*
- ASU 2021-05 – Leases (Topic 842): *Lessors – Certain Leases with Variable Lease Payments*
- ASU 2021-10 – Government Assistance (Topic 832): *Disclosures by Business Entities about Government Assistance*
- ASU 2022-06 – Reference Rate Reform (Topic 848): *Deferral of the Sunset Date of Topic 848*

ASU 2020-06 simplifies the accounting for convertible financial instruments that embody characteristics of debt and equity by (1) eliminating accounting models for convertible financial instruments with cash conversion and beneficial conversion

features within Accounting Standards Codification (ASC) Subtopic 470-20, (2) removing three equity classification requirements for a contract in an entity's own equity to qualify for the derivative scope exception in ASC Subtopic 815-40, and (3) prescribing the method used for computing earnings per share. We adopted this Update prospectively in first quarter 2022. This Update did not have a material impact to our consolidated financial statements.

ASU 2021-05 amends ASC Topic 842 – Leases and provides specific guidance for lessors whose leases include variable lease payments that are not dependent on a reference index or rate and otherwise would have resulted in the recognition of a loss at lease commencement (a day 1 loss). Prior to ASU 2016-02, variable lease payments were excluded from the definition of lease payments for lessors measuring their net investment loss in a sales-type lease or direct financing lease. This often resulted in a day 1 loss, even if the lessor expected the arrangement to be profitable overall. We adopted this Update prospectively in first quarter 2022. This Update did not have a material impact to our consolidated financial statements.

ASU 2021-10 created a new topic in the codification, ASC Topic 832. The ASU requires annual disclosures for a business entity that has received government assistance and uses a grant or contribution accounting model by analogy to other accounting guidance. We adopted this Update in fourth quarter 2022 on a prospective basis. This Update did not have a material impact to our consolidated financial statements.

ASU 2022-06 defers the sunset date of ASC Topic 848 – Reference Rate Reform from December 31, 2022, to December 31, 2024, to extend the ability to apply the guidance in Topic 848, which provides temporary optional guidance to ease the burden in accounting for reference rate reform on financial reporting. We adopted this Update prospectively in fourth quarter 2022. This Update did not have a material impact to our consolidated financial statements.

Consolidation

Our consolidated financial statements include the accounts of the Parent and our subsidiaries in which we have a controlling financial interest. When our consolidated subsidiaries follow specialized industry accounting, that accounting is retained in consolidation.

We are also a variable interest holder in certain entities in which equity investors do not have the characteristics of a controlling financial interest or where the entity does not have enough equity at risk to finance its activities without additional subordinated financial support from other parties (collectively referred to as variable interest entities (VIEs)). Our variable interest arises from contractual, ownership or other monetary interests in the entity, which change with fluctuations in the fair value of the entity's net assets. We consolidate a VIE if we are the primary beneficiary, which is when we have both the power to direct the activities that most significantly impact the VIE and a variable interest that could potentially be significant to the VIE. To determine whether or not a variable interest we hold could potentially be significant to the VIE, we consider both qualitative and quantitative factors regarding the nature, size and form of

Note 1: Summary of Significant Accounting Policies (continued)

our involvement with the VIE. We assess whether or not we are the primary beneficiary of a VIE on an ongoing basis.

Significant intercompany accounts and transactions are eliminated in consolidation. When we have significant influence over operating and financing decisions for a company but do not own a majority of the voting equity interests, we account for the investment using the equity method of accounting, which requires us to recognize our proportionate share of the company's earnings. If we do not have significant influence, we account for the equity security under the fair value method, cost method or measurement alternative.

Noncontrolling interests represent the portion of net income and equity attributable to third-party owners of consolidated subsidiaries that are not wholly-owned by Wells Fargo. Substantially all of our noncontrolling interests relate to our affiliated venture capital and private equity businesses.

Cash, Cash Equivalents, and Restricted Cash

Cash, cash equivalents and restricted cash are recorded at amortized cost and include cash on hand, cash items in transit, and amounts due from or held with other depository institutions. See Note 25 (Regulatory Capital Requirements and Other Restrictions) for additional information on the restrictions on cash and cash equivalents.

Trading Activities

We engage in trading activities to accommodate the investment and risk management activities of our customers. These activities predominantly occur in our Corporate and Investment Banking reportable operating segment. Trading assets and liabilities include debt securities, equity securities, loans held for sale, derivatives and short sales, which are reported within our consolidated balance sheet based on the accounting classification of the instrument. In addition, debt securities that are held for investment purposes that we have elected to account for under the fair value method, are classified as trading.

Our trading assets and liabilities are carried on our consolidated balance sheet at fair value with changes in fair value recognized in net gains from trading and securities within noninterest income. Interest income and interest expense are recognized in net interest income.

Customer accommodation trading activities include our actions as an intermediary to buy and sell financial instruments and market-making activities. We also take positions to manage our exposure to customer accommodation activities. We hold financial instruments for trading in long positions, as well as short positions, to facilitate our trading activities. As an intermediary, we interact with market buyers and sellers to facilitate the purchase and sale of financial instruments to meet the anticipated or current needs of our customers. For example, we may purchase or sell a derivative to a customer who wants to manage interest rate risk exposure. We typically enter into an offsetting derivative or security position to manage our exposure to the customer transaction. We earn income based on the transaction price difference between the customer transaction and the offsetting position, which is reflected in earnings where the fair value changes and related interest income and expense of the positions are recorded.

Our market-making activities include taking long and short trading positions to facilitate customer order flow. These activities are typically executed on a short-term basis. As a market-maker we earn income due to: (1) the difference between the price paid or received for the purchase and sale of the security (bid-ask spread), (2) the net interest income of the

positions, and (3) the changes in fair value of the trading positions held on our consolidated balance sheet. Additionally, we may enter into separate derivative or security positions to manage our exposure related to our long and short trading positions taken in our market-making activities. Income earned on these market-making activities are reflected in earnings where the fair value changes and related interest income and expense of the positions are recorded.

Available-for-Sale and Held-to-Maturity Debt Securities

Our investments in debt securities that are not held for trading purposes are classified as either available-for-sale (AFS) or held-to-maturity (HTM).

Investments in debt securities for which the Company does not have the positive intent and ability to hold to maturity are classified as AFS. AFS debt securities are measured at fair value, with unrealized gains and losses reported in accumulated other comprehensive income (AOCI). The amount reported in other comprehensive income (OCI) is net of the allowance for credit losses (ACL) and applicable income taxes. Investments in debt securities for which the Company has the positive intent and ability to hold to maturity are classified as HTM. HTM debt securities are measured at amortized cost, net of ACL. See Note 3 (Available-for-Sale and Held-to-Maturity Debt Securities) for additional information.

INTEREST INCOME AND GAIN/LOSS RECOGNITION Unamortized premiums and discounts are recognized in interest income over the contractual life of the security using the effective interest method, except for purchased callable debt securities carried at a premium. For purchased callable debt securities carried at a premium, the premium is amortized into interest income to the next call date using the effective interest method. As principal repayments are received on securities (e.g., mortgage-backed securities (MBS)), a proportionate amount of the related premium or discount is recognized in income so that the effective interest rate on the remaining portion of the security continues unchanged.

We recognize realized gains and losses on the sale of debt securities in net gains from trading and securities within noninterest income using the specific identification method.

IMPAIRMENT AND CREDIT LOSSES Unrealized losses on AFS debt securities are driven by a number of factors, including changes in interest rates and credit spreads which impact most types of debt securities, and prepayment rates which impact MBS and collateralized loan obligations (CLO). Additional considerations for certain types of AFS debt securities include:

- Debt securities of U.S. Treasury and federal agencies, including federal agency MBS, are not impacted by credit movements given the explicit or implicit guarantees provided by the U.S. government.
- Debt securities of U.S. states and political subdivisions are most impacted by changes in the relationship between municipal and term funding credit curves rather than by changes in the credit quality of the underlying securities.
- Structured securities, such as MBS and CLO, are also impacted by changes in projected collateral losses of assets underlying the security.

For AFS debt securities where fair value is less than amortized cost basis, we recognize impairment in earnings if we have the intent to sell the security or if it is more likely than not that we will be required to sell the security before recovery of its amortized cost basis. Impairment is recognized in net gains on

trading and securities within noninterest income equal to the difference between the amortized cost basis, net of ACL, and the fair value of the AFS debt security. Following the recognition of this impairment, the AFS debt security's new amortized cost basis is fair value.

For AFS debt securities where fair value is less than amortized cost basis where we did not recognize impairment in earnings, we record an ACL as of the balance sheet date to the extent unrealized loss is due to credit losses. See the "Allowance for Credit Losses" section in this Note for our accounting policies relating to the ACL for debt securities, which also includes debt securities classified as HTM.

TRANSFERS BETWEEN CATEGORIES OF DEBT SECURITIES Transfers of debt securities from the AFS to HTM classification are recorded at fair value, and accordingly the amortized cost of the security transferred to HTM is adjusted to fair value. Unrealized gains or losses reported in AOCI at the transfer date are amortized into earnings over the same period as the unamortized premiums and discounts using the effective interest method. Any ACL previously recorded under the AFS debt security model is reversed and an ACL under the HTM debt security model is re-established. The reversal and re-establishment of the ACL are recorded in provision for credit losses.

Transfers of debt securities from the HTM to AFS classification are recorded at fair value. The HTM amortized cost (excluding any ACL previously recorded under the HTM debt security model) becomes the AFS amortized cost, and the debt security is remeasured at fair value with the unrealized gains and losses reported in OCI. Any ACL previously recorded under the HTM debt security model is reversed and an ACL under the AFS debt security model is re-established. The reversal and re-establishment of the ACL are recorded in provision expense. Transfers from HTM to AFS are only expected to occur under limited circumstances.

NONACCRUAL AND PAST DUE, AND CHARGE-OFF POLICIES We generally place debt securities on nonaccrual status using factors similar to those described for loans. When we place a debt security on nonaccrual status, we reverse the accrued unpaid interest receivable against interest income and suspend the amortization of premiums and accretion of discounts. If the ultimate collectability of the principal is in doubt on a nonaccrual debt security, any cash collected is first applied to reduce the security's amortized cost basis to zero, followed by recovery of amounts previously charged off, and subsequently to interest income. Generally, we return a debt security to accrual status when all delinquent interest and principal become current under the contractual terms of the security and collectability of remaining principal and interest is no longer doubtful.

Our debt securities are considered past due when contractually required principal or interest payments have not been made on the due dates.

Our charge-off policy for debt securities are similar to those described for loans. Subsequent to charge-off, the debt security will be designated as nonaccrual and follow the process described above for any cash received.

Securities and Other Collateralized Financing Agreements

Resale and repurchase agreements, as well as securities borrowing and lending agreements, are accounted for as collateralized financing transactions and are recorded at the acquisition or sale price plus accrued interest. We monitor the fair value of securities or other assets purchased and sold as well

as the collateral pledged and received. Additional collateral is pledged or returned to maintain the appropriate collateral position for the transactions. These financing transactions do not create material credit risk given the collateral provided and the related monitoring process.

We include securities purchased under securities financing agreements in federal funds sold and securities purchased under resale agreements on our consolidated balance sheet. We include collateral other than securities purchased under resale agreements in Loans on our consolidated balance sheet. We include securities sold under securities financing agreements in short-term borrowings on our consolidated balance sheet. At December 31, 2022 and 2021, short-term borrowings were primarily comprised of federal funds purchased and securities sold under agreements to repurchase.

Assets and liabilities arising from securities and other collateralized financing transactions with a single counterparty are presented net on the balance sheet provided they meet certain criteria that permit balance sheet netting. See Note 18 (Pledged Assets and Collateral) for additional information on our offsetting policy.

Loans Held for Sale

Loans held for sale (LHFS) generally includes commercial and residential mortgage loans originated or purchased for sale in the securitization or whole loan market. We have elected the fair value option for a majority of residential LHFS (see Note 15 (Fair Values of Assets and Liabilities)). The remaining residential LHFS are held at the lower of cost or fair value (LOCOM) and are measured on a pool level basis.

Commercial LHFS are generally held at LOCOM and are measured on an individual loan basis. We have elected the fair value option for certain commercial loans included in LHFS that are used in market-making activities for our trading business.

Gains and losses on residential and commercial mortgage LHFS are generally recorded in mortgage banking noninterest income. Gains and losses on trading LHFS are recognized in net gains from trading activities. Gains and losses on other LHFS are recognized in other noninterest income. Direct loan origination costs and fees for LHFS under the fair value option are recognized in earnings at origination. For LHFS recorded at LOCOM, direct loan origination costs and fees are deferred at origination and are recognized in earnings at time of sale. Interest income on LHFS is calculated based upon the note rate of the loan and is recorded in interest income.

Commitments to originate mortgage LHFS are accounted for as derivatives and are measured at fair value. When a determination is made at the time of commitment to originate loans as held for investment, it is our intent to hold these loans to maturity or for the foreseeable future, subject to periodic review under our management evaluation processes, including corporate asset/liability management. If subsequent changes occur, including changes in interest rates, our business strategy, or other market conditions, we may change our intent to hold these loans. When management makes this determination, we immediately transfer these loans to the LHFS portfolio at LOCOM.

Loans

Loans are reported at their outstanding principal balances net of any unearned income, cumulative charge-offs, unamortized deferred fees and costs on originated loans and unamortized premiums or discounts on purchased loans.

Unearned income, deferred fees and costs, and discounts and premiums are amortized to interest income generally over

Note 1: Summary of Significant Accounting Policies (continued)

the contractual life of the loan using the effective interest method. Loan commitment fees collected at closing are deferred and amortized to noninterest income on a straight-line basis over the commitment period if loan funding is unlikely. Upon funding, deferred loan commitment fees are amortized to interest income over the contractual life of the loan.

Loans also include financing leases where we are the lessor (see the “Leasing Activity” section in this Note for our accounting policy for leases) and resale agreements involving collateral other than securities (see “Securities and Other Collateralized Financing Agreements” section in this Note for our accounting policy for other collateralized financing agreements).

See Note 5 (Loans and Related Allowance for Credit Losses) for additional information regarding our accounting for loans.

NONACCRUAL AND PAST DUE LOANS We generally place loans on nonaccrual status when:

- the full and timely collection of interest or principal becomes uncertain (generally based on an assessment of the borrower’s financial condition and the adequacy of collateral, if any), such as in bankruptcy or other circumstances;
- they are 90 days (120 days with respect to residential mortgage loans) past due for interest or principal, unless the loan is both well-secured and in the process of collection;
- part of the principal balance has been charged off; or
- for junior lien mortgage loans, we have evidence that the related first lien mortgage may be 120 days past due or in the process of foreclosure regardless of the junior lien delinquency status.

Credit card loans are not placed on nonaccrual status, but are generally fully charged off when the loan reaches 180 days past due.

When we place a loan on nonaccrual status, we reverse the accrued unpaid interest receivable against interest income and suspend amortization of any net deferred fees. If the ultimate collectability of the recorded loan balance is in doubt on a nonaccrual loan, the cost recovery method is used and cash collected is applied to first reduce the carrying value of the loan to zero and then as a recovery of prior charge-offs. Otherwise, interest income may be recognized to the extent cash is received. Generally, we return a loan to accrual status when all delinquent interest and principal become current under the terms of the loan agreement and collectability of remaining principal and interest is no longer doubtful.

We may re-underwrite modified loans at the time of a restructuring to determine if there is sufficient evidence of sustained repayment capacity based on the borrower’s financial strength, including documented income, debt to income ratios and other factors. If the borrower has demonstrated performance under the previous terms and the underwriting process shows the capacity to continue to perform under the restructured terms, the loan will generally remain in accruing status. When a loan classified as a troubled debt restructuring (TDR) performs in accordance with its modified terms, the loan either continues to accrue interest (for performing loans) or will return to accrual status after the borrower demonstrates a sustained period of performance (generally six consecutive months of payments, or equivalent, inclusive of consecutive payments made prior to the modification). Loans will be placed on nonaccrual status and a corresponding charge-off is recorded if the re-underwriting did not include an evaluation of the borrower’s ability to repay or we believe it is probable that principal and interest contractually due under the modified terms of the agreement will not be collectible.

Our loans are considered past due when contractually required principal or interest payments have not been made on the due dates.

LOAN CHARGE-OFF POLICIES For commercial loans, we generally fully charge off or charge down to net realizable value (fair value of collateral, less estimated costs to sell) for loans secured by collateral when:

- management judges the loan to be uncollectible;
- repayment is deemed to be protracted beyond reasonable time frames;
- the loan has been classified as a loss by either our internal loan review process or our banking regulatory agencies;
- the customer has filed bankruptcy and the loss becomes evident owing to a lack of assets;
- the loan is 180 days past due unless both well-secured and in the process of collection; or
- the loan is probable of foreclosure, and we have received an appraisal of less than the recorded loan balance.

For consumer loans, we fully charge off or charge down to net realizable value when deemed uncollectible due to bankruptcy or other factors, or no later than reaching a defined number of days past due, as follows:

- Residential mortgage loans – We generally charge down to net realizable value when the loan is 180 days past due and fully charge-off when the loan exceeds extended delinquency dates.
- Auto loans – We generally fully charge off when the loan is 120 days past due.
- Credit card loans – We generally fully charge off when the loan is 180 days past due.
- Unsecured loans – We generally fully charge off when the loan is 120 days past due.
- Unsecured lines – We generally fully charge off when the loan is 180 days past due.
- Other secured loans – We generally fully or partially charge down to net realizable value when the loan is 120 days past due.

TROUBLED DEBT RESTRUCTURINGS In situations where, for economic or legal reasons related to a borrower’s financial difficulties, we grant a concession for other than an insignificant period of time to the borrower that we would not otherwise consider, the related loan is classified as a troubled debt restructuring (TDR). These modified terms may include interest rate reductions, principal forgiveness, term extensions, payment forbearance and other actions intended to minimize our economic loss and to avoid foreclosure or repossession of the collateral, if applicable. For modifications where we forgive principal, the entire amount of such principal forgiveness is immediately charged off. If the underwriting for a TDR modification did not include an evaluation of the borrower’s ability to repay, the loan is deemed collateral dependent. Other than resolutions such as foreclosures, sales and transfers to held-for-sale, we may remove loans held for investment from TDR classification, but only if they have been refinanced or restructured at market terms and qualify as a new loan.

TROUBLED DEBT RESTRUCTURINGS AND OTHER RELIEF RELATED TO COVID-19 The *Coronavirus, Aid, Relief, and Economic Security Act* (the CARES Act) and the *Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus (Revised)* issued by federal regulators in April 2020 (the Interagency Statement) provide

optional, temporary relief from accounting for certain loan modifications as TDRs. Based on guidance in the CARES Act and Interagency Statement, modifications related to the adverse effects of Coronavirus Disease 2019 (COVID-19) that meet certain criteria are exempt from TDR classification. We ceased applying TDR relief provided by the CARES Act upon the expiration of the CARES Act on January 1, 2022. During 2022, we continued to apply the TDR relief provided by the Interagency Statement for eligible COVID-related residential mortgage loan modifications.

For COVID-19-related modifications in the form of payment deferrals or payment forbearance, delinquency status will not advance and loans that were accruing at the time the relief is provided will generally not be placed on nonaccrual status during the deferral period. Interest accrued during payment deferrals or payment forbearance may be included in the principal balance of the loans and charge-offs will generally be based on delinquency status after the loan exits the deferral or forbearance period. Loans that exit COVID-related deferrals or payment forbearance are placed on nonaccrual status if there is no evidence that the borrower can resume making payments or if the borrower requests additional modifications.

FORECLOSED ASSETS Foreclosed assets obtained through our lending activities primarily include real estate. Generally, loans have been written down to their net realizable value prior to foreclosure. Any further reduction to their net realizable value is recorded with a charge to the ACL at foreclosure. We allow up to 90 days after foreclosure to finalize determination of net realizable value. Thereafter, changes in net realizable value are recorded to noninterest expense. The net realizable value of these assets is reviewed and updated periodically depending on the type of property. Certain government-guaranteed mortgage loans upon foreclosure are included in accounts receivable, not foreclosed assets. These receivables were loans insured by the

Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA) and are measured based on the balance expected to be recovered from the FHA or VA.

Allowance for Credit Losses

The ACL is management's estimate of the current expected life-time credit losses in the loan portfolio and unfunded credit commitments, at the balance sheet date, excluding loans and unfunded credit commitments carried at fair value or held for sale. Additionally, we maintain an ACL for AFS and HTM debt securities, other financing receivables measured at amortized cost, and other off-balance sheet credit exposures. While we attribute portions of the allowance to specific financial asset classes (loan and debt security portfolios), loan portfolio segments (commercial and consumer) or major security type, the entire ACL is available to absorb credit losses of the Company.

Our ACL process involves procedures to appropriately consider the unique risk characteristics of our financial asset classes, portfolio segments, and major security types. For each loan portfolio segment and each major HTM debt security type, losses are estimated collectively for groups of loans or securities with similar risk characteristics. For loans and securities that do not share similar risk characteristics with other financial assets, the losses are estimated individually, which generally includes our nonperforming large commercial loans and non-accruing HTM debt securities. For AFS debt securities, losses are estimated at the individual security level.

Our ACL amounts are influenced by a variety of factors, including changes in loan and debt security volumes, portfolio credit quality, and general economic conditions. General economic conditions are forecasted using economic variables which will create volatility as those variables change over time. See Table 1.1 for key economic variables used for our loan portfolios.

Table 1.1: Key Economic Variables

Loan Portfolio	Key economic variables
Total commercial	<ul style="list-style-type: none"> Gross domestic product Commercial real estate asset prices, where applicable Unemployment rate
Residential mortgage	<ul style="list-style-type: none"> Home price index Unemployment rate
Other consumer (including credit card, auto, and other consumer)	<ul style="list-style-type: none"> Unemployment rate

Our approach for estimating expected life-time credit losses for loans and debt securities includes the following key components:

- An initial loss forecast period of two years for all portfolio segments and classes of financing receivables and off-balance-sheet credit exposures. This period reflects management's expectation of losses based on forward-looking economic scenarios over that time. We forecast multiple economic scenarios that generally include a base scenario with an optimistic (upside) and one or more pessimistic (downside) scenarios, which are weighted by management to estimate future credit losses.
- Long-term average loss expectations estimated by reverting to the long-term average, on a linear basis, for each of the economic variables forecasted during the initial loss forecast period. These long-term averages are based on observations over multiple economic cycles. The reversion period, which may be up to two years, is assessed on a quarterly basis.
- The remaining contractual term of a loan is adjusted for expected prepayments and certain expected extensions, renewals, or modifications. We extend the contractual term when we are not able to unconditionally cancel contractual renewals or extension options. We also incorporate any scenarios where we reasonably expect to provide an extension through a TDR. Credit card loans have indeterminate maturities, which requires that we determine a contractual life by estimating the application of future payments to the outstanding loan amount.
- Utilization of discounted cash flow (DCF) methods to measure credit impairment for loans modified in a troubled debt restructuring, unless they are collateral dependent and measured at the fair value of the collateral. The DCF methods obtain estimated life-time credit losses using the initial and historical mean loss forecast periods described above.
- For AFS debt securities and certain beneficial interests classified as HTM, we utilize DCF methods to measure the

Note 1: Summary of Significant Accounting Policies (continued)

ACL, which incorporate expected credit losses using the conceptual components described above. For most HTM debt securities, the ACL is measured using an expected loss model, similar to the methodology used for loans.

The ACL for financial assets held at amortized cost is a valuation account that is deducted from, or added to, the amortized cost basis of the financial assets to present the net amount expected to be collected. When credit expectations change, the valuation account is adjusted with changes reported in provision for credit losses. If amounts previously charged off are subsequently expected to be collected, we may recognize a negative allowance, which is limited to the amount that was previously charged off. For financial assets with an ACL estimated using DCF methods, changes in the ACL due to the passage of time are recorded in interest income. The ACL for AFS debt securities reflects the amount of unrealized loss related to expected credit losses, limited by the amount that fair value is less than the amortized cost basis (fair value floor) and cannot have an associated negative allowance.

For certain financial assets, such as residential real estate loans guaranteed by the Government National Mortgage Association (GNMA), an agency of the federal government, U. S. Treasury and Agency mortgage-backed debt securities and certain sovereign debt securities, the Company has not recognized an ACL as our expectation of loss is zero, based on historical losses and consideration of current and forecasted conditions.

For financial assets that are collateral-dependent, we will measure the ACL based on the fair value of the collateral. If we intend to sell the underlying collateral, we will measure the ACL based on the collateral's net realizable value. In most situations, based on our charge-off policies, we will immediately write-down the financial asset to the fair value of the collateral or net realizable value. For consumer loans, collateral-dependent financial assets may have collateral in the form of residential real estate, autos or other personal assets. For commercial loans, collateral-dependent financial assets may have collateral in the form of commercial real estate or other business assets.

We do not generally record an ACL for accrued interest receivables because uncollectible accrued interest is reversed through interest income in a timely manner in line with our non-accrual and past due policies for loans and debt securities. For consumer credit card and certain consumer lines of credit, we include an ACL for accrued interest and fees since these loans are neither placed on nonaccrual status nor written off until the loan is 180 days past due. Accrued interest receivables are included in other assets, except for certain revolving loans, such as credit card loans.

COMMERCIAL LOAN PORTFOLIO SEGMENT ACL METHODOLOGY

Generally, commercial loans, which include net investments in lease financing, are assessed for estimated losses by grading each loan using various risk factors as identified through periodic reviews. Our estimation approach for the commercial portfolio reflects the estimated probability of default in accordance with the borrower's financial strength and the severity of loss in the event of default, considering the quality of any underlying collateral. Probability of default, loss severity at the time of default, and exposure at default are statistically derived through historical observations of default and losses after default within each credit risk rating. These estimates are adjusted as appropriate for risks identified from current and forecasted economic conditions and credit quality trends. Unfunded credit commitments are evaluated based on a conversion factor to

derive a funded loan equivalent amount. The estimated probability of default and loss severity at the time of default are applied to the funded loan equivalent amount to estimate losses for unfunded credit commitments.

CONSUMER LOAN PORTFOLIO SEGMENT ACL METHODOLOGY For consumer loans, we determine the allowance using a pooled approach based on the individual risk characteristics of the loans within those pools. Quantitative modeling methodologies that estimate probability of default, loss severity at the time of default and exposure at default are typically leveraged to estimate expected loss. These methodologies pool loans, generally by product types with similar risk characteristics, such as residential real estate mortgages, auto loans and credit cards. As appropriate and to achieve greater accuracy, we may further stratify selected portfolios by sub-product, risk pool, loss type, geographic location and other predictive characteristics. We use attributes such as delinquency status, Fair Isaac Corporation (FICO) scores, and loan-to-value ratios (where applicable) in the development of our consumer loan models, in addition to home price trends, unemployment trends, and other economic variables that may influence the frequency and severity of losses in the consumer portfolio.

OTHER QUALITATIVE FACTORS The ACL includes amounts for qualitative factors which may not be adequately reflected in our loss models. These amounts represent management's judgment of risks in the processes and assumptions used in establishing the ACL. Generally, these amounts are established at a granular level below our loan portfolio segments. We also consider economic environmental factors, modeling assumptions and performance, process risk, and other subjective factors, including industry trends and emerging risk assessments.

OFF-BALANCE SHEET CREDIT EXPOSURES Our off-balance sheet credit exposures include unfunded loan commitments (generally in the form of revolving lines of credit), financial guarantees not accounted for as insurance contracts or derivatives, including standby letters of credit, and other similar instruments. For off-balance sheet credit exposures, we recognize an ACL associated with the unfunded amounts. We do not recognize an ACL for commitments that are unconditionally cancelable at our discretion. Additionally, we recognize an ACL for financial guarantees that create off-balance sheet credit exposure, such as loans sold with credit recourse and factoring guarantees. ACL for off-balance sheet credit exposures are reported as a liability in accrued expenses and other liabilities on our consolidated balance sheet.

OTHER FINANCIAL ASSETS Other financial assets are evaluated for expected credit losses. These other financial assets include accounts receivable for fees, receivables from government-sponsored entities, such as Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC), and GNMA, and other accounts receivables from high-credit quality counterparties, such as central clearing counterparties. Many of these financial assets are generally not expected to have an ACL as there is a zero loss expectation (e.g., government guarantee) based on no historical credit losses and consideration of current and forecasted conditions. Some financial assets, such as loans to employees, maintain an ACL that is presented on a net basis with the related amortized cost amounts in other assets on our consolidated balance sheet. A provision for credit losses is not recognized

separately from the regular income or expense associated with these financial assets.

Securities purchased under resale agreements are generally over-collateralized by securities or cash and are generally short-term in nature. We have elected the practical expedient for these financial assets given collateral maintenance provisions. These provisions require that we monitor the collateral value and customers are required to replenish collateral, if needed. Accordingly, we generally do not maintain an ACL for these financial assets.

See Note 5 (Loans and Related Allowance for Credit Losses) for additional information.

Purchased Credit Deteriorated Financial Assets

Financial assets acquired that are of poor credit quality and with more than an insignificant evidence of credit deterioration since their origination or issuance are purchased credit deteriorated (PCD) assets. PCD assets include HTM and AFS debt securities and loans. PCD assets are recorded at their purchase price plus an ACL estimated at the time of acquisition. Under this approach, there is no provision for credit losses recognized at acquisition; rather, there is a gross-up of the purchase price of the financial asset for the estimate of expected credit losses and a corresponding ACL recorded. Changes in estimates of expected credit losses after acquisition are recognized as provision for credit losses in subsequent periods. In general, interest income recognition for PCD financial assets is consistent with interest income recognition for the similar non-PCD financial asset.

Leasing Activity

AS LESSOR We lease equipment to our customers under financing or operating leases. Financing leases, which includes both direct financing and sales-type leases, are presented in loans and are recorded at the discounted amounts of lease payments receivable plus the estimated residual value of the leased asset. Leveraged leases, which are a form of financing leases, are reduced by related non-recourse debt from third-party investors. Lease payments receivable reflect contractual lease payments adjusted for renewal or termination options that we believe the customer is reasonably certain to exercise. The residual value reflects our best estimate of the expected sales price for the equipment at lease termination based on sales history adjusted for recent trends in the expected exit markets. Many of our leases allow the customer to extend the lease at prevailing market terms or purchase the asset for fair value at lease termination.

Our allowance for loan losses for financing leases considers both the collectability of the lease payments receivable as well as the estimated residual value of the leased asset. We typically purchase residual value insurance on our financing leases to reduce the risk of loss at lease termination.

In connection with a lease, we may finance the customer's purchase of other products or services from the equipment vendor and allocate the contract consideration between the use of the asset and the purchase of those products or services. Amounts allocated are reported in loans as commercial and industrial loans, rather than as lease financing.

Our primary income from financing leases is interest income recognized using the effective interest method. Variable lease revenue, such as reimbursement for property taxes, are included in lease income within noninterest income.

Operating lease assets are presented in other assets, net of accumulated depreciation. Periodic depreciation expense is recorded on a straight-line basis over the estimated useful life of the leased asset and are included in other noninterest expense.

Operating lease assets are reviewed periodically for impairment and an impairment loss is recognized if the carrying amount of operating lease assets exceeds fair value and is not recoverable. Recoverability is evaluated by comparing the carrying amount of the leased assets to undiscounted cash flows expected through the operation or sale of the asset. Impairment charges for operating lease assets are included in other noninterest income.

Operating lease rental income for leased assets is recognized in lease income within noninterest income on a straight-line basis over the lease term. Variable revenue on operating leases include reimbursements of costs, including property taxes, which fluctuate over time, as well as rental revenue based on usage. For leases of railcars, revenue for maintenance services provided under the lease is recognized in lease income.

We elected to exclude from revenue and expenses any sales tax incurred on lease payments which are reimbursed by the lessee. Substantially all of our leased assets are protected against casualty loss through third-party insurance.

AS LESSEE We enter into lease agreements to obtain the right to use assets for our business operations, substantially all of which are real estate. Lease liabilities and right-of-use (ROU) assets are recognized when we enter into operating or financing leases and represent our obligations and rights to use these assets over the period of the leases and may be re-measured for certain modifications.

Operating lease liabilities include fixed and in-substance fixed payments for the contractual duration of the lease, adjusted for renewals or terminations which were considered probable of exercise when measured. The lease payments are discounted using a rate that approximates a collateralized borrowing rate for the estimated duration of the lease as the implicit discount rate is typically not known. The discount rate is updated when re-measurement events occur. The related operating lease ROU assets may differ from operating lease liabilities due to initial direct costs, deferred or prepaid lease payments and lease incentives.

We present operating lease liabilities in accrued expenses and other liabilities and the related operating lease ROU assets in other assets. The amortization of operating lease ROU assets and the accretion of operating lease liabilities are reported together as fixed lease expense and are included in occupancy expense within noninterest expense. The fixed lease expense is recognized on a straight-line basis over the life of the lease.

Some operating leases include variable lease payments and are recognized as incurred in net occupancy expense within noninterest expense.

For substantially all of our leased assets, we account for consideration paid under the contract for maintenance or other services as lease payments. We exclude certain asset classes, with original terms of less than one year from the operating lease ROU assets and lease liabilities. The related short-term lease expense is included in net occupancy expense.

Finance lease liabilities are presented in long-term debt and the associated finance ROU assets are presented in premises and equipment.

See Note 8 (Leasing Activity) for additional information.

Deposits, Short-term Borrowings and Long-term Debt

Customer deposits, short-term borrowings, and long-term debt are recorded at amortized cost, unless we have elected the fair value option for these items. For example, we may elect the fair value option for certain structured notes. We generally report borrowings with original maturities of one year or less as short-term borrowings and borrowings with original maturities of

Note 1: Summary of Significant Accounting Policies (continued)

greater than one year as long-term debt on our consolidated balance sheet. We do not reclassify long-term debt to short-term borrowings within a year of maturity.

Refer to Note 9 (Deposits) for further information on deposits, Note 10 (Long-Term Debt) for further information on long-term debt, and Note 15 (Fair Values of Assets and Liabilities) for additional information on fair value, including fair value option elections.

Securitizations and Beneficial Interests

Securitizations are transactions in which financial assets are sold to a Special Purpose Entity (SPE), which then issues beneficial interests collateralized by the transferred financial assets. Beneficial interests are generally issued in the form of senior and subordinated interests, and in some cases, we may obtain beneficial interests issued by the SPE. Additionally, from time to time, we may re-securitize certain financial assets in a new securitization transaction. See Note 16 (Securitizations and Variable Interest Entities) for additional information about our involvement with SPEs.

The assets and liabilities transferred to a SPE are excluded from our consolidated balance sheet if the transfer qualifies as a sale and we are not required to consolidate the SPE.

For transfers of financial assets recorded as sales, we recognize and initially measure at fair value all assets obtained (including beneficial interests or mortgage servicing rights) and all liabilities incurred. We record a gain or loss in noninterest income for the difference between assets obtained (net of liabilities incurred) and the carrying amount of the assets sold. Beneficial interests obtained from, and liabilities incurred in, securitizations with off-balance sheet entities may include debt and equity securities, loans, MSR, derivative assets and liabilities, other assets, and other obligations such as liabilities for mortgage repurchase losses or long-term debt and are accounted for as described within this Note.

Mortgage Servicing Rights

We recognize MSR resulting from a sale or securitization of mortgage loans that we originate (asset transfers) or through a direct purchase of such rights. We initially record all of our MSR at fair value. Subsequently, residential loan MSR are carried at fair value. Commercial MSR are subsequently measured at LCOM. The valuation and sensitivity of MSR is discussed further in Note 6 (Mortgage Banking Activities), Note 15 (Fair Values of Assets and Liabilities) and Note 16 (Securitizations and Variable Interest Entities).

For MSR carried at fair value, changes in fair value are reported in mortgage banking noninterest income in the period in which the change occurs. MSR subsequently measured at LCOM are amortized in proportion to, and over the period of, estimated net servicing income. The amortization of MSR is reported in mortgage banking noninterest income, analyzed monthly and adjusted to reflect changes in prepayment rates, as well as other factors.

MSR accounted for at LCOM are periodically evaluated for impairment based on the fair value of those assets. For purposes of impairment evaluation and measurement, we stratify MSR based on the predominant risk characteristics of the underlying loans, including investor and product type. If, by individual stratum, the carrying amount of these MSR exceeds fair value, a valuation allowance is established. The valuation allowance is adjusted as the fair value changes.

Premises and Equipment

Premises and equipment are carried at cost less accumulated depreciation and amortization. We use the straight-line method of depreciation and amortization. Depreciation and amortization expense for premises and equipment was \$1.2 billion in 2022 and \$1.4 billion in both 2021 and 2020. Estimated useful lives range up to 40 years for buildings and improvements, up to 10 years for furniture and equipment, and the shorter of the estimated useful life (up to 8 years) or the lease term for leasehold improvements.

Goodwill and Identifiable Intangible Assets

Goodwill is recorded for business combinations when the purchase price is higher than the fair value of the acquired net assets, including identifiable intangible assets.

We assess goodwill for impairment at a reporting unit level on an annual basis or more frequently in certain circumstances. We have determined that our reporting units are at the reportable operating segment level or one level below. We identify the reporting units based on how the segments and reporting units are managed, taking into consideration the economic characteristics, nature of the products and services, and customers of the segments and reporting units. We allocate goodwill to applicable reporting units based on their relative fair value at the time we acquire a business and when we have a significant business reorganization. If we sell a business, a portion of goodwill is included with the carrying amount of the divested business.

We have the option of performing a qualitative assessment of goodwill. We may also elect to bypass the qualitative test and proceed directly to a quantitative test. If we perform a qualitative assessment of goodwill to test for impairment and conclude it is more likely than not that a reporting unit's fair value is greater than its carrying amount, quantitative tests are not required. However, if we determine it is more likely than not that a reporting unit's fair value is less than its carrying amount, we complete a quantitative assessment to determine if there is goodwill impairment. We apply various quantitative valuation methodologies, including discounted cash flow and earnings multiple approaches, to determine the estimated fair value, which is compared with the carrying value of each reporting unit. A goodwill impairment loss is recognized if the fair value is less than the carrying amount, including goodwill. The goodwill impairment loss is limited to the amount of goodwill allocated to the reporting unit. We recognize impairment losses as a charge to other noninterest expense and a reduction to the carrying value of goodwill. Subsequent reversals of goodwill impairment are prohibited.

We amortize customer relationship intangible assets on an accelerated basis over useful lives not exceeding 10 years. We review intangible assets for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. Impairment is indicated if the sum of undiscounted estimated future net cash flows is less than the carrying value of the asset. Impairment is permanently recognized by writing down the asset to the extent that the carrying value exceeds the estimated fair value.

Derivatives and Hedging Activities

DERIVATIVES We recognize all derivatives on our consolidated balance sheet at fair value. On the date we enter into a derivative contract, we categorize the derivative as either an accounting hedge, economic hedge or part of our customer accommodation trading and other portfolio.

Accounting hedges are either fair value or cash flow hedges. Fair value hedges represent the hedge of the fair value of a recognized asset or liability or an unrecognized firm commitment, including hedges of foreign currency exposure. Cash flow hedges represent the hedge of a forecasted transaction or the variability of cash flows to be paid or received related to a recognized asset or liability.

Economic hedges and customer accommodation trading and other derivatives do not qualify for, or we have elected not to apply, hedge accounting. Economic hedges are derivatives we use to manage interest rate, foreign currency and certain other risks associated with our non-trading activities. Customer accommodation trading and other derivatives predominantly represents derivatives related to our trading business activities. We report changes in the fair values of these derivatives in noninterest income or noninterest expense.

FAIR VALUE HEDGES We record changes in the fair value of the derivative in income, except for certain derivatives in which a portion is recorded to OCI. We record basis adjustments to the amortized cost of the hedged asset or liability due to the changes in fair value related to the hedged risk with the offset recorded in earnings. We present derivative gains or losses in the same income statement category as the hedged asset or liability, as follows:

- For fair value hedges of interest rate risk, amounts are reflected in net interest income;
- For hedges of foreign currency risk, amounts representing the fair value changes less the accrual for periodic cash flow settlements are reflected in noninterest income. The periodic cash flow settlements are reflected in net interest income;
- For hedges of both interest rate risk and foreign currency risk, amounts representing the fair value change less the accrual for periodic cash flow settlements is attributed to both net interest income and noninterest income. The periodic cash flow settlements are reflected in net interest income.

The entire derivative gain or loss is included in the assessment of hedge effectiveness for all fair value hedge relationships, except for hedges of foreign-currency denominated AFS debt securities and long-term debt liabilities hedged with cross-currency swaps. The change in fair value of these swaps attributable to cross-currency basis spread changes is excluded from the assessment of hedge effectiveness. The initial fair value of the excluded component is amortized to net interest income and the difference between changes in fair value of the excluded component and the amount recorded in earnings is recorded in OCI.

CASH FLOW HEDGES We record changes in the fair value of the derivative in OCI. We subsequently reclassify gains and losses from these changes in fair value from OCI to earnings in the same period(s) that the hedged transaction affects earnings and in the same income statement category as the hedged item. The entire gain or loss on these derivatives is included in the assessment of hedge effectiveness.

DOCUMENTATION AND EFFECTIVENESS ASSESSMENT FOR ACCOUNTING HEDGES For fair value and cash flow hedges qualifying for hedge accounting, we formally document at inception the relationship between hedging instruments and hedged items, our risk management objective, strategy and our evaluation of effectiveness for our hedge transactions. This

process includes linking all derivatives designated as fair value or cash flow hedges to specific assets and liabilities on our consolidated balance sheet or to specific forecasted transactions. We assess hedge effectiveness using regression analysis, both at inception of the hedging relationship and on an ongoing basis. For fair value hedges, the regression analysis involves regressing the periodic change in fair value of the hedging instrument against the periodic changes in fair value of the asset or liability being hedged due to changes in the hedged risk(s). For cash flow hedges, the regression analysis involves regressing the periodic changes in fair value of the hedging instrument against the periodic changes in fair value of a hypothetical derivative. The hypothetical derivative has terms that identically match and offset the cash flows of the forecasted transaction being hedged due to changes in the hedged risk(s). The initial assessment for fair value and cash flow hedges includes an evaluation of the quantitative measures of the regression results used to validate the conclusion of high effectiveness. Periodically, as required, we also formally assess whether the derivative we designated in each hedging relationship is expected to be and has been highly effective in offsetting changes in fair values or cash flows of the hedged item using the regression analysis method.

DISCONTINUING HEDGE ACCOUNTING We discontinue hedge accounting prospectively when (1) a derivative is no longer highly effective in offsetting changes in the fair value or cash flows of a hedged item, (2) a derivative expires or is sold, terminated or exercised, (3) we elect to discontinue hedge accounting, or (4) when the forecasted transaction is no longer probable of occurring in a cash flow hedge.

When we discontinue fair value hedge accounting, we no longer adjust the previously hedged asset or liability for changes in fair value. The remaining cumulative adjustments to the hedged item and accumulated amounts reported in OCI are accounted for in the same manner as other components of the carrying amount of the asset or liability. For example, for financial debt instruments such as AFS debt securities, loans or long-term debt, these amounts are amortized into net interest income over the remaining life of the asset or liability similar to other amortized cost basis adjustments. If the hedged item is derecognized, the accumulated amounts reported in OCI are immediately reclassified to net interest income. If the derivative continues to be held after fair value hedge accounting ceases, we carry the derivative on the consolidated balance sheet at its fair value with changes in fair value included in noninterest income.

When we discontinue cash flow hedge accounting and it is probable that the forecasted transaction will occur, the accumulated amount reported in OCI at the de-designation date continues to be reported in OCI until the forecasted transaction affects earnings at which point the related OCI amount is reclassified to net interest income. If cash flow hedge accounting is discontinued and it is probable the forecasted transaction will no longer occur, the accumulated gains and losses reported in OCI at the de-designation date is immediately reclassified to noninterest income. If the derivative continues to be held after cash flow hedge accounting ceases, we carry the derivative on our consolidated balance sheet at its fair value with changes in fair value included in noninterest income.

EMBEDDED DERIVATIVES We may purchase or originate financial instruments that contain an embedded derivative. At inception of the financial instrument, we assess (1) if the economic characteristics of the embedded derivative are not clearly and closely related to the economic characteristics of the host contract, (2) if the financial instrument that embodies both the

Note 1: Summary of Significant Accounting Policies (continued)

embedded derivative and the host contract is not measured at fair value with changes in fair value reported in earnings, and (3) if a separate instrument with the same terms as the embedded instrument would meet the definition of a derivative. If the embedded derivative meets all of these conditions, we separate it from the hybrid contract by recording the bifurcated derivative at fair value and the remaining host contract at the difference between the basis of the hybrid instrument and the fair value of the bifurcated derivative. The bifurcated derivative is carried at fair value with changes recorded in noninterest income and reported on our consolidated balance sheet as a derivative asset or liability. The accounting for the remaining host contract is the same as other assets and liabilities of a similar type and reported on our consolidated balance sheet based upon the accounting classification of the instrument.

COUNTERPARTY CREDIT RISK AND NETTING By using derivatives, we are exposed to counterparty credit risk, which is the risk that counterparties to the derivative contracts do not perform as expected. If a counterparty fails to perform, our counterparty credit risk is equal to the amount reported as a derivative asset on our consolidated balance sheet. The amounts reported as a derivative asset are derivative contracts in a gain position, and to the extent subject to legally enforceable master netting arrangements, net of derivatives in a loss position with the same counterparty and cash collateral received. We minimize counterparty credit risk through credit approvals, limits, monitoring procedures, executing master netting arrangements and obtaining collateral, where appropriate. Counterparty credit risk related to derivatives is considered in determining fair value and our assessment of hedge effectiveness. To the extent derivatives subject to master netting arrangements meet the applicable requirements, including determining the legal enforceability of the arrangement, it is our policy to present derivative balances and related cash collateral amounts net on our consolidated balance sheet. We incorporate adjustments to reflect counterparty credit risk (credit valuation adjustments (CVA)) in determining the fair value of our derivatives. CVA, which considers the effects of enforceable master netting agreements and collateral arrangements, reflects market-based views of the credit quality of each counterparty. We estimate CVA based on observed credit spreads in the credit default swap market and indices indicative of the credit quality of the counterparties to our derivatives.

Cash collateral exchanged related to our interest rate derivatives, and certain commodity and equity derivatives, with centrally cleared counterparties is recorded as a reduction of the derivative fair value asset and liability balances, as opposed to separate non-derivative receivables or payables. This cash collateral, also referred to as variation margin, is exchanged based upon derivative fair value changes, typically on a one-day lag. For additional information on our derivatives and hedging activities, see Note 14 (Derivatives).

Equity Securities

Equity securities exclude investments that represent a controlling interest in the investee. Marketable equity securities have readily determinable fair values and are predominantly used in our trading activities. Marketable equity securities are recorded at fair value with realized and unrealized gains and losses recognized in net gains from trading and securities in noninterest income. Dividend income from marketable equity securities is recognized in interest income.

Nonmarketable equity securities do not have readily determinable fair values. These securities are accounted for under one of the following accounting methods:

- Fair value through net income: This method is an election. The securities are recorded at fair value with unrealized gains or losses recognized in net gains from trading and securities in noninterest income;
- Equity method: This method is applied when we have the ability to exert significant influence over the investee. The securities are recorded at cost and adjusted for our share of the investee's earnings or losses, less any dividends received and/or impairments. Equity method adjustments for our share of the investee's earnings or losses are recognized in other noninterest income and dividends are recognized as a reduction of the investment carrying value;
- Proportional amortization method: This method is applied to certain low-income housing tax credit (LIHTC) investments. The investments are initially recorded at cost and amortized in proportion to the tax credits received. The amortization of the investments and the related tax impacts are recognized in income tax expense;
- Cost method: This method is required for specific securities, such as Federal Reserve Bank stock and Federal Home Loan Bank stock. These securities are held at cost less any impairments;
- Measurement alternative: This method is followed by all remaining nonmarketable equity securities. These securities are initially recorded at cost and are remeasured to fair value as of the date of an orderly observable transaction of the same or similar security of the same issuer. These securities are also adjusted for impairments.

All realized and unrealized gains and losses, including impairment losses, from nonmarketable equity securities are recognized in net gains from trading and securities in noninterest income. Dividend income from all nonmarketable equity securities, other than equity method securities, is recognized in interest income.

Our review for impairment for nonmarketable equity securities not carried at fair value includes an analysis of the facts and circumstances of each security, the intent or requirement to sell the security, the expectations of cash flows, capital needs and the viability of its business model. When the fair value of an equity method or cost method investment is less than its carrying value, we write-down the asset to fair value when we consider declines in value to be other than temporary. When the fair value of an investment accounted for using the measurement alternative is less than its carrying value, we write-down the asset to fair value, without the consideration of anticipated recovery.

See Note 4 (Equity Securities) for additional information.

Pension Accounting

We sponsor a frozen noncontributory qualified defined benefit retirement plan, the Wells Fargo & Company Cash Balance Plan (Cash Balance Plan), which covers eligible employees of Wells Fargo. We also sponsor nonqualified defined benefit plans that provide supplemental defined benefit pension benefits to certain eligible employees. We account for our defined benefit pension plans using an actuarial model. Principal assumptions used in determining the net periodic pension cost and the pension obligation include the discount rate, the expected long-term rate of return on plan assets and projected mortality rates.

A single weighted-average discount rate is used to estimate the present value of our future pension benefit obligations. We

determine the discount rate using a yield curve derived from a broad-based population of high-quality corporate bonds with maturity dates that closely match the estimated timing of the expected benefit payments.

On December 31, 2021, we changed the method used to estimate the interest cost component of pension expense for our principal defined benefit and postretirement plans to the full yield curve approach. The full yield curve approach aligns specific spot rates along the yield curve to the projected benefit payment cash flows. This change does not affect the measurement of our pension obligation as the change in interest cost is offset in the actuarial gain (loss). We accounted for this change prospectively as a change in estimate to our pension expense. Previously, we estimated the interest cost component utilizing a single weighted-average discount rate. We made this change to improve the correlation between the yield curve and the projected benefit payment cash flows.

The determination of our expected long-term rate of return on plan assets is highly quantitative by nature. We evaluate the current asset allocations and expected returns using forward-looking capital market assumptions. We use the resulting projections to derive a baseline expected rate of return for the Cash Balance Plan's prescribed asset mix.

Mortality rate assumptions are based on mortality tables published by the Society of Actuaries adjusted to reflect our specific experience.

At year end, we re-measure our defined benefit plan liabilities and related plan assets and recognize any resulting actuarial gain or loss in OCI. We generally amortize net actuarial gain or loss in excess of a 5% corridor from AOCI into net periodic pension cost over the estimated average remaining participation period, which at December 31, 2022, is 18 years. See Note 21 (Employee Benefits) for additional information on our pension accounting.

Income Taxes

We file income tax returns in the jurisdictions in which we operate and evaluate income tax expense in two components: current and deferred income tax expense. Current income tax expense represents our estimated taxes to be paid or refunded for the current period and includes income tax expense related to uncertain tax positions. Uncertain tax positions that meet the more likely than not recognition threshold are measured to determine the amount of benefit to recognize. An uncertain tax position is measured at the largest amount of benefit that management believes has a greater than 50% likelihood of realization upon settlement. Tax benefits not meeting our realization criteria represent unrecognized tax benefits.

Deferred income taxes are based on the balance sheet method and deferred income tax expense results from changes in deferred tax assets and liabilities between periods. Under the balance sheet method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax basis of assets and liabilities, and enacted changes in tax rates and laws are recognized in the period in which they occur. Deferred tax assets are recognized subject to management's judgment that realization is more likely than not. A valuation allowance reduces deferred tax assets to the realizable amount.

See Note 22 (Income Taxes) to Financial Statements in this Report for a further description of our provision for income taxes and related income tax assets and liabilities.

Stock-Based Compensation

Our long-term incentive plans provide awards for employee services in various forms, such as restricted share rights (RSRs) and performance share awards (PSAs).

Stock-based awards are measured at fair value on the grant date. The cost is recognized in personnel expense, net of actual forfeitures, in our consolidated statement of income normally over the vesting period of the award; awards with graded vesting are expensed on a straight-line method. Awards to employees who are retirement eligible at the grant date are subject to immediate expensing upon grant. Awards to employees who become retirement eligible before the final vesting date are expensed between the grant date and the date the employee becomes retirement eligible. Except for retirement and other limited circumstances, RSRs are canceled when employment ends.

PSAs and certain RSRs granted in 2020 included discretionary conditions that can result in forfeiture and are measured at fair value initially and subsequently until the discretionary conditions end. For these awards, the associated compensation expense fluctuates with changes in our stock price. Awards granted in 2022 and 2021 no longer included these discretionary conditions and are not adjusted for subsequent changes in stock price. For PSAs, compensation expense also fluctuates based on the estimated outcome of meeting the performance conditions. The total expense that will be recognized on these awards is finalized upon the completion of the performance period.

For additional information on our stock-based employee compensation plans, see Note 12 (Common Stock and Stock Plans).

Earnings Per Common Share

We compute earnings per common share by dividing net income applicable to common stock (net income less dividends on preferred stock and the excess of consideration transferred over carrying value of preferred stock redeemed, if any) by the average number of common shares outstanding during the period. We compute diluted earnings per common share using net income applicable to common stock and adding the effect of common stock equivalents (e.g., restricted share rights) that are dilutive to the average number of common shares outstanding during the period.

Fair Value of Assets and Liabilities

Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based on an exit price notion that maximizes the use of observable inputs and minimizes the use of unobservable inputs.

We measure our assets and liabilities at fair value when we are required to record them at fair value, when we have elected the fair value option, and to fulfill fair value disclosure requirements. Assets and liabilities are recorded at fair value on a recurring or nonrecurring basis. Assets and liabilities that are recorded at fair value on a recurring basis require a fair value measurement at each reporting period. Assets and liabilities that are recorded at fair value on a nonrecurring basis are adjusted to fair value only as required through the application of an accounting method such as Locom, write-downs of individual assets, or application of the measurement alternative for certain nonmarketable equity securities.

Note 1: Summary of Significant Accounting Policies (continued)

We classify our assets and liabilities measured at fair value based upon a three-level hierarchy that assigns the highest priority to unadjusted quoted prices in active markets and the lowest priority to unobservable inputs. The three levels are as follows:

- 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 not active, and model-based valuation techniques for which all significant assumptions are observable in the market.
- Level 3 – Valuation is generated from techniques that use significant assumptions that are not observable in the market. These unobservable assumptions reflect our estimates of assumptions that market participants would use in pricing the asset or liability. Valuation techniques include use of discounted cash flow models, market

comparable pricing, option pricing models, and similar techniques.

We monitor the availability of observable market data to assess the appropriate classification of financial instruments within the fair value hierarchy and transfers between Level 1, Level 2, and Level 3 accordingly. Observable market data includes but is not limited to quoted prices and market transactions. Changes in economic conditions or market liquidity generally will drive changes in availability of observable market data. Changes in availability of observable market data, which also may result in changing the valuation technique used, are generally the cause of transfers between Level 1, Level 2, and Level 3. The amounts reported as transfers represent the fair value as of the beginning of the quarter in which the transfer occurred.

See Note 15 (Fair Values of Assets and Liabilities) for a more detailed discussion of the valuation methodologies that we apply to our assets and liabilities.

Supplemental Cash Flow Information

Significant noncash activities are presented in Table 1.2.

Table 1.2: Supplemental Cash Flow Information

(in millions)	Year ended December 31,		
	2022	2021	2020
Available-for-sale debt securities purchased from securitization of LHFS (1)	\$ 1,506	3,096	21,768
Held-to-maturity debt securities purchased from securitization of LHFS (1)	745	20,265	9,912
Transfers from loans to LHFS	6,586	19,297	19,975
Transfers from available-for-sale debt securities to held-to-maturity debt securities	50,132	55,993	31,815

(1) Predominantly represents agency mortgage-backed securities purchased upon settlement of the sale and securitization of our conforming residential mortgage loans. See Note 16 (Securitizations and Variable Interest Entities) for additional information.

Subsequent Events

We have evaluated the effects of events that have occurred subsequent to December 31, 2022 as follows:

In January 2023, we reclassified fixed-rate debt securities with an aggregate fair value of \$23.2 billion and amortized cost of \$23.9 billion from held-to-maturity to available-for-sale and designated \$20.1 billion in notional amounts of interest rate swaps as fair value hedges using the portfolio layer method, in connection with the adoption of ASU 2022-01, Derivatives and Hedging (Topic 815): *Fair Value Hedging – Portfolio Layer Method*. The transfer of debt securities was recorded at fair value and resulted in \$566 million of unrealized losses associated with available-for-sale debt securities being recorded to other comprehensive income, net of deferred taxes.

Except as discussed above, there have been no material events that would require recognition in our 2022 consolidated financial statements or disclosure in the Notes to the consolidated financial statements.

Note 2: Trading Activities

Table 2.1 presents a summary of our trading assets and liabilities measured at fair value through earnings.

Table 2.1: Trading Assets and Liabilities

(in millions)	Dec 31, 2022	Dec 31, 2021
Trading assets:		
Debt securities	\$ 86,155	88,265
Equity securities (1)	26,910	27,476
Loans held for sale	1,466	3,242
Gross trading derivative assets (1)	77,148	48,325
Netting (2)	(54,922)	(28,146)
Total trading derivative assets	22,226	20,179
Total trading assets	136,757	139,162
Trading liabilities:		
Short sale and other liabilities	20,304	20,685
Long-term debt	1,346	—
Gross trading derivative liabilities (1)	77,698	42,449
Netting (2)	(59,232)	(33,978)
Total trading derivative liabilities	18,466	8,471
Total trading liabilities	\$ 40,116	29,156

- (1) In first quarter 2022, we prospectively reclassified certain equity securities and related economic hedge derivatives from "not held for trading activities" to "held for trading activities" to better reflect the business activity of those financial instruments. For additional information on Trading Activities, see Note 1 (Summary of Significant Accounting Policies).
- (2) Represents balance sheet netting for trading derivative asset and liability balances, and trading portfolio level counterparty valuation adjustments.

Table 2.2 provides a summary of the net interest income earned from trading securities, and net gains and losses due to the realized and unrealized gains and losses from trading activities.

Net interest income also includes dividend income on trading securities and dividend expense on trading securities we have sold, but not yet purchased.

Table 2.2: Net Interest Income and Net Gains (Losses) from Trading Activities

(in millions)	Year ended December 31,		
	2022	2021	2020
Interest income:			
Debt securities	\$ 2,466	2,086	2,530
Equity securities (1)	497	441	366
Loans held for sale	48	40	30
Total interest income	3,011	2,567	2,926
Less: Interest expense	592	405	442
Net interest income	2,419	2,162	2,484
Net gains (losses) from trading activities (2):			
Debt securities	(10,053)	(1,796)	2,697
Equity securities (1)	(3,823)	4,491	(630)
Loans held for sale	6	54	28
Long-term debt	52	—	—
Derivatives (1)(3)	15,934	(2,465)	(923)
Total net gains from trading activities	2,116	284	1,172
Total trading-related net interest and noninterest income	\$ 4,535	2,446	3,656

- (1) In first quarter 2022, we prospectively reclassified certain equity securities and related economic hedge derivatives from "not held for trading activities" to "held for trading activities" to better reflect the business activity of those financial instruments. For additional information on Trading Activities, see Note 1 (Summary of Significant Accounting Policies).
- (2) Represents realized gains (losses) from our trading activities and unrealized gains (losses) due to changes in fair value of our trading positions.
- (3) Excludes economic hedging of mortgage banking and asset/liability management activities, for which hedge results (realized and unrealized) are reported with the respective hedged activities.

Note 3: Available-for-Sale and Held-to-Maturity Debt Securities

Table 3.1 provides the amortized cost, net of the allowance for credit losses (ACL) for debt securities, and fair value by major categories of available-for-sale (AFS) debt securities, which are carried at fair value, and held-to-maturity (HTM) debt securities, which are carried at amortized cost, net of the ACL. The net unrealized gains (losses) for AFS debt securities are reported as a component of accumulated other comprehensive income (AOCI), net of the ACL and applicable income taxes. Information on debt securities held for trading is included in Note 2 (Trading Activities).

Outstanding balances exclude accrued interest receivable on AFS and HTM debt securities, which are included in other assets. See Note 7 (Intangible Assets and Other Assets) for additional information on accrued interest receivable. Amounts considered to be uncollectible are reversed through interest income. The interest income reversed for the years ended 2022 and 2021 was insignificant.

Table 3.1: Available-for-Sale and Held-to-Maturity Debt Securities Outstanding

(in millions)	Amortized cost, net (1)	Gross unrealized gains	Gross unrealized losses	Fair value
December 31, 2022				
Available-for-sale debt securities:				
Securities of U.S. Treasury and federal agencies	\$ 47,536	9	(2,260)	45,285
Non-U.S. government securities	162	—	—	162
Securities of U.S. states and political subdivisions (2)	10,958	20	(533)	10,445
Federal agency mortgage-backed securities	53,302	2	(5,167)	48,137
Non-agency mortgage-backed securities (3)	3,423	1	(140)	3,284
Collateralized loan obligations	4,071	—	(90)	3,981
Other debt securities	2,273	75	(48)	2,300
Total available-for-sale debt securities	121,725	107	(8,238)	113,594
Held-to-maturity debt securities:				
Securities of U.S. Treasury and federal agencies	16,202	—	(1,917)	14,285
Securities of U.S. states and political subdivisions	30,985	8	(4,385)	26,608
Federal agency mortgage-backed securities	216,966	30	(34,252)	182,744
Non-agency mortgage-backed securities (3)	1,253	—	(147)	1,106
Collateralized loan obligations	29,926	1	(727)	29,200
Other debt securities	1,727	—	(149)	1,578
Total held-to-maturity debt securities	297,059	39	(41,577)	255,521
Total	\$ 418,784	146	(49,815)	369,115
December 31, 2021				
Available-for-sale debt securities:				
Securities of U.S. Treasury and federal agencies	\$ 39,668	185	(192)	39,661
Non-U.S. government securities	71	—	—	71
Securities of U.S. states and political subdivisions (2)	16,618	350	(51)	16,917
Federal agency mortgage-backed securities	104,661	1,807	(582)	105,886
Non-agency mortgage-backed securities (3)	4,515	32	(15)	4,532
Collateralized loan obligations	5,713	2	(7)	5,708
Other debt securities	4,217	259	(7)	4,469
Total available-for-sale debt securities	175,463	2,635	(854)	177,244
Held-to-maturity debt securities:				
Securities of U.S. Treasury and federal agencies	16,544	599	(318)	16,825
Securities of U.S. states and political subdivisions	32,689	847	(61)	33,475
Federal agency mortgage-backed securities	188,909	1,882	(2,807)	187,984
Non-agency mortgage-backed securities (3)	1,082	31	(18)	1,095
Collateralized loan obligations	31,067	194	(2)	31,259
Other debt securities	1,731	17	—	1,748
Total held-to-maturity debt securities	272,022	3,570	(3,206)	272,386
Total	\$ 447,485	6,205	(4,060)	449,630

(1) Represents amortized cost of the securities, net of the ACL of \$6 million and \$8 million related to AFS debt securities and \$85 million and \$96 million related to HTM debt securities at December 31, 2022 and 2021, respectively.

(2) Includes investments in tax-exempt preferred debt securities issued by investment funds or trusts that predominantly invest in tax-exempt municipal securities. The amortized cost, net of the ACL, and fair value of these types of securities, was \$5.1 billion at December 31, 2022, and \$5.2 billion at December 31, 2021.

(3) Predominantly consists of commercial mortgage-backed securities at both December 31, 2022 and 2021.

Table 3.2 details the breakout of purchases of and transfers to HTM debt securities by major category of security.

Table 3.2: Held-to-Maturity Debt Securities Purchases and Transfers

(in millions)	Year ended December 31,		
	2022	2021	2020
Purchases of held-to-maturity debt securities (1):			
Securities of U.S. Treasury and federal agencies	\$ —	—	3,016
Securities of U.S. states and political subdivisions	843	5,198	1,906
Federal agency mortgage-backed securities	2,051	76,010	51,320
Non-agency mortgage-backed securities	211	235	126
Collateralized loan obligations	—	9,379	688
Total purchases of held-to-maturity debt securities	3,105	90,822	57,056
Transfers from available-for-sale debt securities to held-to-maturity debt securities (2):			
Securities of U.S. states and political subdivisions	—	2,954	10,721
Federal agency mortgage-backed securities	50,132	41,298	5,522
Collateralized loan obligations	—	10,003	15,572
Other debt securities	—	1,738	—
Total transfers from available-for-sale debt securities to held-to-maturity debt securities	\$ 50,132	55,993	31,815

(1) Inclusive of securities purchased but not yet settled and noncash purchases from securitization of loans held for sale (LHFS).

(2) Represents fair value as of the date of the transfers. Debt securities transferred from available-for-sale to held-to-maturity had pre-tax unrealized losses recorded in AOCI of \$4.5 billion for the year ended 2022 and \$529 million for the year ended 2021, respectively, at the time of the transfers.

Table 3.3 shows the composition of interest income, provision for credit losses, and gross realized gains and losses from sales and impairment write-downs included in earnings related to AFS and HTM debt securities (pre-tax).

Table 3.3: Income Statement Impacts for Available-for-Sale and Held-to-Maturity Debt Securities

(in millions)	Year ended December 31,		
	2022	2021	2020
Interest income (1):			
Available-for-sale	\$ 3,095	2,808	4,992
Held-to-maturity	6,220	4,359	3,712
Total interest income	9,315	7,167	8,704
Provision for credit losses:			
Available-for-sale	1	(2)	89
Held-to-maturity	(11)	54	35
Total provision for credit losses	(10)	52	124
Realized gains and losses (2):			
Gross realized gains	276	571	931
Gross realized losses	(125)	(10)	(43)
Impairment write-downs	—	(8)	(15)
Net realized gains	\$ 151	553	873

(1) Excludes interest income from trading debt securities, which is disclosed in Note 2 (Trading Activities).

(2) Realized gains and losses relate to AFS debt securities. There were no realized gains or losses from HTM debt securities in all periods presented.

Credit Quality

We monitor credit quality of debt securities by evaluating various attributes and utilize such information in our evaluation of the appropriateness of the ACL for debt securities. The credit quality indicators that we most closely monitor include credit ratings and delinquency status and are based on information as of our financial statement date.

CREDIT RATINGS Credit ratings express opinions about the credit quality of a debt security. We determine the credit rating of a security according to the lowest credit rating made available by national recognized statistical rating organizations (NRSROs). Debt securities rated investment grade, that is those with ratings similar to BBB-/Baa3 or above, as defined by NRSROs, are generally considered by the rating agencies and market

participants to be low credit risk. Conversely, debt securities rated below investment grade, labeled as “speculative grade” by the rating agencies, are considered to be distinctively higher credit risk than investment grade debt securities. For debt securities not rated by NRSROs, we determine an internal credit grade of the debt securities (used for credit risk management purposes) equivalent to the credit ratings assigned by major credit agencies. Substantially all of our debt securities were rated by NRSROs at December 31, 2022 and 2021.

Table 3.4 shows the percentage of fair value of AFS debt securities and amortized cost of HTM debt securities determined to be rated investment grade, inclusive of securities rated based on internal credit grades.

Note 3: Available-for-Sale and Held-to-Maturity Debt Securities (continued)**Table 3.4: Investment Grade Debt Securities**

(\$ in millions)	Available-for-Sale		Held-to-Maturity	
	Fair value	% investment grade	Amortized cost	% investment grade
December 31, 2022				
Total portfolio (1)	\$ 113,594	99%	\$ 297,144	99%
Breakdown by category:				
Securities of U.S. Treasury and federal agencies (2)	\$ 93,422	100%	\$ 233,169	100%
Securities of U.S. states and political subdivisions	10,445	99	31,000	100
Collateralized loan obligations (3)	3,981	100	29,972	100
All other debt securities (4)	5,746	89	3,003	63
December 31, 2021				
Total portfolio (1)	\$ 177,244	99%	\$ 272,118	99%
Breakdown by category:				
Securities of U.S. Treasury and federal agencies (2)	\$ 145,547	100%	\$ 205,453	100%
Securities of U.S. states and political subdivisions	16,917	99	32,704	100
Collateralized loan obligations (3)	5,708	100	31,128	100
All other debt securities (4)	9,072	88	2,833	64

(1) 99% and 98% were rated AA- and above at December 31, 2022 and 2021, respectively.

(2) Includes federal agency mortgage-backed securities.

(3) 100% were rated AA- and above at both December 31, 2022 and 2021.

(4) Includes non-U.S. government, non-agency mortgage-backed, and all other debt securities.

DELINQUENCY STATUS AND NONACCRUAL DEBT SECURITIES Debt security issuers that are delinquent in payment of amounts due under contractual debt agreements have a higher probability of recognition of credit losses. As such, as part of our monitoring of the credit quality of the debt security portfolio, we consider whether debt securities we own are past due in payment of principal or interest payments and whether any securities have been placed into nonaccrual status.

Debt securities that are past due and still accruing or in nonaccrual status were insignificant at both December 31, 2022 and 2021. Charge-offs on debt securities were insignificant for the years ended December 31, 2022 and 2021.

Purchased debt securities with credit deterioration (PCD) are not considered to be in nonaccrual status, as payments from issuers of these securities remain current. PCD securities were insignificant for the years ended December 31, 2022 and 2021.

Unrealized Losses of Available-for-Sale Debt Securities

Table 3.5 shows the gross unrealized losses and fair value of AFS debt securities by length of time those individual securities in each category have been in a continuous loss position. Debt securities on which we have recorded credit impairment are

categorized as being “less than 12 months” or “12 months or more” in a continuous loss position based on the point in time that the fair value declined to below the amortized cost basis, net of allowance for credit losses.

Table 3.5: Gross Unrealized Losses and Fair Value – Available-for-Sale Debt Securities

(in millions)	Less than 12 months		12 months or more		Total	
	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
December 31, 2022						
Available-for-sale debt securities:						
Securities of U.S. Treasury and federal agencies	\$ (291)	9,870	(1,969)	27,899	(2,260)	37,769
Securities of U.S. states and political subdivisions	(72)	2,154	(461)	2,382	(533)	4,536
Federal agency mortgage-backed securities	(3,580)	39,563	(1,587)	8,481	(5,167)	48,044
Non-agency mortgage-backed securities	(43)	1,194	(97)	2,068	(140)	3,262
Collateralized loan obligations	(65)	3,195	(25)	786	(90)	3,981
Other debt securities	(31)	1,591	(17)	471	(48)	2,062
Total available-for-sale debt securities	\$ (4,082)	57,567	(4,156)	42,087	(8,238)	99,654
December 31, 2021						
Available-for-sale debt securities:						
Securities of U.S. Treasury and federal agencies	\$ (192)	24,418	—	—	(192)	24,418
Securities of U.S. states and political subdivisions	(36)	2,308	(15)	532	(51)	2,840
Federal agency mortgage-backed securities	(334)	40,695	(248)	9,464	(582)	50,159
Non-agency mortgage-backed securities	(4)	1,966	(11)	543	(15)	2,509
Collateralized loan obligations	(3)	1,619	(4)	1,242	(7)	2,861
Other debt securities	—	—	(7)	624	(7)	624
Total available-for-sale debt securities	\$ (569)	71,006	(285)	12,405	(854)	83,411

We have assessed each debt security with gross unrealized losses included in the previous table for credit impairment. As part of that assessment we evaluated and concluded that we do not intend to sell any of the debt securities, and that it is more likely than not that we will not be required to sell, prior to recovery of the amortized cost basis. We evaluate, where necessary, whether credit impairment exists by comparing the present value of the expected cash flows to the debt securities' amortized cost basis. Credit impairment is recorded as an ACL for debt securities.

For descriptions of the factors we consider when analyzing debt securities for impairment as well as methodology and significant inputs used to measure credit losses, see Note 1 (Summary of Significant Accounting Policies) in this Report.

Note 3: Available-for-Sale and Held-to-Maturity Debt Securities (continued)

Contractual Maturities

Table 3.6 and Table 3.7 show the remaining contractual maturities, amortized cost, net of the ACL, fair value and weighted average effective yields of AFS and HTM debt securities, respectively. The remaining contractual principal

maturities for mortgage-backed securities (MBS) do not consider prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay obligations before the underlying mortgages mature.

Table 3.6: Contractual Maturities – Available-for-Sale Debt Securities

By remaining contractual maturity (\$ in millions)	Total	Within one year	After one year through five years	After five years through ten years	After ten years
December 31, 2022					
Available-for-sale debt securities (1):					
Securities of U.S. Treasury and federal agencies					
Amortized cost, net	\$ 47,536	4,046	21,094	20,884	1,512
Fair value	45,285	3,945	20,576	19,326	1,438
Weighted average yield	1.09%	1.19	0.55	1.59	1.44
Non-U.S. government securities					
Amortized cost, net	\$ 162	1	137	24	—
Fair value	162	1	137	24	—
Weighted average yield	3.49%	5.10	3.62	2.71	—
Securities of U.S. states and political subdivisions					
Amortized cost, net	\$ 10,958	1,139	2,471	4,866	2,482
Fair value	10,445	1,138	2,455	4,513	2,339
Weighted average yield	3.46%	4.06	3.43	3.16	3.80
Federal agency mortgage-backed securities					
Amortized cost, net	\$ 53,302	1	277	856	52,168
Fair value	48,137	1	264	799	47,073
Weighted average yield	3.26%	3.33	1.90	2.48	3.28
Non-agency mortgage-backed securities					
Amortized cost, net	\$ 3,423	—	—	71	3,352
Fair value	3,284	—	—	65	3,219
Weighted average yield	4.58%	—	—	3.31	4.61
Collateralized loan obligations					
Amortized cost, net	\$ 4,071	—	—	3,668	403
Fair value	3,981	—	—	3,592	389
Weighted average yield	5.53%	—	—	5.53	5.54
Other debt securities					
Amortized cost, net	\$ 2,273	81	203	866	1,123
Fair value	2,300	79	199	866	1,156
Weighted average yield	5.13%	5.16	5.73	4.47	5.52
Total available-for-sale debt securities					
Amortized cost, net	\$ 121,725	5,268	24,182	31,235	61,040
Fair value	113,594	5,164	23,631	29,185	55,614
Weighted average yield	2.57%	1.87	0.90	2.41	3.38

(1) Weighted average yields displayed by maturity bucket are weighted based on amortized cost without effect for any related hedging derivatives and are shown pre-tax.

Table 3.7: Contractual Maturities – Held-to-Maturity Debt Securities

By remaining contractual maturity (\$ in millions)	Total	Within one year	After one year through five years	After five years through ten years	After ten years
December 31, 2022					
Held-to-maturity debt securities (1):					
Securities of U.S. Treasury and federal agencies					
Amortized cost, net	\$ 16,202	—	12,415	—	3,787
Fair value	14,285	—	11,972	—	2,313
Weighted average yield	2.18%	—	2.37	—	1.58
Securities of U.S. states and political subdivisions					
Amortized cost, net	\$ 30,985	1,677	1,959	2,052	25,297
Fair value	26,608	1,664	1,912	2,018	21,014
Weighted average yield	2.12%	1.26	1.58	2.28	2.20
Federal agency mortgage-backed securities					
Amortized cost, net	\$ 216,966	—	—	—	216,966
Fair value	182,744	—	—	—	182,744
Weighted average yield	2.27%	—	—	—	2.27
Non-agency mortgage-backed securities					
Amortized cost, net	\$ 1,253	—	18	65	1,170
Fair value	1,106	—	17	61	1,028
Weighted average yield	3.11%	—	2.93	3.88	3.07
Collateralized loan obligations					
Amortized cost, net	\$ 29,926	—	—	13,264	16,662
Fair value	29,200	—	—	13,085	16,115
Weighted average yield	5.62%	—	—	5.71	5.55
Other debt securities					
Amortized cost, net	\$ 1,727	—	758	969	—
Fair value	1,578	—	713	865	—
Weighted average yield	4.47%	—	4.10	4.75	—
Total held-to-maturity debt securities					
Amortized cost, net	\$ 297,059	1,677	15,150	16,350	263,882
Fair value	255,521	1,664	14,614	16,029	223,214
Weighted average yield	2.61%	1.26	2.35	5.21	2.47

(1) Weighted average yields displayed by maturity bucket are weighted based on amortized cost, excluding unamortized basis adjustments related to the transfer of certain debt securities from AFS to HTM, and are shown pre-tax.

Note 4: Equity Securities

Table 4.1 provides a summary of our equity securities by business purpose and accounting method.

Table 4.1: Equity Securities

(in millions)	Dec 31, 2022	Dec 31, 2021
Held for trading at fair value:		
Marketable equity securities (1)	\$ 17,180	27,476
Nonmarketable equity securities (2)(3)	9,730	—
Total equity securities held for trading	26,910	27,476
Not held for trading:		
Fair value:		
Marketable equity securities	1,436	2,578
Nonmarketable equity securities (2)	37	9,044
Total equity securities not held for trading at fair value	1,473	11,622
Equity method:		
Private equity	2,836	3,077
Tax-advantaged renewable energy (4)	6,535	4,740
New market tax credit and other	298	379
Total equity method	9,669	8,196
Other methods:		
Low-income housing tax credit investments (LIHTC) (4)	12,186	12,314
Private equity (5)	9,276	9,694
Federal Reserve Bank stock and other at cost (6)	4,900	3,584
Total equity securities not held for trading	37,504	45,410
Total equity securities	\$ 64,414	72,886

- (1) Represents securities held as part of our customer accommodation trading activities. For additional information on these activities, see Note 2 (Trading Activities).
(2) In first quarter 2022, we prospectively reclassified certain equity securities and related economic hedge derivatives from "not held for trading activities" to "held for trading activities" to better reflect the business activity of those financial instruments. For additional information on Trading Activities, see Note 1 (Summary of Significant Accounting Policies).
(3) Represents securities economically hedged with equity derivatives.
(4) See Note 16 (Securitized and Variable Interest Entities) for information about tax credit investments.
(5) Represents nonmarketable equity securities accounted for under the measurement alternative, which were predominantly securities associated with our affiliated venture capital business.
(6) Includes \$3.5 billion of investments in Federal Reserve Bank stock at both December 31, 2022 and 2021, and \$1.4 billion and \$39 million of investments in Federal Home Loan Bank stock at December 31, 2022 and 2021, respectively.

Net Gains and Losses Not Held for Trading

Table 4.2 provides a summary of the net gains and losses from equity securities not held for trading, which excludes equity method adjustments for our share of the investee's earnings or

losses that are recognized in other noninterest income. Gains and losses for securities held for trading are reported in net gains from trading and securities.

Table 4.2: Net Gains (Losses) from Equity Securities Not Held for Trading

(in millions)	2022	Year ended December 31,	
		2021	2020
Net gains (losses) from equity securities carried at fair value:			
Marketable equity securities	\$ (225)	(202)	63
Nonmarketable equity securities (1)	(82)	(188)	1,414
Total equity securities carried at fair value	(307)	(390)	1,477
Net gains (losses) from nonmarketable equity securities not carried at fair value (2):			
Impairment write-downs	(2,452)	(121)	(1,655)
Net unrealized gains (3)(4)	1,101	4,862	1,651
Net realized gains from sale (4)	852	1,581	359
Total nonmarketable equity securities not carried at fair value	(499)	6,322	355
Net gains (losses) from economic hedge derivatives (1)	—	495	(1,167)
Total net gains (losses) from equity securities not held for trading	\$ (806)	6,427	665

- (1) In first quarter 2022, we prospectively reclassified certain equity securities and related economic hedge derivatives from "not held for trading activities" to "held for trading activities" to better reflect the business activity of those financial instruments. For additional information on Trading Activities, see Note 1 (Summary of Significant Accounting Policies).
(2) Includes amounts related to private equity and venture capital investments in consolidated portfolio companies, which are not reported in equity securities on our consolidated balance sheet.
(3) Includes unrealized gains (losses) due to observable price changes from equity securities accounted for under the measurement alternative.
(4) During the year ended December 31, 2021, we recognized \$442 million of gains (including \$293 million of unrealized gains) related to the partial sale of a nonmarketable equity investment to an unrelated third-party that resulted in the deconsolidation of a consolidated portfolio company. Our retained investment in nonmarketable equity securities of the formerly consolidated portfolio company was remeasured to fair value.

Measurement Alternative

Table 4.3 provides additional information about the impairment write-downs and observable price changes from nonmarketable

equity securities accounted for under the measurement alternative. Gains and losses related to these adjustments are also included in Table 4.2.

Table 4.3: Net Gains (Losses) from Measurement Alternative Equity Securities

(in millions)	Year ended December 31,		
	2022	2021	2020
Net gains (losses) recognized in earnings during the period:			
Gross unrealized gains from observable price changes	\$ 1,115	4,569	1,651
Gross unrealized losses from observable price changes	(14)	—	—
Impairment write-downs	(2,263)	(109)	(954)
Net realized gains from sale	98	456	38
Total net gains (losses) recognized during the period	\$ (1,064)	4,916	735

Table 4.4 presents cumulative carrying value adjustments to nonmarketable equity securities accounted for under the measurement alternative that were still held at the end of each reporting period presented.

Table 4.4: Measurement Alternative Cumulative Gains (Losses)

(in millions)	Year ended December 31,		
	2022	2021	2020
Cumulative gains (losses):			
Gross unrealized gains from observable price changes	\$ 7,141	6,278	2,356
Gross unrealized losses from observable price changes	(14)	(3)	(25)
Impairment write-downs	(2,896)	(821)	(969)

Note 5: Loans and Related Allowance for Credit Losses

Table 5.1 presents total loans outstanding by portfolio segment and class of financing receivable. Outstanding balances include unearned income, net deferred loan fees or costs, and unamortized discounts and premiums. These amounts were less than 1% of our total loans outstanding at December 31, 2022 and 2021.

Outstanding balances exclude accrued interest receivable on loans, except for certain revolving loans, such as credit card loans.

See Note 7 (Intangible Assets and Other Assets) for additional information on accrued interest receivable. Amounts considered to be uncollectible are reversed through interest income. During 2022, we reversed accrued interest receivable of \$29 million for our commercial portfolio segment and \$143 million for our consumer portfolio segment, compared with \$44 million and \$175 million, respectively, for 2021.

Table 5.1: Loans Outstanding

(in millions)	Dec 31, 2022	Dec 31, 2021
Commercial and industrial	\$ 386,806	350,436
Commercial real estate	155,802	147,825
Lease financing	14,908	14,859
Total commercial	557,516	513,120
Residential mortgage	269,117	258,888
Credit card	46,293	38,453
Auto	53,669	56,659
Other consumer	29,276	28,274
Total consumer	398,355	382,274
Total loans	\$ 955,871	895,394

Our non-U.S. loans are reported by respective class of financing receivable in the table above. Substantially all of our non-U.S. loan portfolio is commercial loans. Table 5.2 presents

total non-U.S. commercial loans outstanding by class of financing receivable.

Table 5.2: Non-U.S. Commercial Loans Outstanding

(in millions)	Dec 31, 2022	Dec 31, 2021
Commercial and industrial	\$ 78,981	77,365
Commercial real estate	7,619	8,652
Lease financing	670	680
Total non-U.S. commercial loans	\$ 87,270	86,697

Loan Concentrations

Loan concentrations may exist when there are amounts loaned to borrowers engaged in similar activities or similar types of loans extended to a diverse group of borrowers that would cause them to be similarly impacted by economic or other conditions. Commercial and industrial loans and lease financing to borrowers in the financials except banks industry represented 15% and 16% of total loans at December 31, 2022 and 2021, respectively. At December 31, 2022 and 2021, we did not have concentrations representing 10% or more of our total loan portfolio in the commercial real estate (CRE) portfolios (real estate mortgage and real estate construction) by state or property type. Residential mortgage loans to borrowers in the state of California represented 12% of total loans at both December 31, 2022 and 2021. These California loans are generally diversified among the larger metropolitan areas in California, with no single area consisting of more than 4% of total loans at both December 31, 2022 and 2021. We continuously monitor changes in real estate values and underlying economic or market conditions for all geographic areas of our residential mortgage portfolio as part of our credit risk management process.

Some of our residential mortgage loans include an interest-only feature as part of the loan terms. These interest-only loans were approximately 2% and 3% of total loans at December 31, 2022 and 2021, respectively. Substantially all of these interest-only loans at origination were considered to be prime or near prime. We do not offer option adjustable-rate mortgage (ARM) products, nor do we offer variable-rate mortgage products with fixed payment amounts, commonly referred to within the financial services industry as negative amortizing mortgage loans.

Loan Purchases, Sales, and Transfers

Table 5.3 presents the proceeds paid or received for purchases and sales of loans and transfers from loans held for investment to mortgages/loans held for sale. The table excludes loans for

which we have elected the fair value option and government insured/guaranteed residential mortgage – first lien loans because their loan activity normally does not impact the ACL.

Table 5.3: Loan Purchases, Sales, and Transfers

(in millions)	Year ended December 31,					
	2022			2021		
	Commercial	Consumer	Total	Commercial	Consumer	Total
Purchases	\$ 740	5	745	380	6	386
Sales and net transfers (to)/from LHFS	(3,182)	(1,135)	(4,317)	(4,084)	(243)	(4,327)

Unfunded Credit Commitments

Unfunded credit commitments are legally binding agreements to lend to customers with terms covering usage of funds, contractual interest rates, expiration dates, and any required collateral. Our commercial lending commitments include, but are not limited to, (i) commitments for working capital and general corporate purposes, (ii) financing to customers who warehouse financial assets secured by real estate, consumer, or corporate loans, (iii) financing that is expected to be syndicated or replaced with other forms of long-term financing, and (iv) commercial real estate lending. We also originate multipurpose lending commitments under which commercial customers have the option to draw on the facility in one of several forms, including the issuance of letters of credit, which reduces the unfunded commitment amounts of the facility.

The maximum credit risk for these commitments will generally be lower than the contractual amount because these commitments may expire without being used or may be cancelled at the customer's request. We may reduce or cancel lines of credit in accordance with the contracts and applicable law. Certain commitments either provide us with funding discretion or are subject to loan agreements with covenants regarding the financial performance of the customer or borrowing base formulas that must be met before we are required to fund the commitment. Our credit risk monitoring activities include managing the amount of commitments, both to individual customers and in total, and the size and maturity structure of these commitments. We do not recognize an ACL for commitments that are unconditionally cancellable at our discretion.

We issue commercial letters of credit to assist customers in purchasing goods or services, typically for international trade. At December 31, 2022 and 2021, we had \$1.8 billion and \$1.5 billion, respectively, of outstanding issued commercial letters of credit. See Note 17 (Guarantees and Other Commitments) for additional information on issued standby letters of credit.

We may be a fronting bank, whereby we act as a representative for other lenders, and advance funds or provide for the issuance of letters of credit under syndicated loan or letter of credit agreements. Any advances are generally repaid in less than a week and would normally require default of both the customer and another lender to expose us to loss.

The contractual amount of our unfunded credit commitments, including unissued letters of credit, is summarized in Table 5.4. The table excludes issued letters of credit and is presented net of commitments syndicated to others, including the fronting arrangements described above.

Table 5.4: Unfunded Credit Commitments

(in millions)	Dec 31, 2022	Dec 31, 2021
Commercial and industrial	\$ 457,473	388,162
Commercial real estate	29,518	31,458
Total commercial	486,991	419,620
Residential mortgage (1)	39,155	60,439
Credit card	145,526	130,743
Other consumer (2)	69,244	75,919
Total consumer	253,925	267,101
Total unfunded credit commitments	\$ 740,916	686,721

(1) Includes lines of credit totaling \$35.5 billion and \$45.6 billion as of December 31, 2022 and 2021, respectively.

(2) Primarily includes securities-based lines of credit.

Note 5: Loans and Related Allowance for Credit Losses (continued)**Allowance for Credit Losses**

Table 5.5 presents the allowance for credit losses (ACL) for loans, which consists of the allowance for loan losses and the allowance for unfunded credit commitments. The ACL for loans decreased

\$179 million from December 31, 2021, reflecting reduced uncertainty around the economic impact of the COVID-19 pandemic on our loan portfolio. This decrease was partially offset by loan growth and a less favorable economic environment.

Table 5.5: Allowance for Credit Losses for Loans

(\$ in millions)	Year ended December 31,	
	2022	2021
Balance, beginning of period	\$ 13,788	19,713
Provision for credit losses	1,544	(4,207)
Interest income on certain loans (1)	(108)	(145)
Loan charge-offs:		
Commercial and industrial	(307)	(517)
Commercial real estate	(21)	(99)
Lease financing	(27)	(46)
Total commercial	(355)	(662)
Residential mortgage	(175)	(260)
Credit card	(1,195)	(1,189)
Auto	(734)	(497)
Other consumer	(407)	(423)
Total consumer	(2,511)	(2,369)
Total loan charge-offs	(2,866)	(3,031)
Loan recoveries:		
Commercial and industrial	224	299
Commercial real estate	32	46
Lease financing	20	22
Total commercial	276	367
Residential mortgage	238	277
Credit card	344	389
Auto	312	316
Other consumer	88	108
Total consumer	982	1,090
Total loan recoveries	1,258	1,457
Net loan charge-offs	(1,608)	(1,574)
Other	(7)	1
Balance, end of period	\$ 13,609	13,788
Components:		
Allowance for loan losses	\$ 12,985	12,490
Allowance for unfunded credit commitments	624	1,298
Allowance for credit losses	\$ 13,609	13,788
Net loan charge-offs as a percentage of average total loans	0.17 %	0.18
Allowance for loan losses as a percentage of total loans	1.36	1.39
Allowance for credit losses for loans as a percentage of total loans	1.42	1.54

(1) Loans with an allowance measured by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize changes in allowance attributable to the passage of time as interest income.

Table 5.6 summarizes the activity in the ACL by our commercial and consumer portfolio segments.

Table 5.6: Allowance for Credit Losses for Loans Activity by Portfolio Segment

(in millions)	Year ended December 31,					
	2022			2021		
	Commercial	Consumer	Total	Commercial	Consumer	Total
Balance, beginning of period	\$ 7,791	5,997	13,788	11,516	8,197	19,713
Provision for credit losses	(721)	2,265	1,544	(3,373)	(834)	(4,207)
Interest income on certain loans (1)	(29)	(79)	(108)	(58)	(87)	(145)
Loan charge-offs	(355)	(2,511)	(2,866)	(662)	(2,369)	(3,031)
Loan recoveries	276	982	1,258	367	1,090	1,457
Net loan charge-offs	(79)	(1,529)	(1,608)	(295)	(1,279)	(1,574)
Other	(6)	(1)	(7)	1	—	1
Balance, end of period	\$ 6,956	6,653	13,609	7,791	5,997	13,788

(1) Loans with an allowance measured by discounting expected cash flows using the loan's effective interest rate over the remaining life of the loan recognize changes in allowance attributable to the passage of time as interest income.

Credit Quality

We monitor credit quality by evaluating various attributes and utilize such information in our evaluation of the appropriateness of the ACL for loans. The following sections provide the credit quality indicators we most closely monitor. The credit quality indicators are generally based on information as of our financial statement date.

COMMERCIAL CREDIT QUALITY INDICATORS We manage a consistent process for assessing commercial loan credit quality. Commercial loans are generally subject to individual risk assessment using our internal borrower and collateral quality ratings, which is our primary credit quality indicator. Our ratings are aligned to regulatory definitions of pass and criticized categories with the criticized segmented among special mention, substandard, doubtful and loss categories.

Table 5.7 provides the outstanding balances of our commercial loan portfolio by risk category and credit quality information by origination year for term loans. Revolving loans may convert to term loans as a result of a contractual provision in the original loan agreement or if modified in a troubled debt restructuring (TDR). At December 31, 2022, we had \$532.4 billion and \$25.1 billion of pass and criticized commercial loans, respectively.

Note 5: Loans and Related Allowance for Credit Losses (continued)

Table 5.7: Commercial Loan Categories by Risk Categories and Vintage

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2022	2021	2020	2019	2018	Prior			
December 31, 2022									
Commercial and industrial									
Pass	\$ 61,646	31,376	11,128	13,656	3,285	5,739	247,594	842	375,266
Criticized	872	1,244	478	505	665	532	7,244	—	11,540
Total commercial and industrial	62,518	32,620	11,606	14,161	3,950	6,271	254,838	842	386,806
Commercial real estate									
Pass	38,022	38,709	16,564	16,409	10,587	16,159	6,765	150	143,365
Criticized	2,785	2,794	965	2,958	1,088	1,688	159	—	12,437
Total commercial real estate	40,807	41,503	17,529	19,367	11,675	17,847	6,924	150	155,802
Lease financing									
Pass	4,543	3,336	1,990	1,427	765	1,752	—	—	13,813
Criticized	330	275	190	169	94	37	—	—	1,095
Total lease financing	4,873	3,611	2,180	1,596	859	1,789	—	—	14,908
Total commercial loans	\$ 108,198	77,734	31,315	35,124	16,484	25,907	261,762	992	557,516
	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2021	2020	2019	2018	2017	Prior			
December 31, 2021									
Commercial and industrial									
Pass	\$ 65,562	15,193	20,553	7,400	3,797	13,985	211,452	679	338,621
Criticized	1,657	884	1,237	1,256	685	551	5,528	17	11,815
Total commercial and industrial	67,219	16,077	21,790	8,656	4,482	14,536	216,980	696	350,436
Commercial real estate									
Pass	44,091	19,987	23,562	14,785	7,830	16,355	6,453	5	133,068
Criticized	3,972	1,385	3,561	2,068	943	2,428	400	—	14,757
Total commercial real estate	48,063	21,372	27,123	16,853	8,773	18,783	6,853	5	147,825
Lease financing									
Pass	4,100	3,012	2,547	1,373	838	1,805	—	—	13,675
Criticized	284	246	282	184	86	102	—	—	1,184
Total lease financing	4,384	3,258	2,829	1,557	924	1,907	—	—	14,859
Total commercial loans	\$ 119,666	40,707	51,742	27,066	14,179	35,226	223,833	701	513,120

Table 5.8 provides days past due (DPD) information for commercial loans, which we monitor as part of our credit risk

management practices; however, delinquency is not a primary credit quality indicator for commercial loans.

Table 5.8: Commercial Loan Categories by Delinquency Status

(in millions)	Still accruing			Nonaccrual loans	Total commercial loans
	Current-29 DPD	30-89 DPD	90+ DPD		
December 31, 2022					
Commercial and industrial	\$ 384,164	1,313	583	746	386,806
Commercial real estate	153,877	833	134	958	155,802
Lease financing	14,623	166	—	119	14,908
Total commercial loans	\$ 552,664	2,312	717	1,823	557,516
December 31, 2021					
Commercial and industrial	\$ 348,033	1,217	206	980	350,436
Commercial real estate	146,084	464	29	1,248	147,825
Lease financing	14,568	143	—	148	14,859
Total commercial loans	\$ 508,685	1,824	235	2,376	513,120

CONSUMER CREDIT QUALITY INDICATORS We have various classes of consumer loans that present unique credit risks. Loan delinquency, Fair Isaac Corporation (FICO) credit scores and loan-to-value (LTV) for residential mortgage loans are the primary credit quality indicators that we monitor and utilize in our evaluation of the appropriateness of the ACL for the consumer loan portfolio segment.

Many of our loss estimation techniques used for the ACL for loans rely on delinquency-based models; therefore, delinquency is an important indicator of credit quality in the establishment of our ACL for consumer loans. Credit quality information is provided with the year of origination for term loans. Revolving loans may convert to term loans as a result of a contractual provision in the original loan agreement or if modified in a TDR.

We obtain FICO scores at loan origination and the scores are generally updated at least quarterly, except in limited circumstances, including compliance with the Fair Credit Reporting Act (FCRA). FICO scores are not available for certain loan types or may not be required if we deem it unnecessary due to strong collateral and other borrower attributes.

Table 5.9 provides the outstanding balances of our residential mortgage loans by our primary credit quality indicators.

Payment deferral activities in the residential mortgage portfolio instituted in response to the COVID-19 pandemic could continue to delay the recognition of delinquencies for residential mortgage customers who otherwise would have moved into past due status. For additional information on customer accommodations in response to the COVID-19 pandemic, see Note 1 (Summary of Significant Accounting Policies) to Financial Statements in this Report.

LTV refers to the ratio comparing the loan's outstanding balance to the property's collateral value. Combined LTV (CLTV) refers to the combination of first lien mortgage and junior lien mortgage (including unused line amounts for credit line products) ratios. We obtain LTVs and CLTVs using a cascade approach which first uses values provided by automated valuation models (AVMs) for the property. If an AVM is not available, then the value is estimated using the original appraised value adjusted by the change in Home Price Index (HPI) for the property location. If an HPI is not available, the original appraised value is used. The HPI value is normally the only method considered for high value properties, generally with an original value of \$1 million or more, as the AVM values have proven less accurate for these properties. Generally, we obtain available LTVs and CLTVs on a quarterly basis. Certain loans do not have an LTV or CLTV due to a lack of industry data availability and portfolios acquired from or serviced by other institutions.

Note 5: Loans and Related Allowance for Credit Losses (continued)

Table 5.9: Credit Quality Indicators for Residential Mortgage Loans by Vintage

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2022	2021	2020	2019	2018	Prior			
December 31, 2022									
By delinquency status:									
Current-29 DPD	\$ 48,581	65,705	37,289	20,851	6,190	61,680	11,031	6,913	258,240
30-89 DPD	65	66	32	33	21	683	58	159	1,117
90+ DPD	6	17	15	25	15	530	32	260	900
Government insured/guaranteed loans (1)	9	59	133	148	200	8,311	—	—	8,860
Total residential mortgage	\$ 48,661	65,847	37,469	21,057	6,426	71,204	11,121	7,332	269,117
By FICO:									
740+	\$ 43,976	61,450	35,221	19,437	5,610	51,551	8,664	4,139	230,048
700-739	3,245	2,999	1,419	941	314	4,740	1,159	1,021	15,838
660-699	1,060	851	438	306	169	2,388	567	656	6,435
620-659	211	248	106	82	50	1,225	223	349	2,494
<620	59	81	44	46	28	1,323	227	466	2,274
No FICO available	101	159	108	97	55	1,666	281	701	3,168
Government insured/guaranteed loans (1)	9	59	133	148	200	8,311	—	—	8,860
Total residential mortgage	\$ 48,661	65,847	37,469	21,057	6,426	71,204	11,121	7,332	269,117
By LTV/CLTV:									
0-80%	\$ 40,869	64,613	37,145	20,744	6,155	62,593	10,923	7,188	250,230
80.01-100%	7,670	1,058	112	97	30	107	109	97	9,280
>100% (2)	48	20	13	6	3	23	28	16	157
No LTV available	65	97	66	62	38	170	61	31	590
Government insured/guaranteed loans (1)	9	59	133	148	200	8,311	—	—	8,860
Total residential mortgage	\$ 48,661	65,847	37,469	21,057	6,426	71,204	11,121	7,332	269,117

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2021	2020	2019	2018	2017	Prior			
December 31, 2021									
By delinquency status:									
Current-29 DPD	\$ 70,022	41,547	24,917	7,686	13,755	62,276	16,131	6,099	242,433
30-89 DPD	139	34	32	12	28	558	60	111	974
90+ DPD	1	79	76	75	98	1,458	114	422	2,323
Government insured/guaranteed loans (1)	14	134	209	349	364	12,088	—	—	13,158
Total residential mortgage	\$ 70,176	41,794	25,234	8,122	14,245	76,380	16,305	6,632	258,888
By FICO:									
740+	\$ 64,616	39,168	23,259	7,009	12,584	51,881	12,448	3,568	214,533
700-739	4,129	1,671	1,127	399	766	5,007	1,684	972	15,755
660-699	980	489	358	193	301	2,720	853	653	6,547
620-659	187	122	93	50	55	1,420	352	370	2,649
<620	61	28	40	30	58	1,597	391	467	2,672
No FICO available	189	182	148	92	117	1,667	577	602	3,574
Government insured/guaranteed loans (1)	14	134	209	349	364	12,088	—	—	13,158
Total residential mortgage	\$ 70,176	41,794	25,234	8,122	14,245	76,380	16,305	6,632	258,888
By LTV/CLTV:									
0-80%	\$ 69,511	41,070	24,419	7,544	13,677	63,544	15,300	6,243	241,308
80.01-100%	486	437	474	147	134	394	711	283	3,066
>100% (2)	15	41	34	15	10	99	186	66	466
No LTV available	150	112	98	67	60	255	108	40	890
Government insured/guaranteed loans (1)	14	134	209	349	364	12,088	—	—	13,158
Total residential mortgage	\$ 70,176	41,794	25,234	8,122	14,245	76,380	16,305	6,632	258,888

(1) Government insured or guaranteed loans represent loans whose repayments are predominantly insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). Loans insured/guaranteed by the FHA/VA and 90+ DPD totaled \$3.2 billion and \$5.7 billion at December 31, 2022 and 2021, respectively.

(2) Reflects total loan balances with LTV/CLTV amounts in excess of 100%. In the event of default, the loss content would generally be limited to only the amount in excess of 100% LTV/CLTV.

Table 5.10 provides the outstanding balances of our credit card loan portfolio by primary credit quality indicators.

The revolving loans converted to term loans in the credit card loan category represent credit card loans with modified terms that require payment over a specific term.

Table 5.10: Credit Quality Indicators for Credit Card

(in millions)	December 31, 2022			December 31, 2021		
	Revolving loans	Revolving loans converted to term loans	Total	Revolving loans	Revolving loans converted to term loans	Total
By delinquency status:						
Current-29 DPD	\$ 45,131	223	45,354	37,686	192	37,878
30-89 DPD	457	27	484	294	12	306
90+ DPD	441	14	455	263	6	269
Total credit cards	\$ 46,029	264	46,293	38,243	210	38,453
By FICO:						
740+	\$ 16,681	19	16,700	14,240	19	14,259
700-739	10,640	37	10,677	9,254	39	9,293
660-699	9,573	55	9,628	7,934	52	7,986
620-659	4,885	45	4,930	3,753	38	3,791
<620	4,071	107	4,178	2,945	61	3,006
No FICO available	179	1	180	117	1	118
Total credit cards	\$ 46,029	264	46,293	38,243	210	38,453

Table 5.11 provides the outstanding balances of our Auto and Other consumer loan portfolios by primary credit quality indicators.

Table 5.11: Credit Quality Indicators for Auto and Other Consumer by Vintage

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2022	2021	2020	2019	2018	Prior			
December 31, 2022									
By delinquency status:									
Auto									
Current-29 DPD	\$ 19,101	19,126	7,507	4,610	1,445	421	—	—	52,210
30-89 DPD	218	585	253	167	69	45	—	—	1,337
90+ DPD	23	56	22	13	4	4	—	—	122
Total auto	\$ 19,342	19,767	7,782	4,790	1,518	470	—	—	53,669
Other consumer									
Current-29 DPD	\$ 3,718	1,184	341	240	63	83	23,431	117	29,177
30-89 DPD	17	12	2	3	1	2	14	8	59
90+ DPD	5	5	1	1	—	1	13	14	40
Total other consumer	\$ 3,740	1,201	344	244	64	86	23,458	139	29,276
By FICO:									
Auto									
740+	\$ 9,361	8,233	3,193	2,146	664	166	—	—	23,763
700-739	3,090	3,033	1,287	788	238	64	—	—	8,500
660-699	2,789	2,926	1,163	641	192	58	—	—	7,769
620-659	2,021	2,156	796	421	130	47	—	—	5,571
<620	2,062	3,389	1,316	756	263	126	—	—	7,912
No FICO available	19	30	27	38	31	9	—	—	154
Total auto	\$ 19,342	19,767	7,782	4,790	1,518	470	—	—	53,669
Other consumer									
740+	\$ 1,908	546	174	112	21	50	1,660	43	4,514
700-739	726	216	62	44	10	13	568	18	1,657
660-699	527	177	34	33	9	8	449	19	1,256
620-659	204	81	13	14	4	5	181	11	513
<620	89	64	14	16	5	5	154	18	365
No FICO available	286	117	47	25	15	5	920	30	1,445
FICO not required (1)	—	—	—	—	—	—	19,526	—	19,526
Total other consumer	\$ 3,740	1,201	344	244	64	86	23,458	139	29,276

(continued on following page)

Note 5: Loans and Related Allowance for Credit Losses (continued)

(continued from previous page)

(in millions)	Term loans by origination year						Revolving loans	Revolving loans converted to term loans	Total
	2021	2020	2019	2018	2017	Prior			
December 31, 2021									
By delinquency status:									
Auto									
Current-29 DPD	\$ 29,246	12,412	8,476	3,271	1,424	714	—	—	55,543
30-89 DPD	289	260	218	106	60	78	—	—	1,011
90+ DPD	31	28	23	9	6	8	—	—	105
Total auto	\$ 29,566	12,700	8,717	3,386	1,490	800	—	—	56,659
Other consumer									
Current-29 DPD	\$ 2,221	716	703	203	107	125	23,988	143	28,206
30-89 DPD	5	3	5	2	—	3	15	5	38
90+ DPD	1	1	2	1	—	1	13	11	30
Total other consumer	\$ 2,227	720	710	206	107	129	24,016	159	28,274
By FICO:									
Auto									
740+	\$ 12,029	5,127	4,009	1,566	672	245	—	—	23,648
700-739	4,899	2,233	1,519	572	237	112	—	—	9,572
660-699	4,953	2,137	1,251	451	190	106	—	—	9,088
620-659	3,991	1,453	800	298	135	95	—	—	6,772
<620	3,678	1,716	1,126	486	247	232	—	—	7,485
No FICO available	16	34	12	13	9	10	—	—	94
Total auto	\$ 29,566	12,700	8,717	3,386	1,490	800	—	—	56,659
Other consumer									
740+	\$ 1,197	382	303	85	19	77	2,509	49	4,621
700-739	412	116	110	39	9	18	713	25	1,442
660-699	261	68	79	31	8	12	490	20	969
620-659	91	24	34	14	4	5	193	13	378
<620	31	17	29	14	5	7	160	16	279
No FICO available	235	113	155	23	62	10	1,236	36	1,870
FICO not required (1)	—	—	—	—	—	—	18,715	—	18,715
Total other consumer	\$ 2,227	720	710	206	107	129	24,016	159	28,274

(1) Substantially all loans not requiring a FICO score are securities-based loans originated by the Wealth and Investment Management operating segment.

NONACCRUAL LOANS Table 5.12 provides loans on nonaccrual status. Nonaccrual loans may have an ACL or a negative allowance for credit losses from expected recoveries of amounts previously written off. Customer payment deferral activities in

the residential mortgage portfolio instituted in response to the COVID-19 pandemic could continue to delay the recognition of nonaccrual loans for those residential mortgage customers who would have otherwise moved into nonaccrual status.

Table 5.12: Nonaccrual Loans

(in millions)	Nonaccrual loans		Amortized cost		Recognized interest income	
			Nonaccrual loans without related allowance for credit losses (1)		Year ended December 31,	
	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021	2022	2021
Commercial and industrial	\$ 746	980	174	190	63	97
Commercial real estate	958	1,248	134	71	54	69
Lease financing	119	148	5	9	—	—
Total commercial	1,823	2,376	313	270	117	166
Residential mortgage	3,611	4,604	2,316	3,219	211	175
Auto	153	198	—	—	26	34
Other consumer	39	34	—	—	4	3
Total consumer	3,803	4,836	2,316	3,219	241	212
Total nonaccrual loans	\$ 5,626	7,212	2,629	3,489	358	378

(1) Nonaccrual loans may not have an allowance for credit losses if the loss expectations are zero given the related collateral value.

LOANS IN PROCESS OF FORECLOSURE Our recorded investment in consumer mortgage loans collateralized by residential real estate property that are in process of foreclosure was \$1.0 billion and \$694 million at December 31, 2022 and 2021, respectively, which included \$771 million and \$583 million, respectively, of loans that are government insured/guaranteed. Under the Consumer Financial Protection Bureau guidelines, we do not commence the foreclosure process on residential mortgage loans until after the loan is 120 days delinquent. Foreclosure procedures and timelines vary depending on whether the property address resides in a judicial or non-judicial state. Judicial states require the foreclosure to be processed through the state's courts while non-judicial states are processed without court intervention. Foreclosure timelines vary according to state law.

Note 5: Loans and Related Allowance for Credit Losses (continued)

LOANS 90 DAYS OR MORE PAST DUE AND STILL ACCRUING Certain loans 90 days or more past due are still accruing, because they are (1) well-secured and in the process of collection or (2) residential mortgage or consumer loans exempt under regulatory rules from being classified as nonaccrual until later delinquency, usually 120 days past due.

Table 5.13 shows loans 90 days or more past due and still accruing by class for loans not government insured/guaranteed.

Table 5.13: Loans 90 Days or More Past Due and Still Accruing

(\$ in millions)	Dec 31, 2022	Dec 31, 2021
Total:	\$ 4,340	5,358
Less: FHA insured/VA guaranteed (1)	3,005	4,699
Total, not government insured/guaranteed	\$ 1,335	659
By segment and class, not government insured/guaranteed:		
Commercial and industrial	\$ 583	206
Commercial real estate	134	29
Total commercial	717	235
Residential mortgage	28	49
Credit card	455	269
Auto	111	88
Other consumer	24	18
Total consumer	618	424
Total, not government insured/guaranteed	\$ 1,335	659

(1) Represents loans whose repayments are predominantly insured by the FHA or guaranteed by the VA.

TROUBLED DEBT RESTRUCTURINGS (TDRs) When, for economic or legal reasons related to a borrower's financial difficulties, we grant a concession for other than an insignificant period of time to a borrower that we would not otherwise consider, the related loan is classified as a TDR, the balance of which totaled \$9.2 billion and \$10.2 billion at December 31, 2022 and 2021, respectively. We do not consider loan resolutions such as foreclosure or short sale to be a TDR. In addition, COVID-19-related modifications are generally not classified as TDRs due to the relief under the CARES Act and the Interagency Statement. For additional information on the TDR relief, see Note 1 (Summary of Significant Accounting Policies) in this Report.

We may require some consumer borrowers experiencing financial difficulty to make trial payments generally for a period of three to four months, according to the terms of a planned permanent modification, to determine if they can perform according to those terms. These arrangements represent trial modifications, which we classify and account for as TDRs. While loans are in trial payment programs, their original terms are not considered modified and they continue to advance through delinquency status and accrue interest according to their original terms.

Commitments to lend additional funds on loans whose terms have been modified in a TDR amounted to \$434 million and \$431 million at December 31, 2022 and 2021, respectively.

Table 5.14 summarizes our TDR modifications for the periods presented by primary modification type and includes the financial effects of these modifications. For those loans that modify more than once, the table reflects each modification that occurred during the period. Loans that both modify and are paid off or written-off within the period, as well as changes in recorded investment during the period for loans modified in prior periods, are not included in the table.

Table 5.14: TDR Modifications

(\$ in millions)	Primary modification type (1)				Financial effects of modifications		
	Principal forgiveness	Interest rate reduction	Other concessions (2)	Total	Charge-offs (3)	Weighted average interest rate reduction	Recorded investment related to interest rate reduction (4)
Year Ended December 31, 2022							
Commercial and industrial	\$ 24	24	349	397	—	10.69%	\$ 24
Commercial real estate	—	12	112	124	—	0.92	12
Lease financing	—	—	2	2	—	—	—
Total commercial	24	36	463	523	—	7.51	36
Residential mortgage	1	369	1,357	1,727	6	1.61	369
Credit card	—	311	—	311	—	20.33	311
Auto	2	7	63	72	16	4.33	7
Other consumer	—	19	3	22	1	11.48	19
Trial modifications (5)	—	—	228	228	—	—	—
Total consumer	3	706	1,651	2,360	23	10.14	706
Total	\$ 27	742	2,114	2,883	23	10.02%	\$ 742
Year Ended December 31, 2021							
Commercial and industrial	\$ 2	9	879	890	20	0.81%	\$ 9
Commercial real estate	41	15	259	315	—	1.28	14
Lease financing	—	—	7	7	—	—	—
Total commercial	43	24	1,145	1,212	20	1.11	23
Residential mortgage	—	70	1,324	1,394	3	1.80	70
Credit card	—	106	—	106	—	19.12	106
Auto	1	4	131	136	54	3.82	4
Other consumer	—	18	1	19	—	11.83	18
Trial modifications (5)	—	—	(3)	(3)	—	—	—
Total consumer	1	198	1,453	1,652	57	12.01	198
Total	\$ 44	222	2,598	2,864	77	10.84%	\$ 221
Year Ended December 31, 2020							
Commercial and industrial	\$ 24	47	2,971	3,042	162	0.74%	\$ 48
Commercial real estate	10	35	684	729	5	1.11	35
Lease financing	—	—	1	1	—	—	—
Total commercial	34	82	3,656	3,772	167	0.90	83
Residential mortgage	—	25	4,277	4,302	7	1.93	51
Credit card	—	272	—	272	—	14.12	272
Auto	4	6	166	176	93	4.65	6
Other consumer	—	23	34	57	1	8.28	23
Trial modifications (5)	—	—	3	3	—	—	—
Total consumer	4	326	4,480	4,810	101	11.80	352
Total	\$ 38	408	8,136	8,582	268	9.73%	\$ 435

- (1) Amounts represent the recorded investment in loans after recognizing the effects of the TDR, if any. TDRs may have multiple types of concessions, but are presented only once in the first modification type based on the order presented in the table above. The reported amounts include loans remodified of \$445 million, \$737 million, and \$1.5 billion for the years ended December 31, 2022, 2021 and 2020, respectively.
- (2) Other concessions include loans with payment (principal and/or interest) deferral, loans discharged in bankruptcy, loan renewals, term extensions and other interest and noninterest adjustments, but exclude modifications that also forgive principal and/or reduce the contractual interest rate. The reported amounts include loans that are new TDRs that may have COVID-19-related payment deferrals and exclude COVID-19-related payment deferrals on loans previously reported as TDRs given limited current financial effects other than payment deferral.
- (3) Charge-offs include write-downs of the investment in the loan in the period it is contractually modified. The amount of charge-off will differ from the modification terms if the loan has been charged down prior to the modification based on our policies. In addition, there may be cases where we have a charge-off/down with no legal principal modification.
- (4) Recorded investment related to interest rate reduction reflects the effect of reduced interest rates on loans with an interest rate concession as one of their concession types, which includes loans reported as a principal primary modification type that also have an interest rate concession.
- (5) Trial modifications are granted a delay in payments due under the original terms during the trial payment period. However, these loans continue to advance through delinquency status and accrue interest according to their original terms. Any subsequent permanent modification generally includes interest rate related concessions; however, the exact concession type and resulting financial effect are usually not known until the loan is permanently modified. Trial modifications for the period are presented net of previously reported trial modifications that became permanent in the current period.

Note 5: Loans and Related Allowance for Credit Losses (continued)

Table 5.15 summarizes permanent modification TDRs that have defaulted in the current period within 12 months of their permanent modification date. We are reporting these defaulted

TDRs based on a payment default definition of 90 days past due for the commercial portfolio segment and 60 days past due for the consumer portfolio segment.

Table 5.15: Defaulted TDRs

(in millions)	Recorded investment of defaults		
	Year ended December 31,		
	2022	2021	2020
Commercial and industrial	\$ 55	132	677
Commercial real estate	14	34	128
Lease financing	—	1	1
Total commercial	69	167	806
Residential mortgage	142	13	46
Credit card	43	25	72
Auto	21	43	32
Other consumer	2	3	5
Total consumer	208	84	155
Total	\$ 277	251	961

Note 6: Mortgage Banking Activities

Mortgage banking activities consist of residential and commercial mortgage originations, sales and servicing.

We apply the amortization method to commercial MSR and apply the fair value method to residential MSR. The amortized cost of commercial MSR was \$1.2 billion, \$1.3 billion and

\$1.3 billion, with an estimated fair value of \$2.1 billion, \$1.5 billion, and \$1.4 billion, at December 31, 2022, 2021 and 2020, respectively. Table 6.1 presents the changes in MSR measured using the fair value method.

Table 6.1: Analysis of Changes in Fair Value MSR

(in millions)	Year ended December 31,		
	2022	2021	2020
Fair value, beginning of period	\$ 6,920	6,125	11,517
Servicing from securitizations or asset transfers (1)	1,003	1,645	1,708
Sales and other (2)	(614)	(8)	(32)
Net additions	389	1,637	1,676
Changes in fair value:			
Due to valuation inputs or assumptions:			
Mortgage interest rates (3)	3,417	1,625	(3,946)
Servicing and foreclosure costs (4)	(17)	(9)	(175)
Discount rates (5)	42	(56)	27
Prepayment estimates and other (6)	(188)	(390)	(599)
Net changes in valuation inputs or assumptions	3,254	1,170	(4,693)
Changes due to collection/realization of expected cash flows (7)	(1,253)	(2,012)	(2,375)
Total changes in fair value	2,001	(842)	(7,068)
Fair value, end of period	\$ 9,310	6,920	6,125

- (1) Includes impacts associated with exercising cleanup calls on securitizations and our right to repurchase delinquent loans from GNMA loan securitization pools. MSR may increase upon repurchase due to servicing liabilities associated with these delinquent GNMA loans.
- (2) Includes sales and transfers of MSR, which can result in an increase in MSR if related to portfolios with servicing liabilities. For the year ended December 31, 2022, MSR decreased \$611 million due to the sale of interest-only strips related to excess servicing cash flows from agency residential mortgage-backed securitizations.
- (3) Includes prepayment rate changes as well as other valuation changes due to changes in mortgage interest rates. To reduce exposure to changes in interest rates, MSR are economically hedged with derivative instruments.
- (4) Includes costs to service and unreimbursed foreclosure costs.
- (5) In 2022, we enhanced our approach for estimating the discount rates to a more dynamic methodology for market curves and volatility, which had a nominal impact.
- (6) Represents other changes in valuation model inputs or assumptions including prepayment rate estimation changes that are independent of mortgage interest rate changes.
- (7) Represents the reduction in the MSR fair value for the cash flows expected to be collected during the period, net of income accreted due to the passage of time.

Table 6.2 provides key weighted-average assumptions used in the valuation of residential MSR and sensitivity of the current fair value of residential MSR to immediate adverse changes in those assumptions. Amounts for residential MSR include

purchased servicing rights as well as servicing rights resulting from the transfer of loans. See Note 15 (Fair Values of Assets and Liabilities) for additional information on key assumptions for residential MSR.

Table 6.2: Assumptions and Sensitivity of Residential MSR

(\$ in millions, except cost to service amounts)	Dec 31, 2022	Dec 31, 2021
Fair value of interests held	\$ 9,310	6,920
Expected weighted-average life (in years)	6.3	4.7
Key assumptions:		
Prepayment rate assumption (1)	9.4 %	14.7
Impact on fair value from 10% adverse change	\$ 288	356
Impact on fair value from 25% adverse change	688	834
Discount rate assumption	9.1 %	6.4
Impact on fair value from 100 basis point increase	\$ 368	276
Impact on fair value from 200 basis point increase	707	529
Cost to service assumption (\$ per loan)	102	106
Impact on fair value from 10% adverse change	171	165
Impact on fair value from 25% adverse change	427	411

- (1) Includes a blend of prepayment speeds and expected defaults. Prepayment speeds are influenced by mortgage interest rates as well as our estimation of drivers of borrower behavior.

The sensitivities in the preceding table are hypothetical and caution should be exercised when relying on this data. Changes in value based on variations in assumptions generally cannot be extrapolated because the relationship of the change in the assumption to the change in value may not be linear. Also, the

effect of a variation in a particular assumption on the value of the other interests held is calculated independently without changing any other assumptions. In reality, changes in one factor may result in changes in others, which might magnify or counteract the sensitivities.

Note 6: Mortgage Banking Activities (continued)

We present the components of our managed servicing portfolio in Table 6.3 at unpaid principal balance for loans serviced and subserviced for others and at carrying value for owned loans serviced.

Table 6.3: Managed Servicing Portfolio

(in billions)	Dec 31, 2022	Dec 31, 2021
Residential mortgage servicing:		
Serviced and subserviced for others	\$ 681	718
Owned loans serviced	273	276
Total residential servicing	954	994
Commercial mortgage servicing:		
Serviced and subserviced for others	577	597
Owned loans serviced	133	130
Total commercial servicing	710	727
Total managed servicing portfolio	\$ 1,664	1,721
Total serviced for others, excluding subserviced for others	\$ 1,246	1,304
MSRs as a percentage of loans serviced for others	0.84 %	0.63
Weighted average note rate (mortgage loans serviced for others)	4.30	3.82

At December 31, 2022 and 2021, we had servicer advances, net of an allowance for uncollectible amounts, of \$2.5 billion and \$3.2 billion, respectively. As the servicer of loans for others, we advance certain payments of principal, interest, taxes, insurance, and default-related expenses which are generally reimbursed within a short timeframe from cash flows from the trust, government-sponsored entities (GSEs), insurer or borrower. The credit risk related to these advances is limited since the reimbursement is generally senior to cash payments to investors. We also advance payments of taxes and insurance for our owned

loans which are collectible from the borrower. We maintain an allowance for uncollectible amounts for advances on loans serviced for others that may not be reimbursed if the payments were not made in accordance with applicable servicing agreements or if the insurance or servicing agreements contain limitations on reimbursements. Servicing advances on owned loans are charged-off when deemed uncollectible.

Table 6.4 presents the components of mortgage banking noninterest income.

Table 6.4: Mortgage Banking Noninterest Income

(in millions)	Year ended December 31,		
	2022	2021	2020
Servicing fees:			
Contractually specified servicing fees, late charges and ancillary fees	\$ 2,475	2,801	3,250
Unreimbursed direct servicing costs (1)	(189)	(332)	(620)
Servicing fees	2,286	2,469	2,630
Amortization (2)	(247)	(225)	(308)
Changes due to collection/realization of expected cash flows (3)	(A) (1,253)	(2,012)	(2,375)
Net servicing fees	786	232	(53)
Changes in fair value of MSRs due to valuation inputs or assumptions (4)	(B) 3,254	1,170	(4,693)
Net derivative gains (losses) from economic hedges (5)	(3,507)	(1,208)	4,607
Market-related valuation changes to MSRs, net of hedge results	(253)	(38)	(86)
Total net servicing income	533	194	(139)
Net gains on mortgage loan originations/sales (6)	850	4,762	3,632
Total mortgage banking noninterest income	\$ 1,383	4,956	3,493
Total changes in fair value of MSRs carried at fair value	(A)+(B) \$ 2,001	(842)	(7,068)

(1) Includes costs associated with foreclosures, unreimbursed interest advances to investors, and other interest costs.

(2) Includes a \$4 million and \$41 million reversal of impairment on the commercial amortized MSRs in 2022 and 2021, respectively, and a \$37 million impairment on the commercial amortized MSRs in 2020.

(3) Represents the reduction in the MSR fair value for the cash flows expected to be collected during the period, net of income accreted due to the passage of time.

(4) Refer to the analysis of changes in fair value MSRs presented in Table 6.1 in this Note for more detail.

(5) See Note 14 (Derivatives) for additional discussion and detail on economic hedges.

(6) Includes net gains (losses) of \$2.5 billion, \$1.2 billion and \$(1.8) billion at December 31, 2022, 2021 and 2020, respectively, related to derivatives used as economic hedges of mortgage loans held for sale and derivative loan commitments.

Note 7: Intangible Assets and Other Assets

Table 7.1 presents the gross carrying value of intangible assets and accumulated amortization.

Table 7.1: Intangible Assets

(in millions)	December 31, 2022			December 31, 2021		
	Gross carrying value	Accumulated amortization	Net carrying value	Gross carrying value	Accumulated amortization	Net carrying value
Amortized intangible assets (1):						
MSRs (2)	\$ 4,942	(3,772)	1,170	4,794	(3,525)	1,269
Customer relationship and other intangibles	754	(602)	152	842	(631)	211
Total amortized intangible assets	\$ 5,696	(4,374)	1,322	5,636	(4,156)	1,480
Unamortized intangible assets:						
MSRs (carried at fair value)	\$ 9,310			6,920		
Goodwill	25,173			25,180		

(1) Balances are excluded commencing in the period following full amortization.

(2) There was no valuation allowance recorded for amortized MSRs at December 31, 2022, and a \$4 million valuation allowance recorded at December 31, 2021. See Note 6 (Mortgage Banking Activities) for additional information on MSRs.

Table 7.2 provides the current year and estimated future amortization expense for amortized intangible assets. We based our projections of amortization expense shown below on existing

asset balances at December 31, 2022. Future amortization expense may vary from these projections.

Table 7.2: Amortization Expense for Intangible Assets

(in millions)	Amortized MSRs	Customer relationship and other intangibles	Total
Year ended December 31, 2022 (actual)	\$ 247	59	306
Estimate for year ended December 31,			
2023	\$ 238	51	289
2024	201	41	242
2025	176	33	209
2026	141	27	168
2027	111	—	111

Table 7.3 shows the allocation of goodwill to our reportable operating segments.

Table 7.3: Goodwill

(in millions)	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Consolidated Company
December 31, 2020	\$ 16,418	3,018	5,375	1,276	305	26,392
Foreign currency translation	—	—	—	—	—	—
Transfers of goodwill	—	(80)	—	(932)	1,012	—
Divestitures	—	—	—	—	(1,212)	(1,212)
December 31, 2021	\$ 16,418	2,938	5,375	344	105	25,180
Foreign currency translation	—	(7)	—	—	—	(7)
December 31, 2022	\$ 16,418	2,931	5,375	344	105	25,173

Table 7.4 presents the components of other assets.

Table 7.4: Other Assets

(in millions)	Dec 31, 2022	Dec 31, 2021
Corporate/bank-owned life insurance (1)	\$ 20,807	20,619
Accounts receivable (2)	23,646	20,831
Interest receivable:		
AFS and HTM debt securities	1,572	1,360
Loans	3,470	1,950
Trading and other	767	305
Operating lease assets (lessor)	5,790	6,182
Operating lease ROU assets (lessee)	3,837	3,805
Other (3)	15,945	12,207
Total other assets	\$ 75,834	67,259

(1) Corporate/bank-owned life insurance is recorded at cash surrender value.

(2) Primarily includes derivatives clearinghouse receivables, trade date receivables, and servicer advances, which are recorded at amortized cost.

(3) Primarily includes income tax receivables, prepaid expenses, foreclosed assets, and private equity and venture capital investments in consolidated portfolio companies.

Note 8: Leasing Activity

The information below provides a summary of our leasing activities as a lessor and lessee.

As a Lessor

Table 8.1 presents the composition of our leasing revenue and Table 8.2 provides the components of our investment in lease financing. Noninterest income on leases, included in Table 8.1 is included in other noninterest income on our consolidated statement of income. Lease expense, included in other noninterest expense on our consolidated statement of income, was \$750 million, \$867 million, and \$1.0 billion for the years ended December 31, 2022, 2021 and 2020, respectively.

In 2021, we recognized an impairment charge of \$268 million due to weakening demand for certain rail cars used for transportation of coal products. There were no impairments of rail cars as of December 31, 2022. Our rail car leasing business is in Corporate for our operating segment disclosures. For additional information on the accounting for impairment of operating lease assets, see Note 1 (Summary of Significant Accounting Policies).

Table 8.1: Leasing Revenue

(in millions)	Year ended December 31,		
	2022	2021	2020
Interest income on lease financing	\$ 600	683	853
Other lease revenue:			
Variable revenue on lease financing	114	101	107
Fixed revenue on operating leases	972	995	1,169
Variable revenue on operating leases	58	64	47
Other lease-related revenue (1)	125	(164)	(78)
Noninterest income on leases	1,269	996	1,245
Total leasing revenue	\$ 1,869	1,679	2,098

(1) Includes net gains (losses) on disposition of assets leased under operating leases or lease financings, and impairment charges.

Table 8.2: Investment in Lease Financing

(in millions)	Dec 31, 2022	Dec 31, 2021
Lease receivables	\$ 13,139	12,756
Residual asset values	3,554	3,721
Unearned income	(1,785)	(1,618)
Lease financing	\$ 14,908	14,859

Our net investment in financing and sales-type leases included \$789 million and \$1.0 billion of leveraged leases at December 31, 2022 and 2021, respectively.

As shown in Table 7.4, included in Note 7 (Intangible Assets and Other Assets), we had \$5.8 billion and \$6.2 billion in operating lease assets at December 31, 2022 and 2021, respectively, which was net of \$3.1 billion of accumulated depreciation for both periods. Depreciation expense for the operating lease assets was \$477 million, \$604 million and \$755 million in 2022, 2021 and 2020, respectively.

Table 8.3 presents future lease payments owed by our lessees.

Table 8.3: Maturities of Lease Receivables

(in millions)	December 31, 2022	
	Direct financing and sales-type leases	Operating leases
2023	\$ 4,260	571
2024	3,265	437
2025	2,221	320
2026	1,260	193
2027	649	120
Thereafter	1,484	164
Total lease receivables	\$ 13,139	1,805

As a Lessee

Substantially all of our leases are operating leases. Table 8.4 presents balances for our operating leases.

Table 8.4: Operating Lease Right-of-Use (ROU) Assets and Lease Liabilities

(in millions)	Dec 31, 2022	Dec 31, 2021
ROU assets	\$ 3,837	3,805
Lease liabilities	4,465	4,476

Table 8.5 provides the composition of our lease costs, which are predominantly included in net occupancy expense.

Table 8.5: Lease Costs

(in millions)	Year ended December 31,		
	2022	2021	2020
Fixed lease expense – operating leases	\$ 1,022	1,048	1,149
Variable lease expense	277	289	299
Other (1)	(37)	(93)	(77)
Total lease costs	\$ 1,262	1,244	1,371

(1) Predominantly includes gains recognized from sale leaseback transactions and sublease rental income.

Table 8.6 provides the future lease payments under operating leases as well as information on the remaining average lease term and discount rate as of December 31, 2022.

Table 8.6: Lease Payments on Operating Leases

(in millions, except for weighted averages)	Dec 31, 2022
2023	\$ 883
2024	947
2025	772
2026	633
2027	488
Thereafter	1,142
Total lease payments	4,865
Less: imputed interest	400
Total operating lease liabilities	\$ 4,465
Weighted average remaining lease term (in years)	6.5
Weighted average discount rate	2.6 %

Our operating leases predominantly expire within the next 15 years, with the longest lease expiring in 2105. We do not include renewal or termination options in the establishment of the lease term when we are not reasonably certain that we will exercise them. As of December 31, 2022, we had additional operating leases commitments of \$654 million, predominantly for real estate, which leases had not yet commenced. These leases are expected to commence during 2024 and have lease terms of 3 years to 20 years.

Note 9: Deposits

Table 9.1 presents a summary of both time certificates of deposit (CDs) and other time deposits issued by domestic and non-U.S. offices.

Table 9.1: Time Deposits

(in millions)	December 31,	
	2022	2021
Total domestic and Non-U.S.	\$ 66,887	30,012
Time deposits in excess of \$250,000	9,133	5,527

The contractual maturities of time deposits are presented in Table 9.2.

Table 9.2: Contractual Maturities of Time Deposits

(in millions)	December 31, 2022	
2023	\$	52,445
2024		12,654
2025		693
2026		255
2027		474
Thereafter		366
Total	\$	66,887

Demand deposit overdrafts of \$339 million and \$153 million were included as loan balances at December 31, 2022 and 2021, respectively.

Note 10: Long-Term Debt

We issue long-term debt denominated in multiple currencies, predominantly in U.S. dollars. Our issuances, which are generally unsecured, have both fixed and floating interest rates. Principal is repaid upon contractual maturity, unless redeemed at our option at an earlier date. Interest is paid primarily on either a semi-annual or annual basis.

As a part of our overall interest rate risk management strategy, we often use derivatives to manage our exposure to interest rate risk. We also use derivatives to manage our exposure to foreign currency risk. As a result, a majority of the long-term debt presented below is hedged in a fair value or cash flow hedge relationship.

Table 10.1 presents a summary of our long-term debt carrying values, reflecting unamortized debt discounts and premiums, and hedge basis adjustments; unless we have elected the fair value option. See Note 14 (Derivatives) for additional information on qualifying hedge contracts and Note 15 (Fair Values of Assets and Liabilities) for additional information on fair value option elections. The interest rates displayed represent the range of contractual rates in effect at December 31, 2022. These interest rates do not include the effects of any associated derivatives designated in a hedge accounting relationship.

Table 10.1: Long-Term Debt

(in millions)	Maturity date(s)	Stated interest rate(s)	December 31,	
			2022	2021
Wells Fargo & Company (Parent only)				
Senior				
Fixed-rate notes	2023-2045	0.50-6.75%	\$ 43,749	62,525
Floating-rate notes	2026-2048	3.49-4.74%	1,046	5,535
FixFloat notes	2024-2053	0.81-5.01%	60,752	43,010
Structured notes (1)			6,305	5,874
Total senior debt – Parent			111,852	116,944
Subordinated				
Fixed-rate notes (2)	2023-2046	3.45-7.57%	21,379	27,970
Total subordinated debt – Parent			21,379	27,970
Junior subordinated				
Fixed-rate notes	2029-2036	5.95-7.95%	827	1,041
Floating-rate notes	2027	4.58-5.08%	343	331
Total junior subordinated debt – Parent (3)			1,170	1,372
Total long-term debt – Parent (2)			134,401	146,286
Wells Fargo Bank, N.A., and other bank entities (Bank)				
Senior				
Floating-rate notes	2038-2053	4.21-4.54%	117	116
Floating-rate advances – Federal Home Loan Bank (FHLB) (4)	2023-2024	3.71-4.93%	27,000	—
Structured notes (1)			262	307
Finance leases	2023-2029	1.13-17.78%	22	26
Total senior debt – Bank			27,401	449
Subordinated				
Fixed-rate notes	2023-2038	5.25-7.74%	4,305	5,387
Total subordinated debt – Bank			4,305	5,387
Junior subordinated				
Floating-rate notes	2027	4.73-5.18%	401	388
Total junior subordinated debt – Bank (3)			401	388
Other bank debt (5)	2023-2062	0.24-9.50%	7,082	6,634
Total long-term debt – Bank			\$ 39,189	12,858

(continued on following page)

Note 10: Long-Term Debt (continued)

(continued from previous page)

(in millions)	Maturity date(s)	Stated interest rate(s)	December 31,	
			2022	2021
Other consolidated subsidiaries				
Senior				
Fixed-rate notes	2023	3.46%	\$ 369	398
Structured notes (1)			911	1,147
Total long-term debt – Other consolidated subsidiaries			1,280	1,545
Total long-term debt (6)			\$ 174,870	160,689

- (1) Includes certain structured notes that have coupon or repayment terms linked to the performance of debt or equity securities, an embedded equity, commodity, or currency index, or basket of indices, for which the maturity may be accelerated based on the value of a referenced index or security. In addition, a major portion consists of zero coupon notes where interest is paid as part of the final redemption amount.
- (2) Includes fixed-rate subordinated notes issued by the Parent at a discount of \$121 million and \$123 million at December 31, 2022 and 2021, respectively, and debt issuance costs of \$2 million at both December 31, 2022 and 2021, to effect a modification of Wells Fargo Bank, N.A., notes. These subordinated notes are carried at their par amount on the consolidated balance sheet of the Parent presented in Note 26 (Parent-Only Financial Statements). In addition, Parent long-term debt presented in Note 26 also includes affiliate related issuance costs of \$365 million and \$329 million at December 31, 2022 and 2021, respectively.
- (3) Includes \$401 million and \$388 million of junior subordinated debentures held by unconsolidated wholly-owned trust preferred security VIEs at December 31, 2022 and 2021, respectively. In 2021, we liquidated certain of our trust preferred security VIEs. As part of these liquidations, junior subordinated debentures that were held by the trusts with a total carrying value of \$332 million, were distributed to third-party investors. See Note 16 (Securitized and Variable Interest Entities) for additional information about trust preferred security VIEs.
- (4) We pledge certain assets as collateral to secure advances from the FHLB. For additional information, see Note 18 (Pledged Assets and Collateral).
- (5) Primarily relates to unfunded commitments for LIHTC investments. For additional information, see Note 16 (Securitized and Variable Interest Entities).
- (6) A major portion of long-term debt is redeemable at our option at one or more dates prior to contractual maturity.

The aggregate carrying value of long-term debt that matures (based on contractual payment dates) as of December 31, 2022, in each of the following five years and thereafter is presented in Table 10.2.

Table 10.2: Maturity of Long-Term Debt

(in millions)	December 31, 2022						
	2023	2024	2025	2026	2027	Thereafter	Total
Wells Fargo & Company (Parent Only)							
Senior debt	\$ 3,712	11,116	14,030	23,189	7,392	52,413	111,852
Subordinated debt	2,620	702	951	2,631	2,343	12,132	21,379
Junior subordinated debt	—	—	—	—	343	827	1,170
Total long-term debt – Parent	6,332	11,818	14,981	25,820	10,078	65,372	134,401
Wells Fargo Bank, N.A., and other bank entities (Bank)							
Senior debt	10,003	17,003	176	82	3	134	27,401
Subordinated debt	894	—	149	—	27	3,235	4,305
Junior subordinated debt	—	—	—	—	401	—	401
Other bank debt	2,815	1,613	488	163	54	1,949	7,082
Total long-term debt – Bank	13,712	18,616	813	245	485	5,318	39,189
Other consolidated subsidiaries							
Senior debt	463	86	413	222	—	96	1,280
Total long-term debt – Other consolidated subsidiaries	463	86	413	222	—	96	1,280
Total long-term debt	\$ 20,507	30,520	16,207	26,287	10,563	70,786	174,870

As part of our long-term and short-term borrowing arrangements, we are subject to various financial and operational covenants. Some of the agreements under which debt has been issued have provisions that may limit the merger or sale of certain subsidiary banks and the issuance of capital stock or convertible securities by certain subsidiary banks. At December 31, 2022, we were in compliance with all the covenants.

Note 11: Preferred Stock

We are authorized to issue 20 million shares of preferred stock, without par value. Outstanding preferred shares rank senior to common shares both as to the payment of dividends and liquidation preferences but have no general voting rights. All outstanding preferred stock with a liquidation preference value, except for Series L Preferred Stock, may be redeemed for the liquidation preference value, plus any accrued but unpaid dividends, on any dividend payment date on or after the earliest redemption date for that series. Additionally, these same series of preferred stock may be redeemed following a “regulatory

capital treatment event”, as described in the terms of each series. Capital actions, including redemptions of our preferred stock, may be subject to regulatory approval or conditions.

In addition, we are authorized to issue 4 million shares of preference stock, without par value. We have not issued any preference shares under this authorization. If issued, preference shares would be limited to one vote per share.

Table 11.1 summarizes information about our preferred stock.

Table 11.1: Preferred Stock

(in millions, except shares)	Earliest redemption date	December 31, 2022				December 31, 2021				
		Shares authorized and designated	Shares issued and outstanding	Liquidation preference value	Carrying value	Shares authorized and designated	Shares issued and outstanding	Liquidation preference value	Carrying value	
DEP Shares										
Dividend Equalization Preferred Shares (DEP)	Currently redeemable	97,000	96,546	\$ —	—	97,000	96,546	\$ —	—	
Preferred Stock:										
Series L (1)										
7.50% Non-Cumulative Perpetual Convertible Class A	—	4,025,000	3,967,986	3,968	3,200	4,025,000	3,967,995	3,968	3,200	
Series Q										
5.85% Fixed-to-Floating Non-Cumulative Perpetual Class A	9/15/2023	69,000	69,000	1,725	1,725	69,000	69,000	1,725	1,725	
Series R										
6.625% Fixed-to-Floating Non-Cumulative Perpetual Class A	3/15/2024	34,500	33,600	840	840	34,500	33,600	840	840	
Series S										
5.90% Fixed-to-Floating Non-Cumulative Perpetual Class A	6/15/2024	80,000	80,000	2,000	2,000	80,000	80,000	2,000	2,000	
Series U										
5.875% Fixed-to-Floating Non-Cumulative Perpetual Class A	6/15/2025	80,000	80,000	2,000	2,000	80,000	80,000	2,000	2,000	
Series Y										
5.625% Non-Cumulative Perpetual Class A	Currently redeemable	27,600	27,600	690	690	27,600	27,600	690	690	
Series Z										
4.75% Non-Cumulative Perpetual Class A	3/15/2025	80,500	80,500	2,013	2,013	80,500	80,500	2,013	2,013	
Series AA										
4.70% Non-Cumulative Perpetual Class A	12/15/2025	46,800	46,800	1,170	1,170	46,800	46,800	1,170	1,170	
Series BB										
3.90% Fixed-Reset Non-Cumulative Perpetual Class A	3/15/2026	140,400	140,400	3,510	3,510	140,400	140,400	3,510	3,510	
Series CC										
4.375% Non-Cumulative Perpetual Class A	3/15/2026	46,000	42,000	1,050	1,050	46,000	42,000	1,050	1,050	
Series DD										
4.25% Non-Cumulative Perpetual Class A	9/15/2026	50,000	50,000	1,250	1,250	50,000	50,000	1,250	1,250	
ESOP (2)										
Cumulative Convertible		—	—	—	—	609,434	609,434	609	609	
Total		4,776,800	4,714,432	\$ 20,216	19,448	5,386,234	5,323,875	\$ 20,825	20,057	

- (1) At the option of the holder, each share of Series L Preferred Stock may be converted at any time into 6.3814 shares of common stock, plus cash in lieu of fractional shares, subject to anti-dilution adjustments. If converted within 30 days of certain liquidation or change of control events, the holder may receive up to 16.5916 additional shares, or, at our option, receive an equivalent amount of cash in lieu of common stock. We may convert some or all of the Series L Preferred Stock into shares of common stock if the closing price of our common stock exceeds 130 percent of the conversion price of the Series L Preferred Stock for 20 trading days during any period of 30 consecutive trading days. We declared dividends of \$298 million on Series L Preferred Stock in each of the years 2022, 2021 and 2020.
- (2) See the “ESOP Cumulative Convertible Preferred Stock” section in this Note for additional information.

Note 11: Preferred Stock (continued)

ESOP CUMULATIVE CONVERTIBLE PREFERRED STOCK All shares of our ESOP Cumulative Convertible Preferred Stock (ESOP Preferred Stock) were issued to a trustee acting on behalf of the Wells Fargo & Company 401(k) Plan (the 401(k) Plan). In October 2022, we redeemed all outstanding shares of our ESOP Preferred Stock in exchange for shares of the Company's common stock. The redemption price was based on a fair market value of \$618 million.

Dividends on the ESOP Preferred Stock were cumulative from the date of initial issuance and were payable quarterly at annual rates based upon the year of issuance. Each share of ESOP

Preferred Stock released from the unallocated reserve of the 401(k) Plan was converted into shares of our common stock based on the stated value of the ESOP Preferred Stock and the then current market price of our common stock. The ESOP Preferred Stock was also convertible at the option of the holder at any time, unless previously redeemed. We had the option to redeem the ESOP Preferred Stock at any time, in whole or in part, at a redemption price per share equal to the higher of (a) \$1,000 per share plus accrued and unpaid dividends or (b) the fair market value, as defined in the Certificates of Designation for the ESOP Preferred Stock.

Table 11.2: ESOP Preferred Stock

(in millions, except shares)	Shares issued and outstanding		Carrying value		Adjustable dividend rate	
	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021	Minimum	Maximum
ESOP Preferred Stock						
\$1,000 liquidation preference per share						
2018	—	189,225	\$ —	189	7.00 %	8.00 %
2017	—	135,135	—	135	7.00	8.00
2016	—	128,380	—	128	9.30	10.30
2015	—	68,106	—	68	8.90	9.90
2014	—	62,420	—	63	8.70	9.70
2013	—	26,168	—	26	8.50	9.50
Total ESOP Preferred Stock (1)	—	609,434	\$ —	609		
Unearned ESOP shares (2)			\$ —	(646)		

(1) At December 31, 2021, additional paid-in capital included \$37 million related to ESOP Preferred Stock.

(2) We recorded a corresponding charge to unearned ESOP shares in connection with the issuance of the ESOP Preferred Stock. See Note 12 (Common Stock and Stock Plans) for additional information.

Note 12: Common Stock and Stock Plans

Common Stock

Table 12.1 presents our reserved, issued and authorized shares of common stock at December 31, 2022.

Table 12.1: Common Stock Shares

	Number of shares
Shares reserved (1)	303,203,184
Shares issued	5,481,811,474
Shares not reserved or issued	3,214,985,342
Total shares authorized	9,000,000,000

(1) Shares reserved for employee stock plans (employee restricted share rights, performance share awards, 401(k), and deferred compensation plans), convertible securities, dividend reinvestment and common stock purchase plans, and director plans.

We repurchase shares to meet common stock issuance requirements for our benefit plans, share awards, conversion of our convertible securities, acquisitions and other corporate purposes. Various factors determine the amount and timing of our share repurchases, including our capital requirements, the number of shares we expect to issue for acquisitions and employee benefit plans, market conditions (including the trading price of our stock), and regulatory and legal considerations. These factors can change at any time, and there can be no assurance as to the number of shares we will repurchase or when we will repurchase them.

Dividend Reinvestment and Common Stock Purchase Plans

Participants in our dividend reinvestment and common stock direct purchase plans may purchase shares of our common stock at fair market value by reinvesting dividends and/or making optional cash payments under the plan's terms.

Employee Stock Plans

We offer stock-based employee compensation plans as described below. For additional information on our accounting for stock-based compensation plans, see Note 1 (Summary of Significant Accounting Policies).

LONG-TERM INCENTIVE PLANS We have granted restricted share rights (RSRs) and performance share awards (PSAs) as our primary long-term incentive awards.

Holders of RSRs and PSAs may be entitled to receive additional RSRs and PSAs (dividend equivalents) or cash payments equal to the cash dividends that would have been paid had the RSRs or PSAs been issued and outstanding shares of common stock. RSRs and PSAs granted as dividend equivalents are subject to the same vesting schedule and conditions as the underlying award.

Table 12.2 summarizes the major components of stock compensation expense and the related recognized tax benefit.

Table 12.2: Stock Compensation Expense

(in millions)	Year ended December 31,		
	2022	2021	2020
RSRs	\$ 947	931	732
Performance shares (1)	31	74	(110)
Total stock compensation expense	\$ 978	1,005	622
Related recognized tax benefit	\$ 242	248	154

(1) Compensation expense fluctuates with the estimated outcome of satisfying performance conditions and, for certain awards, changes in our stock price.

The total number of shares of common stock available for grant under the plans at December 31, 2022, was 129 million.

Restricted Share Rights

Holders of RSRs are entitled to the related shares of common stock at no cost generally vesting over three to five years after the RSRs are granted. A summary of the status of our RSRs at December 31, 2022, and changes during 2022 is presented in Table 12.3.

Table 12.3: Restricted Share Rights

	Number	Weighted-average grant-date fair value
Nonvested at January 1, 2022	51,604,179	\$ 37.98
Granted	24,793,104	51.80
Vested	(20,380,394)	42.30
Canceled or forfeited	(2,779,746)	44.18
Nonvested at December 31, 2022	53,237,143	42.44

The weighted-average grant date fair value of RSRs granted during 2021 and 2020 was \$32.99 and \$42.53, respectively.

At December 31, 2022, there was \$986 million of total unrecognized compensation cost related to nonvested RSRs. The cost is expected to be recognized over a weighted-average period of 2.4 years. The total fair value of RSRs that vested during 2022, 2021 and 2020 was \$1.0 billion, \$902 million and \$981 million, respectively.

Performance Share Awards

Holders of PSAs are entitled to the related shares of common stock at no cost subject to the Company's achievement of specified performance criteria over a three-year period. PSAs are granted at a target number based on the Company's performance. The number of awards that vest can be adjusted downward to zero and upward to a maximum of either 125% or 150% of target. The awards vest in the quarter after the end of the performance period. For PSAs whose performance period ended December 31, 2022, the determination of the number of performance shares that will vest will occur in first quarter 2023 after review of the Company's performance by the Human Resources Committee of the Board.

Note 12: Common Stock and Stock Plans (continued)

A summary of the status of our PSAs at December 31, 2022, and changes during 2022 is in Table 12.4, based on the performance adjustments recognized as of December 2022.

Table 12.4: Performance Share Awards

	Number	Weighted-average grant-date fair value (1)
Nonvested at January 1, 2022	4,682,969	\$ 36.63
Granted	1,011,080	\$ 52.80
Vested	(392,241)	\$ 50.50
Canceled or forfeited	(793,471)	\$ 49.36
Nonvested at December 31, 2022	4,508,337	\$ 36.81

(1) Reflects approval date fair value for grants subject to variable accounting.

The weighted-average grant date fair value of performance awards granted during 2021 and 2020 was \$32.76 and \$40.39, respectively.

At December 31, 2022, there was \$33 million of total unrecognized compensation cost related to nonvested performance awards. The cost is expected to be recognized over a weighted-average period of 1.9 years. The total fair value of PSAs that vested during 2022, 2021 and 2020 was \$19 million, \$31 million and \$35 million, respectively.

Stock Options

Stock options have not been issued in the last three years and no stock options were outstanding at December 31, 2022, 2021 and 2020.

Director Awards

We granted common stock awards to non-employee directors elected or re-elected at the annual meeting of stockholders on April 26, 2022. These stock awards vest immediately.

Employee Stock Ownership Plan

The Wells Fargo & Company 401(k) Plan (401(k) Plan) is a defined contribution plan with an Employee Stock Ownership Plan (ESOP) feature. We have previously loaned money to the 401(k) Plan to purchase ESOP Preferred Stock that was convertible into common stock over time as the loans were repaid. The Company's annual contribution to the 401(k) Plan, as well as dividends received on unreleased shares, are used to make payments on the loans. As the loans are repaid, shares are released from the unallocated reserve of the 401(k) Plan.

In October 2022, we redeemed all outstanding shares of our ESOP Preferred Stock in exchange for shares of the Company's common stock. For additional information see Note 11 (Preferred Stock).

Shares that are not yet released are reflected on our consolidated balance sheet as unearned ESOP shares. Released common stock is allocated to the 401(k) Plan participants and invested in the Wells Fargo ESOP Fund within the 401(k) Plan. Dividends on the allocated common shares reduce retained earnings, and the shares are considered outstanding for computing earnings per share. Dividends on the unreleased common stock or ESOP Preferred Stock do not reduce retained earnings, and the unreleased shares are not considered to be common stock equivalents for computing earnings per share.

Table 12.5 presents the information related to the Wells Fargo ESOP Fund and the dividends paid to the 401(k) Plan.

Table 12.5: Wells Fargo ESOP Fund

(in millions, except shares)	December 31,		
	2022	2021	2020
Allocated shares outstanding (common)	152,438,152	149,638,081	155,810,091
Unreleased shares outstanding (common)	10,329,650	—	—
Fair value of unreleased shares outstanding (common)	\$ 427	—	—
Unreleased shares outstanding (preferred)	—	609,434	822,242
Conversion value of unreleased ESOP preferred shares	\$ —	609	822
Fair value of unreleased ESOP preferred shares based on redemption	—	700	990

Dividends paid on (in millions):	Year ended December 31,		
	2022	2021	2020
Allocated shares (common)	\$ 134	74	155
Unreleased shares (common)	4	—	—
Unreleased shares (preferred)	36	66	77

Note 13: Legal Actions

Wells Fargo and certain of our subsidiaries are involved in a number of judicial, regulatory, governmental, arbitration, and other proceedings or investigations concerning matters arising from the conduct of our business activities, and many of those proceedings and investigations expose Wells Fargo to potential financial loss or other adverse consequences. These proceedings and investigations include actions brought against Wells Fargo and/or our subsidiaries with respect to corporate-related matters and transactions in which Wells Fargo and/or our subsidiaries were involved. In addition, Wells Fargo and our subsidiaries may be requested to provide information to or otherwise cooperate with government authorities in the conduct of investigations of other persons or industry groups. We establish accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. For such accruals, we record the amount we consider to be the best estimate within a range of potential losses that are both probable and estimable; however, if we cannot determine a best estimate, then we record the low end of the range of those potential losses. There can be no assurance as to the ultimate outcome of legal actions, including the matters described below, and the actual costs of resolving legal actions may be substantially higher or lower than the amounts accrued for those actions.

AUTOMOBILE LENDING MATTERS On April 20, 2018, the Company entered into consent orders with the Office of the Comptroller of the Currency (OCC) and the Consumer Financial Protection Bureau (CFPB) to resolve, among other things, investigations by the agencies into the Company's compliance risk management program and its past practices involving certain automobile collateral protection insurance (CPI) policies and certain mortgage interest rate lock extensions. The consent orders require remediation to customers and the payment of a total of \$1.0 billion in civil money penalties to the agencies. In July 2017, the Company announced a plan to remediate customers who may have been financially harmed due to issues related to automobile CPI policies purchased through a third-party vendor on their behalf. Multiple putative class actions alleging, among other things, unfair and deceptive practices relating to these CPI policies, were filed against the Company and consolidated into one multi-district litigation in the United States District Court for the Central District of California. As previously disclosed, the Company entered into a settlement to resolve the multi-district litigation. Shareholders also filed a putative securities fraud class action against the Company and its executive officers alleging material misstatements and omissions of CPI-related information in the Company's public disclosures. In January 2020, the court dismissed this action as to all defendants except the Company and a former executive officer and limited the action to two alleged misstatements. Subject to court approval, the parties have entered into an agreement pursuant to which the Company will pay \$300 million to resolve this action. In addition, the Company was subject to a class action in the United States District Court for the Central District of California alleging that customers were entitled to refunds related to the unused portion of guaranteed automobile protection (GAP) waiver or insurance agreements between the customer and dealer and, by assignment, the lender. As previously disclosed, the Company entered into a settlement to resolve the class action. Allegations related to the CPI and GAP programs were among the subjects of a shareholder derivative lawsuit in the United States District

Court for the Northern District of California, which has been dismissed. In addition, federal and state government agencies, including the CFPB, have undertaken formal or informal inquiries, investigations, or examinations regarding these and other issues related to the origination, servicing, and collection of consumer auto loans, including related insurance products. On December 20, 2022, the Company entered into a consent order with the CFPB to resolve the CFPB's investigations related to automobile lending, consumer deposit accounts, and mortgage lending. The consent order requires, among other things, remediation to customers and the payment of a \$1.7 billion civil penalty to the CFPB. As previously disclosed, the Company entered into an agreement to resolve investigations by state attorneys general.

COMMERCIAL LENDING SHAREHOLDER LITIGATION In October and November 2020, plaintiffs filed two putative securities fraud class actions, which were consolidated into one lawsuit pending in the United States District Court for the Northern District of California alleging that the Company and certain of its current and former officers made false and misleading statements or omissions regarding, among other things, the Company's commercial lending underwriting practices, the credit quality of its commercial credit portfolios, and the value of its commercial loans, collateralized loan obligations and commercial mortgage-backed securities. In May 2022, the district court granted defendants' motion to dismiss the lawsuit, which was appealed to the United States Court of Appeals for the Ninth Circuit. In January 2023, the parties voluntarily dismissed the appeal.

COMPANY 401(K) PLAN MATTERS Federal government agencies, including the United States Department of Labor (Department of Labor), have undertaken reviews of certain transactions associated with the Employee Stock Ownership Plan feature of the Company's 401(k) plan, including the manner in which the 401(k) plan purchased certain securities used in connection with the Company's contributions to the 401(k) plan. As previously disclosed, the Company entered into an agreement to resolve the Department of Labor's review. On September 26, 2022, participants in the Company's 401(k) plan filed a putative class action in the United States District Court for the District of Minnesota alleging that the Company violated the Employee Retirement Income Security Act of 1974 in connection with certain of these transactions.

CONSENT ORDER DISCLOSURE LITIGATION Wells Fargo shareholders have brought a putative securities fraud class action in the United States District Court for the Southern District of New York alleging that the Company and certain of its current and former executive officers and directors made false or misleading statements regarding the Company's efforts to comply with the February 2018 consent order with the Federal Reserve Board and the April 2018 consent orders with the CFPB and OCC. Allegations related to the Company's efforts to comply with these three consent orders are also among the subjects of a shareholder derivative lawsuit filed in California state court.

CONSUMER DEPOSIT ACCOUNT RELATED REGULATORY INVESTIGATIONS The CFPB has undertaken an investigation into whether customers were unduly harmed by the Company's historical practices associated with the freezing (and, in many cases, closing) of consumer deposit accounts after the Company

Note 13: Legal Actions (continued)

detected suspected fraudulent activity (by third parties or account holders) that affected those accounts. The CFPB has also undertaken an investigation into certain of the Company's past disclosures to customers regarding the minimum qualifying debit card usage required for customers to receive a waiver of monthly service fees on certain consumer deposit accounts. As described above, on December 20, 2022, the Company entered into a consent order with the CFPB to resolve the CFPB's investigations related to automobile lending, consumer deposit accounts, and mortgage lending.

HIRING PRACTICES MATTERS Government agencies, including the United States Department of Justice and the United States Securities and Exchange Commission, have undertaken formal or informal inquiries or investigations regarding the Company's hiring practices related to diversity. A putative securities fraud class action has also been filed in the United States District Court for the Northern District of California alleging that the Company and certain of its executive officers made false or misleading statements about the Company's hiring practices related to diversity. Allegations related to the Company's hiring practices related to diversity are also among the subjects of shareholder derivative lawsuits filed in the United States District Court for the Northern District of California.

INTERCHANGE LITIGATION Plaintiffs representing a class of merchants have filed putative class actions, and individual merchants have filed individual actions, against Wells Fargo Bank, N.A., Wells Fargo & Company, Wachovia Bank, N.A., and Wachovia Corporation regarding the interchange fees associated with Visa and MasterCard payment card transactions. Visa, MasterCard, and several other banks and bank holding companies are also named as defendants in these actions. These actions have been consolidated in the United States District Court for the Eastern District of New York. The amended and consolidated complaint asserts claims against defendants based on alleged violations of federal and state antitrust laws and seeks damages as well as injunctive relief. Plaintiff merchants allege that Visa, MasterCard, and payment card issuing banks unlawfully colluded to set interchange rates. Plaintiffs also allege that enforcement of certain Visa and MasterCard rules and alleged tying and bundling of services offered to merchants are anticompetitive. Wells Fargo and Wachovia, along with other defendants and entities, are parties to Loss and Judgment Sharing Agreements, which provide that they, along with other entities, will share, based on a formula, in any losses from the Interchange Litigation. On July 13, 2012, Visa, MasterCard, and the financial institution defendants, including Wells Fargo, signed a memorandum of understanding with plaintiff merchants to resolve the consolidated class action and reached a separate settlement in principle of the consolidated individual actions. The settlement payments to be made by all defendants in the consolidated class and individual actions totaled approximately \$6.6 billion before reductions applicable to certain merchants opting out of the settlement. The class settlement also provided for the distribution to class merchants of 10 basis points of default interchange across all credit rate categories for a period of eight consecutive months. The district court granted final approval of the settlement, which was appealed to the United States Court of Appeals for the Second Circuit by settlement objector merchants. Other merchants opted out of the settlement and are pursuing several individual actions. On June 30, 2016, the Second Circuit vacated the settlement agreement and reversed and remanded the consolidated action to the United States District Court for the Eastern District of

New York for further proceedings. On November 23, 2016, prior class counsel filed a petition to the United States Supreme Court, seeking review of the reversal of the settlement by the Second Circuit, and the Supreme Court denied the petition on March 27, 2017. On November 30, 2016, the district court appointed lead class counsel for a damages class and an equitable relief class. The parties have entered into a settlement agreement to resolve the money damages class claims pursuant to which defendants will pay a total of approximately \$6.2 billion, which includes approximately \$5.3 billion of funds remaining from the 2012 settlement and \$900 million in additional funding. The Company's allocated responsibility for the additional funding is approximately \$94.5 million. The court granted final approval of the settlement on December 13, 2019, which was appealed to the United States Court of Appeals for the Second Circuit by settlement objector merchants. On September 27, 2021, the district court granted the plaintiffs' motion for class certification in the equitable relief case. Several of the opt-out and direct action litigations have been settled while others remain pending.

MORTGAGE LENDING MATTERS Plaintiffs representing a class of mortgage borrowers filed separate putative class actions alleging that Wells Fargo improperly denied mortgage loan modifications or repayment plans to customers in the foreclosure process due to the overstatement of foreclosure attorneys' fees that were included for purposes of determining whether a customer in the foreclosure process qualified for a mortgage loan modification or repayment plan. As previously disclosed, the Company entered into settlements to resolve the class actions, while the others were voluntarily dismissed. In addition, federal and state government agencies, including the CFPB, have undertaken formal or informal inquiries or investigations regarding these and other mortgage servicing matters. On September 9, 2021, the OCC assessed a \$250 million civil money penalty against the Company regarding loss mitigation activities in the Company's Home Lending business and insufficient progress in addressing requirements under the OCC's April 2018 consent order. In addition, on September 9, 2021, the Company entered into a consent order with the OCC requiring the Company to improve the execution, risk management, and oversight of loss mitigation activities in its Home Lending business. As described above, on December 20, 2022, the Company entered into a consent order with the CFPB to resolve the CFPB's investigations related to automobile lending, consumer deposit accounts, and mortgage lending.

NOMURA/NATIXIS MORTGAGE-RELATED LITIGATION In August 2014 and August 2015, Nomura Credit & Capital Inc. (Nomura) and Natixis Real Estate Holdings, LLC (Natixis) filed a total of seven third-party complaints against Wells Fargo Bank, N.A., in New York state court. In the underlying first-party actions, Nomura and Natixis have been sued for alleged breaches of representations and warranties made in connection with residential mortgage-backed securities sponsored by them. In the third-party actions, Nomura and Natixis allege that Wells Fargo, as master servicer, primary servicer or securities administrator, failed to notify Nomura and Natixis of their own breaches, failed to properly oversee the primary servicers, and failed to adhere to accepted servicing practices. Natixis additionally alleges that Wells Fargo failed to perform default oversight duties. In March 2022, Wells Fargo entered into an agreement to settle the six actions filed by Nomura, and the actions have been voluntarily dismissed. In the remaining action filed by Natixis, Wells Fargo has asserted counterclaims alleging that Natixis failed to provide Wells Fargo notice of its

representation and warranty breaches. In January 2023, Natixis and Wells Fargo reached an agreement in principle to settle their respective claims.

OFAC RELATED INVESTIGATION The Company has self-identified an issue whereby certain foreign banks utilized a Wells Fargo software-based solution to conduct import/export trade-related financing transactions with countries and entities prohibited by the Office of Foreign Assets Control (OFAC) of the United States Department of the Treasury. We do not believe any funds related to these transactions flowed through accounts at Wells Fargo as a result of the aforementioned conduct. The Company has made voluntary self-disclosures to OFAC and has been cooperating with investigations or inquiries arising out of this matter by federal government agencies. The Company is in resolution discussions with certain of these agencies, although there can be no assurance as to the outcome of these discussions.

RECORD-KEEPING INVESTIGATIONS The United States Securities and Exchange Commission and the United States Commodity Futures Trading Commission have undertaken investigations regarding the Company's compliance with records retention requirements relating to business communications sent over unapproved electronic messaging channels.

RETAIL SALES PRACTICES MATTERS Federal and state government agencies, including the United States Department of Justice (Department of Justice) and the United States Securities and Exchange Commission (SEC), have undertaken formal or informal inquiries or investigations arising out of certain retail sales practices of the Company that were the subject of settlements with the CFPB, the OCC, and the Office of the Los Angeles City Attorney announced by the Company on September 8, 2016. On February 21, 2020, the Company entered into an agreement with the Department of Justice to resolve the Department of Justice's criminal investigation into the Company's retail sales practices as well as a separate agreement to resolve the Department of Justice's civil investigation. As part of the Department of Justice criminal settlement, no charges will be filed against the Company provided the Company abides by all the terms of the agreement. The Department of Justice criminal settlement also includes the Company's agreement that the facts set forth in the settlement document constitute sufficient facts for the finding of criminal violations of statutes regarding bank records and personal information. On February 21, 2020, the Company also entered into an order to resolve the SEC's investigation arising out of the Company's retail sales practices. The SEC order contains a finding, to which the Company consented, that the facts set forth include violations of Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 thereunder. As part of the resolution of the Department of Justice and SEC investigations, the Company made payments totaling \$3.0 billion. The Company has also entered into agreements to resolve other government agency investigations, including investigations by the state attorneys general. In addition, a number of lawsuits were filed by non-governmental parties seeking damages or other remedies related to these retail sales practices. As previously disclosed, the Company entered into various settlements to resolve these lawsuits.

RMBS TRUSTEE LITIGATION In December 2014, Phoenix Light SF Limited (Phoenix Light) and certain related entities filed a complaint in the United States District Court for the Southern District of New York alleging claims against Wells Fargo Bank, N.A., in its capacity as trustee for a number of residential

mortgage-backed securities (RMBS) trusts. Complaints raising similar allegations have been filed by Commerzbank AG in the Southern District of New York and by IKB International and IKB Deutsche Industriebank in New York state court. In each case, the plaintiffs allege that Wells Fargo Bank, N.A., as trustee, caused losses to investors, and plaintiffs assert causes of action based upon, among other things, the trustee's alleged failure to notify and enforce repurchase obligations of mortgage loan sellers for purported breaches of representations and warranties, notify investors of alleged events of default, and abide by appropriate standards of care following alleged events of default. In July 2022, the district court dismissed Phoenix Light's claims and certain of the claims asserted by Commerzbank AG, and subsequently entered judgment in each case in favor of Wells Fargo Bank, N.A. In August 2022, Phoenix Light and Commerzbank AG appealed the district court's decision to the United States Court of Appeals for the Second Circuit. The Company previously settled two class actions filed by institutional investors and an action filed by the National Credit Union Administration with similar allegations. In addition, Park Royal I LLC and Park Royal II LLC have filed substantially similar lawsuits in New York state court alleging Wells Fargo Bank, N.A., as trustee, failed to take appropriate actions upon learning of defective mortgage loan documentation.

SEMINOLE TRIBE TRUSTEE LITIGATION The Seminole Tribe of Florida filed a complaint in Florida state court alleging that Wells Fargo, as trustee, charged excess fees in connection with the administration of a minor's trust and failed to invest the assets of the trust prudently. The complaint was later amended to include three individual current and former beneficiaries as plaintiffs and to remove the Tribe as a party to the case. Wells Fargo filed a petition to remove the case to federal court, but the case was remanded back to state court.

OUTLOOK As described above, the Company establishes accruals for legal actions when potential losses associated with the actions become probable and the costs can be reasonably estimated. The high end of the range of reasonably possible losses in excess of the Company's accrual for probable and estimable losses was approximately \$1.4 billion as of December 31, 2022. The outcomes of legal actions are unpredictable and subject to significant uncertainties, and it is inherently difficult to determine whether any loss is probable or even possible. It is also inherently difficult to estimate the amount of any loss and there may be matters for which a loss is probable or reasonably possible but not currently estimable. Accordingly, actual losses may be in excess of the established accrual or the range of reasonably possible loss. Based on information currently available, advice of counsel, available insurance coverage, and established reserves, Wells Fargo believes that the eventual outcome of the actions against Wells Fargo and/or its subsidiaries will not, individually or in the aggregate, have a material adverse effect on Wells Fargo's consolidated financial condition. However, it is possible that the ultimate resolution of a matter, if unfavorable, may be material to Wells Fargo's results of operations for any particular period.

Note 14: Derivatives

We use derivatives to manage exposure to market risk, including interest rate risk, credit risk and foreign currency risk, and to assist customers with their risk management objectives. We designate certain derivatives as hedging instruments in qualifying hedge accounting relationships (fair value or cash flow hedges). Our remaining derivatives consist of economic hedges that do not qualify for hedge accounting and derivatives held for customer accommodation trading or other purposes.

Risk Management Derivatives

Our asset/liability management approach to interest rate, foreign currency and certain other risks includes the use of derivatives, which are typically designated as fair value or cash flow hedges, or economic hedges. We use derivatives to help minimize significant, unplanned fluctuations in earnings, fair values of assets and liabilities, and cash flows caused by interest rate, foreign currency and other market risk volatility. This approach involves modifying the repricing characteristics of certain assets and liabilities so that changes in interest rates, foreign currency and other exposures, which may cause the hedged assets and liabilities to gain or lose fair value, do not have a significant adverse effect on the net interest margin, cash flows and earnings. In a fair value or economic hedge, the effect of change in fair value will generally be offset by the unrealized gain or loss on the derivatives linked to the hedged assets and liabilities. In a cash flow hedge, where we manage the variability of cash payments due to interest rate or foreign currency fluctuations by the effective use of derivatives linked to hedged assets and liabilities, the hedged asset or liability is not adjusted and the unrealized gain or loss on the derivative is recorded in other comprehensive income.

Customer Accommodation Trading

We also use various derivatives, including interest rate, commodity, equity, credit and foreign exchange contracts, as an accommodation to our customers as part of our trading businesses. These derivative transactions, which involve engaging in market-making activities or acting as an intermediary, are conducted in an effort to help customers manage their market risks. We usually offset our exposure from such derivatives by entering into other financial contracts, such as separate derivative or security transactions. These customer accommodations and any offsetting derivatives are treated as customer accommodation trading and other derivatives in our disclosures. Additionally, embedded derivatives that are required to be accounted for separately from their host contracts are included in the customer accommodation trading and other derivatives disclosures, as applicable.

Table 14.1 presents the total notional or contractual amounts and fair values for our derivatives. Derivative transactions can be measured in terms of the notional amount, but this amount is not recorded on our consolidated balance

sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the instruments. The notional amount is generally not exchanged, but is used only as the basis on which derivative cash flows are determined.

Table 14.1: Notional or Contractual Amounts and Fair Values of Derivatives

(in millions)	December 31, 2022			December 31, 2021		
	Notional or contractual amount	Derivative assets	Fair value Derivative liabilities	Notional or contractual amount	Derivative assets	Fair value Derivative liabilities
Derivatives designated as hedging instruments						
Interest rate contracts	\$ 263,876	670	579	153,993	2,212	327
Commodity contracts	1,681	9	25	1,739	26	3
Foreign exchange contracts	15,544	161	1,015	24,949	281	669
Total derivatives designated as qualifying hedging instruments		840	1,619		2,519	999
Derivatives not designated as hedging instruments						
Economic hedges:						
Interest rate contracts	65,727	410	253	142,234	40	41
Equity contracts (1)	3,884	—	260	26,263	1,493	1,194
Foreign exchange contracts	38,139	490	968	28,192	395	88
Credit contracts	290	14	—	290	7	—
Subtotal		914	1,481		1,935	1,323
Customer accommodation trading and other derivatives:						
Interest rate contracts	10,156,300	40,006	42,641	7,976,534	20,286	17,435
Commodity contracts	96,001	5,991	3,420	74,903	5,939	2,414
Equity contracts (1)	390,427	9,573	8,012	321,863	16,278	17,827
Foreign exchange contracts	1,475,224	21,562	24,703	560,049	5,912	5,915
Credit contracts	45,359	52	36	38,318	39	43
Subtotal		77,184	78,812		48,454	43,634
Total derivatives not designated as hedging instruments		78,098	80,293		50,389	44,957
Total derivatives before netting		78,938	81,912		52,908	45,956
Netting		(56,164)	(61,827)		(31,430)	(36,532)
Total		\$ 22,774	20,085		21,478	9,424

(1) In first quarter 2022, we prospectively reclassified certain equity securities and related economic hedge derivatives from "not held for trading activities" to "held for trading activities" to better reflect the business activity of those financial instruments. For additional information on Trading Activities, see Note 1 (Summary of Significant Accounting Policies).

Balance Sheet Offsetting

We execute substantially all of our derivative transactions under master netting arrangements. Where legally enforceable, these master netting arrangements give the ability, in the event of default by the counterparty, to liquidate securities held as collateral and to offset receivables and payables with the same counterparty. We reflect all derivative balances and related cash collateral subject to enforceable master netting arrangements on a net basis on our consolidated balance sheet. We do not net non-cash collateral that we receive or pledge against derivative balances on our consolidated balance sheet.

For disclosure purposes, we present "Total Derivatives, net" which represents the aggregate of our net exposure to each counterparty after considering the balance sheet netting adjustments and any non-cash collateral. We manage derivative exposure by monitoring the credit risk associated with each counterparty using counterparty-specific credit risk limits, using master netting arrangements and obtaining collateral.

Table 14.2 provides information on the fair values of derivative assets and liabilities subject to enforceable master netting arrangements, the balance sheet netting adjustments and the resulting net fair value amount recorded on our consolidated balance sheet, as well as the non-cash collateral associated with such arrangements. In addition to the netting amounts included in the table, we also have balance sheet netting related to resale and repurchase agreements that are disclosed within Note 18 (Pledged Assets and Collateral).

Note 14: Derivatives (continued)

Table 14.2: Fair Values of Derivative Assets and Liabilities

(in millions)	December 31, 2022		December 31, 2021	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
Interest rate contracts				
Over-the-counter (OTC)	\$ 37,000	37,598	20,067	16,654
OTC cleared	649	845	168	192
Exchange traded	262	193	52	28
Total interest rate contracts	37,911	38,636	20,287	16,874
Commodity contracts				
OTC	4,833	2,010	5,040	1,249
Exchange traded	876	1,134	557	1,047
Total commodity contracts	5,709	3,144	5,597	2,296
Equity contracts				
OTC	4,269	4,475	6,132	9,730
Exchange traded	3,742	2,409	7,493	6,086
Total equity contracts	8,011	6,884	13,625	15,816
Foreign exchange contracts				
OTC	21,537	26,127	6,335	6,221
Total foreign exchange contracts	21,537	26,127	6,335	6,221
Credit contracts				
OTC	39	22	32	31
Total credit contracts	39	22	32	31
Total derivatives subject to enforceable master netting arrangements, gross	73,207	74,813	45,876	41,238
Less: Gross amounts offset				
Counterparty netting (1)	(49,115)	(49,073)	(27,172)	(27,046)
Cash collateral netting	(7,049)	(12,754)	(4,258)	(9,486)
Total derivatives subject to enforceable master netting arrangements, net	17,043	12,986	14,446	4,706
Derivatives not subject to enforceable master netting arrangements	5,731	7,099	7,032	4,718
Total derivatives recognized in consolidated balance sheet, net	22,774	20,085	21,478	9,424
Non-cash collateral	(3,517)	(582)	(1,432)	(412)
Total Derivatives, net	\$ 19,257	19,503	20,046	9,012

(1) Represents amounts with counterparties subject to enforceable master netting arrangements that have been offset in our consolidated balance sheet, including portfolio level counterparty valuation adjustments related to customer accommodation and other trading derivatives. Counterparty valuation adjustments related to derivative assets were \$372 million and \$284 million and debit valuation adjustments related to derivative liabilities were \$331 million and \$158 million as of December 31, 2022 and 2021, respectively, and were primarily related to interest rate contracts.

Fair Value and Cash Flow Hedges

For fair value hedges, we use interest rate swaps to convert certain of our fixed-rate long-term debt and time certificates of deposit to floating rates to hedge our exposure to interest rate risk. We also enter into cross-currency swaps, cross-currency interest rate swaps and forward contracts to hedge our exposure to foreign currency risk and interest rate risk associated with the issuance of non-U.S. dollar denominated long-term debt. We also enter into futures contracts, forward contracts, and swap contracts to hedge our exposure to the price risk of physical commodities included in Other Assets. In addition, we use interest rate swaps, cross-currency swaps, cross-currency interest rate swaps and forward contracts to hedge against changes in fair value of certain investments in available-for-sale debt securities due to changes in interest rates, foreign currency rates, or both. For certain fair value hedges of foreign currency risk, changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income (OCI). See Note 24 (Other Comprehensive Income) for the amounts recognized in other comprehensive income.

For cash flow hedges, we use interest rate swaps to hedge the variability in interest payments received on certain interest-earning deposits with banks and certain floating-rate commercial loans, and interest paid on certain floating-rate debt due to changes in the contractually specified interest rate. We also use cross-currency swaps to hedge variability in interest payments on fixed-rate foreign currency-denominated long-term debt due to changes in foreign exchange rates.

We estimate \$695 million pre-tax of deferred net losses related to cash flow hedges in OCI at December 31, 2022, will be reclassified into net interest income during the next twelve months. For cash flow hedges as of December 31, 2022, we are hedging our interest rate and foreign currency exposure to the variability of future cash flows for all forecasted transactions for a maximum of 10 years. For additional information on our accounting hedges, see Note 1 (Summary of Significant Accounting Policies).

Table 14.3 and Table 14.4 show the net gains (losses) related to derivatives in cash flow and fair value hedging relationships, respectively.

Table 14.3: Gains (Losses) Recognized on Cash Flow Hedging Relationships

(in millions)	Net interest income			Total recorded in net income	Total recorded in OCI
	Loans	Other interest income	Long-term debt	Derivative gains (losses)	Derivative gains (losses)
Year Ended December 31, 2022					
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 37,715	3,308	(5,505)	N/A	(1,448)
Interest rate contracts:					
Realized gains (losses) (pre-tax) reclassified from OCI into net income	(20)	24	—	4	(4)
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	N/A	(1,524)
Total gains (losses) (pre-tax) on interest rate contracts	(20)	24	—	4	(1,528)
Foreign exchange contracts:					
Realized gains (losses) (pre-tax) reclassified from OCI into net income	—	—	(10)	(10)	10
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	N/A	(17)
Total gains (losses) (pre-tax) on foreign exchange contracts	—	—	(10)	(10)	(7)
Total gains (losses) (pre-tax) recognized on cash flow hedges	\$ (20)	24	(10)	(6)	(1,535)
Year Ended December 31, 2021					
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 28,634	334	(3,173)	N/A	212
Interest rate contracts:					
Realized gains (losses) (pre-tax) reclassified from OCI into net income	(137)	—	—	(137)	137
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	N/A	7
Total gains (losses) (pre-tax) on interest rate contracts	(137)	—	—	(137)	144
Foreign exchange contracts:					
Realized gains (losses) (pre-tax) reclassified from OCI into net income	—	—	(6)	(6)	6
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	N/A	(19)
Total gains (losses) (pre-tax) on foreign exchange contracts	—	—	(6)	(6)	(13)
Total gains (losses) (pre-tax) recognized on cash flow hedges	\$ (137)	—	(6)	(143)	131
Year ended December 31, 2020					
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 34,230	954	(4,471)	N/A	198
Interest rate contracts:					
Realized gains (losses) (pre-tax) reclassified from OCI into net income	(215)	—	4	(211)	211
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	N/A	—
Total gains (losses) (pre-tax) on interest rate contracts	(215)	—	4	(211)	211
Foreign exchange contracts:					
Realized gains (losses) (pre-tax) reclassified from OCI into net income	—	—	(8)	(8)	8
Net unrealized gains (losses) (pre-tax) recognized in OCI	N/A	N/A	N/A	N/A	10
Total gains (losses) (pre-tax) on foreign exchange contracts	—	—	(8)	(8)	18
Total gains (losses) (pre-tax) recognized on cash flow hedges	\$ (215)	—	(4)	(219)	229

Note 14: Derivatives (continued)

Table 14.4: Gains (Losses) Recognized on Fair Value Hedging Relationships

(in millions)	Net interest income			Noninterest income	Total recorded in net income	Total recorded in OCI
	Debt securities	Deposits	Long-term debt	Other	Derivative gains (losses)	Derivative gains (losses)
Year Ended December 31, 2022						
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 11,781	(2,349)	(5,505)	2,238	N/A	(1,448)
Interest contracts						
Amounts related to cash flows on derivatives	143	65	313	—	521	N/A
Recognized on derivatives	3,616	(345)	(18,056)	—	(14,785)	—
Recognized on hedged items	(3,576)	350	17,919	—	14,693	N/A
Total gains (losses) (pre-tax) on interest rate contracts	183	70	176	—	429	—
Foreign exchange contracts						
Amounts related to cash flows on derivatives	—	—	(189)	—	(189)	N/A
Recognized on derivatives	—	—	(1,120)	(1,021)	(2,141)	87
Recognized on hedged items	—	—	1,097	1,005	2,102	N/A
Total gains (losses) (pre-tax) on foreign exchange contracts	—	—	(212)	(16)	(228)	87
Commodity contracts						
Recognized on derivatives	—	—	—	57	57	—
Recognized on hedged items	—	—	—	(43)	(43)	N/A
Total gains (losses) (pre-tax) on commodity contracts	—	—	—	14	14	—
Total gains (losses) (pre-tax) recognized on fair value hedges	\$ 183	70	(36)	(2)	215	87
Year Ended December 31, 2021						
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 9,253	(388)	(3,173)	3,734	N/A	212
Interest contracts						
Amounts related to cash flows on derivatives	(253)	289	2,136	—	2,172	N/A
Recognized on derivatives	1,129	(336)	(6,351)	—	(5,558)	—
Recognized on hedged items	(1,117)	333	6,288	—	5,504	N/A
Total gains (losses) (pre-tax) on interest rate contracts	(241)	286	2,073	—	2,118	—
Foreign exchange contracts						
Amounts related to cash flows on derivatives	57	—	10	—	67	N/A
Recognized on derivatives	4	—	(516)	(99)	(611)	81
Recognized on hedged items	(3)	—	438	82	517	N/A
Total gains (losses) (pre-tax) on foreign exchange contracts	58	—	(68)	(17)	(27)	81
Commodity contracts						
Recognized on derivatives	—	—	—	113	113	—
Recognized on hedged items	—	—	—	(124)	(124)	N/A
Total gains (losses) (pre-tax) on commodity contracts	—	—	—	(11)	(11)	—
Total gains (losses) (pre-tax) recognized on fair value hedges	\$ (183)	286	2,005	(28)	2,080	81
Year ended December 31, 2020						
Total amounts presented in the consolidated statement of income and other comprehensive income	\$ 11,234	(2,804)	(4,471)	3,847	N/A	198
Interest contracts						
Amounts related to cash flows on derivatives	(338)	503	1,704	—	1,869	N/A
Recognized on derivatives	(1,261)	161	6,691	—	5,591	—
Recognized on hedged items	1,317	(151)	(6,543)	—	(5,377)	N/A
Total gains (losses) (pre-tax) on interest rate contracts	(282)	513	1,852	—	2,083	—
Foreign exchange contracts						
Amounts related to cash flows on derivatives	52	—	(139)	—	(87)	N/A
Recognized on derivatives	(1)	—	261	1,591	1,851	(31)
Recognized on hedged items	2	—	(201)	(1,575)	(1,774)	N/A
Total gains (losses) (pre-tax) on foreign exchange contracts	53	—	(79)	16	(10)	(31)
Commodity contracts						
Recognized on derivatives	—	—	—	(11)	(11)	—
Recognized on hedged items	—	—	—	27	27	N/A
Total gains (losses) (pre-tax) on commodity contracts	—	—	—	16	16	—
Total gains (losses) (pre-tax) recognized on fair value hedges	\$ (229)	513	1,773	32	2,089	(31)

Table 14.5 shows the carrying amount and associated cumulative basis adjustment related to the application of hedge accounting that is included in the carrying amount of hedged assets and liabilities in fair value hedging relationships.

Table 14.5: Hedged Items in Fair Value Hedging Relationships

(in millions)	Hedged items currently designated		Hedged items no longer designated	
	Carrying amount of assets/ (liabilities) (1)(2)	Hedge accounting basis adjustment assets/(liabilities) (3)	Carrying amount of assets/ (liabilities) (2)	Hedge accounting basis adjustment assets/(liabilities)
December 31, 2022				
Available-for-sale debt securities (4)	\$ 39,423	(3,859)	16,100	722
Other assets	1,663	38	—	—
Deposits	(41,687)	205	(10)	—
Long-term debt	(130,997)	13,862	(5)	—
December 31, 2021				
Available-for-sale debt securities (4)	\$ 24,144	(559)	17,962	965
Other assets	1,156	(58)	—	—
Deposits	(10,187)	(144)	—	—
Long-term debt	(138,801)	(5,192)	—	—

(1) Does not include the carrying amount of hedged items where only foreign currency risk is the designated hedged risk. The carrying amount excluded for debt securities is \$739 million and for long-term debt is \$0 million as of December 31, 2022, and \$873 million for debt securities and \$(2.7) billion for long-term debt as of December 31, 2021.

(2) Represents the full carrying amount of the hedged asset or liability item as of the balance sheet date, except for circumstances in which only a portion of the asset or liability was designated as the hedged item in which case only the portion designated is presented.

(3) The balance includes \$39 million and \$334 million of debt securities and long-term debt cumulative basis adjustments as of December 31, 2022, respectively, and \$136 million and \$188 million of debt securities and long-term debt cumulative basis adjustments as of December 31, 2021, respectively, on terminated hedges whereby the hedged items have subsequently been re-designated into existing hedges.

(4) Carrying amount represents the amortized cost.

Derivatives Not Designated as Hedging Instruments

Derivatives not designated as hedging instruments include economic hedges and derivatives entered into for customer accommodation trading purposes.

We use economic hedge derivatives to manage our exposure to interest rate risk, equity price risk, foreign currency risk, and credit risk. We also use economic hedge derivatives to mitigate the periodic earnings volatility caused by mismatches between the changes in fair value of the hedged item and hedging instrument recognized on our fair value accounting hedges. Changes in the fair values of derivatives used to economically hedge the deferred compensation plan are reported in personnel expense.

Mortgage Banking Activities

We use economic hedge derivatives in our mortgage banking business to hedge the risk of changes in the fair value of (1) certain residential MSRMs measured at fair value, (2) residential mortgage LHFS, (3) derivative loan commitments, and (4) other interests held. The types of derivatives used include swaps, swaptions, constant maturity mortgages, forwards, Eurodollar and Treasury futures and options contracts. Loan commitments for mortgage loans that we intend to sell are considered derivatives. Residential MSRMs, derivative loan commitments, certain residential mortgage LHFS, and our economic hedge derivatives are carried at fair value with changes in fair value included in mortgage banking noninterest income. See Note 6 (Mortgage Banking Activities) for additional information on this economic hedging activity and mortgage banking income.

Customer Accommodation Trading and Other

For customer accommodation trading purposes, we use swaps, futures, forwards, spots and options to assist our customers in managing their own risks, including interest rate, commodity, equity, foreign exchange, and credit contracts. These derivatives are not linked to specific assets and liabilities on our consolidated balance sheet or to forecasted transactions in an accounting hedge relationship and, therefore, do not qualify for hedge accounting. We also enter into derivatives for risk management that do not otherwise qualify for hedge accounting. They are carried at fair value with changes in fair value recorded in noninterest income.

Customer accommodation trading and other derivatives also include embedded derivatives that are required to be accounted for separately from their host contract. We periodically issue hybrid long-term notes and certificates of deposit (CDs) where the performance of the hybrid instrument note is linked to an equity, commodity or currency index, or basket of such indices. These notes contain explicit terms that affect some or all of the cash flows or the value of the note in a manner similar to a derivative instrument and therefore are considered to contain an “embedded” derivative instrument. The indices on which the performance of the hybrid instrument is calculated are not clearly and closely related to the host debt instrument. The “embedded” derivative is separated from the host contract and accounted for as a derivative. Additionally, we may invest in hybrid instruments that contain embedded derivatives, such as credit derivatives, that are not clearly and closely related to the host contract. In such instances, we either elect fair value option for the hybrid instrument or separate the embedded derivative from the host contract and account for the host contract and derivative separately.

Note 14: Derivatives (continued)

Table 14.6 shows the net gains (losses), recognized by income statement lines, related to derivatives not designated as hedging instruments.

Table 14.6: Gains (Losses) on Derivatives Not Designated as Hedging Instruments

(in millions)	Noninterest income			Noninterest expense	
	Mortgage banking	Net gains from trading and securities	Other	Total	Personnel expense
Year Ended December 31, 2022					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	\$ (1,040)	—	(83)	(1,123)	—
Equity contracts (2)	—	—	10	10	877
Foreign exchange contracts	—	—	547	547	—
Credit contracts	—	—	6	6	—
Subtotal	(1,040)	—	480	(560)	877
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts	(1,079)	9,742	—	8,663	—
Commodity contracts	—	390	—	390	—
Equity contracts (2)	—	4,652	(286)	4,366	—
Foreign exchange contracts	—	1,177	—	1,177	—
Credit contracts	—	(27)	—	(27)	—
Subtotal	(1,079)	15,934	(286)	14,569	—
Net gains (losses) recognized related to derivatives not designated as hedging instruments	\$ (2,119)	15,934	194	14,009	877
Year Ended December 31, 2021					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	\$ (51)	—	(11)	(62)	—
Equity contracts	—	495	(1)	494	(611)
Foreign exchange contracts	—	—	335	335	—
Credit contracts	—	—	(12)	(12)	—
Subtotal	(51)	495	311	755	(611)
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts	62	1,217	—	1,279	—
Commodity contracts	—	133	—	133	—
Equity contracts	—	(4,549)	(444)	(4,993)	—
Foreign exchange contracts	—	827	—	827	—
Credit contracts	—	(93)	—	(93)	—
Subtotal	62	(2,465)	(444)	(2,847)	—
Net gains (losses) recognized related to derivatives not designated as hedging instruments	\$ 11	(1,970)	(133)	(2,092)	(611)
Year ended December 31, 2020					
Net gains (losses) recognized on economic hedges derivatives:					
Interest contracts (1)	\$ 2,787	—	(93)	2,694	—
Equity contracts	—	(1,167)	(25)	(1,192)	(778)
Foreign exchange contracts	—	—	(455)	(455)	—
Credit contracts	—	—	14	14	—
Subtotal	2,787	(1,167)	(559)	1,061	(778)
Net gains (losses) recognized on customer accommodation trading and other derivatives:					
Interest contracts	1,964	(1,021)	—	943	—
Commodity contracts	—	446	—	446	—
Equity contracts	—	(436)	(334)	(770)	—
Foreign exchange contracts	—	89	—	89	—
Credit contracts	—	(1)	—	(1)	—
Subtotal	1,964	(923)	(334)	707	—
Net gains (losses) recognized related to derivatives not designated as hedging instruments	\$ 4,751	(2,090)	(893)	1,768	(778)

(1) Mortgage banking amounts for the years ended 2022, 2021 and 2020 are comprised of gains (losses) of \$(3.5) billion, \$(1.2) billion and \$4.6 billion, respectively, related to derivatives used as economic hedges of MSRs measured at fair value offset by gains (losses) of \$2.5 billion, \$1.2 billion and \$(1.8) billion, respectively, related to derivatives used as economic hedges of mortgage loans held for sale and derivative loan commitments.

(2) In first quarter 2022, we prospectively reclassified certain equity securities and related economic hedge derivatives from "not held for trading activities" to "held for trading activities" to better reflect the business activity of those financial instruments. For additional information on Trading Activities, see Note 1 (Summary of Significant Accounting Policies).

Credit Derivatives

Credit derivative contracts are arrangements whose value is derived from the transfer of credit risk of a reference asset or entity from one party (the purchaser of credit protection) to another party (the seller of credit protection). We generally use credit derivatives to assist customers with their risk management objectives by purchasing and selling credit protection on corporate debt obligations through the use of credit default swaps or through risk participation swaps to help manage counterparty exposure. We would be required to perform under the credit derivatives we sold in the event of default by the referenced obligors. Events of default include events such as bankruptcy, capital restructuring or lack of principal and/or interest payment.

Table 14.7 provides details of sold credit derivatives.

Table 14.7: Sold Credit Derivatives

(in millions)	Protection sold	Notional amount	
		Protection sold	Protection sold – non-investment grade
December 31, 2022			
Credit default swaps	\$	12,733	1,860
Risk participation swaps		6,728	6,518
Total credit derivatives	\$	19,461	8,378
December 31, 2021			
Credit default swaps	\$	8,033	1,982
Risk participation swaps		6,756	6,012
Total credit derivatives	\$	14,789	7,994

Protection sold represents the estimated maximum exposure to loss that would be incurred if, upon an event of default, the value of our interests and any associated collateral declined to zero, and does not take into consideration any of recovery value from the referenced obligation or offset from collateral held or any economic hedges.

The amounts under non-investment grade represent the notional amounts of those credit derivatives on which we have a higher risk of being required to perform under the terms of the credit derivative and are a function of the underlying assets.

We consider the credit risk to be low if the underlying assets under the credit derivative have an external rating that is investment grade. If an external rating is not available, we classify the credit derivative as non-investment grade.

Our maximum exposure to sold credit derivatives is managed through posted collateral and purchased credit derivatives with identical or similar reference positions in order to achieve our desired credit risk profile. The credit risk management is designed to provide an ability to recover a significant portion of any amounts that would be paid under sold credit derivatives.

Credit-Risk Contingent Features

Certain of our derivative contracts contain provisions whereby if the credit rating of our debt were to be downgraded by certain major credit rating agencies, the counterparty could demand additional collateral or require termination or replacement of derivative instruments in a net liability position. Table 14.8 illustrates our exposure to OTC bilateral derivative contracts with credit-risk contingent features, collateral we have posted, and the additional collateral we would be required to post if the credit rating of our debt was downgraded below investment grade.

Table 14.8: Credit-Risk Contingent Features

(in billions)	Dec 31, 2022	Dec 31, 2021
Net derivative liabilities with credit-risk contingent features	\$ 20.7	12.2
Collateral posted	17.4	11.0
Additional collateral to be posted upon a below investment grade credit rating (1)	3.3	1.2

(1) Any credit rating below investment grade requires us to post the maximum amount of collateral.

Note 15: Fair Values of Assets and Liabilities

We use fair value measurements to record fair value adjustments to certain assets and liabilities and to fulfill fair value disclosure requirements. Assets and liabilities recorded at fair value on a recurring basis, such as derivatives, residential MSRs, and trading or AFS debt securities, are presented in Table 15.1 in this Note. Additionally, from time to time, we record fair value adjustments on a nonrecurring basis. These nonrecurring adjustments typically involve application of lower of cost or fair value (LOCOM) accounting, write-downs of individual assets or application of the measurement alternative for nonmarketable equity securities. Assets recorded at fair value on a nonrecurring basis are presented in Table 15.4 in this Note. We provide in Table 15.9 estimates of fair value for financial instruments that are not recorded at fair value, such as loans and debt liabilities carried at amortized cost.

FAIR VALUE HIERARCHY We classify our assets and liabilities recorded at fair value as either Level 1, 2, or 3 in the fair value hierarchy. The highest priority (Level 1) is assigned to valuations based on unadjusted quoted prices in active markets and the lowest priority (Level 3) is assigned to valuations based on significant unobservable inputs. See Note 1 (Summary of Significant Accounting Policies) in this Report for a detailed description of the fair value hierarchy.

In the determination of the classification of financial instruments in Level 2 or Level 3 of the fair value hierarchy, we consider all available information, including observable market data, indications of market liquidity and orderliness, and our understanding of the valuation techniques and significant inputs used. This determination is ultimately based upon the specific facts and circumstances of each instrument or instrument category and judgments are made regarding the significance of the unobservable inputs to the instruments' fair value measurement in its entirety. If unobservable inputs are considered significant, the instrument is classified as Level 3.

We do not classify nonmarketable equity securities in the fair value hierarchy if we use the non-published net asset value (NAV) per share (or its equivalent) as a practical expedient to measure fair value. Marketable equity securities with published NAVs are classified in the fair value hierarchy.

Assets

TRADING DEBT SECURITIES Trading debt securities are recorded at fair value on a recurring basis. These securities are valued using internal trader prices that are subject to independent price verification procedures, which includes comparing internal trader prices against multiple independent pricing sources, such as prices obtained from third-party pricing services, observed trades, and other approved market data. These pricing services compile prices from various sources and may apply matrix pricing for similar securities when no price is observable. We review pricing methodologies provided by pricing services to determine if observable market information is being used versus unobservable inputs. When evaluating the appropriateness of an internal trader price, compared with other independent pricing sources, considerations include the range and quality of available information and observability of trade data. These sources are used to evaluate the reasonableness of a trader price; however, valuing financial instruments involves judgments acquired from knowledge of a particular market. Substantially all of our trading debt securities are recorded using internal trader prices.

AVAILABLE-FOR-SALE DEBT SECURITIES AFS debt securities are recorded at fair value on a recurring basis. Fair value measurement for AFS debt securities is based upon various sources of market pricing. Where available, we use quoted prices in active markets. When instruments are traded in secondary markets and quoted prices in active markets do not exist for such securities, we use prices obtained from third-party pricing services and, to a lesser extent, may use prices obtained from independent broker-dealers (brokers), collectively vendor prices. Substantially all of our AFS debt securities are recorded using vendor prices. See the "Level 3 Asset and Liability Valuation Processes – Vendor Developed Valuations" section in this Note for additional discussion of our processes when using vendor prices to record fair value of AFS debt securities, which includes those classified as Level 2 or Level 3 within the fair value hierarchy.

When vendor prices are deemed inappropriate, they may be adjusted based on other market data or internal models. We also use internal models when no vendor prices are available. Internal models use discounted cash flow techniques or market comparable pricing techniques.

LOANS HELD FOR SALE (LHFS) LHFS generally includes commercial and residential mortgage loans originated for sale in the securitization or whole loan market. A majority of residential LHFS, and our portfolio of commercial LHFS in our trading business, are recorded at fair value on a recurring basis. The remaining LHFS are held at LOCOM which may be written down to fair value on a nonrecurring basis. Fair value for LHFS that are not part of our trading business is based on quoted market prices, where available, or the prices for other mortgage whole loans with similar characteristics. We may use securitization prices that are adjusted for typical securitization activities including servicing value, portfolio composition, market conditions and liquidity. Fair value for LHFS in our trading business is based on pending transactions when available. Where market pricing data or pending transactions are not available, we use a discounted cash flow model to estimate fair value.

LOANS Although loans are recorded at amortized cost, we record nonrecurring fair value adjustments to reflect write-downs that are based on the observable market price of the loan or current appraised value of the collateral less costs to sell.

MORTGAGE SERVICING RIGHTS (MSRs) Residential MSRs are carried at fair value on a recurring basis. Commercial MSRs are carried at LOCOM and may be written down to fair value on a nonrecurring basis. MSRs do not trade in an active market with readily observable prices. We determine the fair value of MSRs using a valuation model that estimates the present value of expected future net servicing income. The model incorporates assumptions that market participants may use in estimating future net servicing income cash flows, including estimates of prepayment speeds (including housing price volatility for residential MSRs), discount rates, default rates, cost to service (including delinquency and foreclosure costs), escrow account earnings, contractual servicing fee income, ancillary income and late fees.

DERIVATIVES Derivatives are recorded at fair value on a recurring basis. The fair value of exchange-traded derivatives that are actively traded and valued using quoted market prices are

classified as Level 1 of the fair value hierarchy. The fair value of other derivatives, which predominantly relate to derivatives traded in over-the-counter (OTC) markets, are measured using internal valuation techniques, as quoted market prices are not readily available. These instruments are classified as Level 2 or Level 3 of the fair value hierarchy, depending on the significance of unobservable inputs in the valuation. Valuation techniques and inputs to internal models depend on the type of derivative and nature of the underlying rate, price or index upon which the value of the derivative is based. Key inputs can include yield curves, credit curves, foreign exchange rates, prepayment rates, volatility measurements and correlation of certain of these inputs.

EQUITY SECURITIES Marketable equity securities and certain nonmarketable equity securities that we have elected to account for at fair value are recorded at fair value on a recurring basis. Our remaining nonmarketable equity securities are accounted for using the equity method, cost method or measurement alternative and can be subject to nonrecurring fair value adjustments to record impairment. Additionally, the carrying value of equity securities accounted for under the measurement alternative is also remeasured to fair value upon the occurrence of orderly observable transactions of the same or similar securities of the same issuer.

We use quoted prices to determine the fair value of marketable equity securities, as the securities are publicly traded. Quoted prices are typically not available for nonmarketable equity securities. We therefore use other methods, generally market comparable pricing techniques, to determine fair value for such securities. We use all available information in making this determination, which includes observable transaction prices for the same or similar security, prices from third-party pricing services, broker quotes, trading multiples of comparable public companies, and discounted cash flow models. Where appropriate, we make adjustments to observed market data to reflect the comparative differences between the market data and the attributes of our equity security, such as differences with public companies and other investment-specific considerations like liquidity, marketability or differences in terms of the instruments.

OTHER ASSETS Although other assets are generally recorded at amortized cost, we record nonrecurring fair value adjustments to reflect impairments or the impact of certain lease modifications. Other assets subject to nonrecurring fair value measurements include operating lease ROU assets, foreclosed assets and physical commodities. Fair value is generally based upon independent market prices or appraised values less costs to sell, or the use of a discounted cash flow model.

Liabilities

SHORT-SALE TRADING LIABILITIES Short-sale trading liabilities in our trading business are recorded at fair value on a recurring basis and are measured using quoted prices in active markets, where available. When quoted prices for the same instruments are not available or markets are not active, fair values are estimated using recent trades of similar securities.

LONG-TERM DEBT Although long-term debt is generally recorded at amortized cost, we have elected the fair value option for certain structured notes issued by our trading business. Fair values for these instruments are estimated using a discounted cash flow model that includes both the embedded derivative and debt portions of the notes. The discount rate used in these

discounted cash flow models also incorporates the impact of our credit spread, which is based on observable spreads in the secondary bond market.

Level 3 Asset and Liability Valuation Processes

We generally determine fair value of our Level 3 assets and liabilities by using internal models and, to a lesser extent, prices obtained from vendors. Our valuation processes vary depending on which approach is utilized.

INTERNAL MODEL VALUATIONS Certain Level 3 fair value estimates are based on internal models, such as discounted cash flow or market comparable pricing techniques. Some of the inputs used in these valuations are unobservable. Unobservable inputs are generally derived from or can be correlated to historic performance of similar portfolios or previous market trades in similar instruments where particular unobservable inputs may be implied. We attempt to correlate each unobservable input to historical experience and other third-party data where available.

Internal models are subject to review prescribed within our model risk management policies and procedures, which include model validation. Model validation helps ensure our models are appropriate for their intended use and appropriate controls exist to help mitigate risk of invalid valuations. Model validation assesses the adequacy and appropriateness of our models, including reviewing its key components, such as inputs, processing components, logic or theory, output results and supporting model documentation. Validation also includes ensuring significant unobservable model inputs are appropriate given observable market transactions or other market data within the same or similar asset classes. We also have ongoing monitoring procedures in place for our Level 3 assets and liabilities that use internal valuation models. These procedures, which are designed to provide reasonable assurance that models continue to perform as expected, include:

- ongoing analysis and benchmarking to market transactions and other independent market data (including pricing vendors, if available);
- back-testing of modeled fair values to actual realized transactions; and
- review of modeled valuation results against expectations, including review of significant or unusual fluctuations in value.

We update model inputs and methodologies periodically to reflect these monitoring procedures. Additionally, existing models are subject to periodic reviews and we perform full model revalidations as necessary.

Internal valuation models are subject to ongoing review by the appropriate principal line of business or enterprise function and monitoring oversight by Independent Risk Management. Independent Risk Management, through its Model Risk function, provides independent oversight of model risk management, and its responsibilities include governance, validation, periodic review, and monitoring of model risk across the Company and providing periodic reports to management and the Board's Risk Committee.

VENDOR-DEVELOPED VALUATIONS We routinely obtain pricing from third-party vendors to value our assets or liabilities. In certain limited circumstances, this includes assets and liabilities that we classify as Level 3. We have processes in place to approve and periodically review third-party vendors to assess whether information obtained and valuation techniques used are appropriate. This review may consist of, among other things,

Note 15: Fair Values of Assets and Liabilities (continued)

obtaining and evaluating control reports issued and pricing methodology materials distributed. We monitor and review vendor prices on an ongoing basis to evaluate whether the fair values are reasonable and in line with market experience in similar asset classes. While the inputs used to determine fair value are not provided by the pricing vendors, and therefore unavailable for our review, we perform one or more of the following procedures to validate the pricing information and determine appropriate classification within the fair value hierarchy:

- comparison to other pricing vendors (if available);
- variance analysis of prices;

- corroboration of pricing by reference to other independent market data, such as market transactions and relevant benchmark indices;
- review of pricing by Company personnel familiar with market liquidity and other market-related conditions; and
- investigation of prices on a specific instrument-by-instrument basis.

Assets and Liabilities Recorded at Fair Value on a Recurring Basis

Table 15.1 presents the balances of assets and liabilities recorded at fair value on a recurring basis.

Table 15.1: Fair Value on a Recurring Basis

(in millions)	December 31, 2022				December 31, 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Trading debt securities:								
Securities of U.S. Treasury and federal agencies	\$ 28,844	4,530	—	33,374	27,607	2,249	—	29,856
Collateralized loan obligations	—	540	150	690	—	655	211	866
Corporate debt securities	—	10,344	23	10,367	—	9,987	18	10,005
Federal agency mortgage-backed securities	—	34,447	—	34,447	—	40,350	—	40,350
Non-agency mortgage-backed securities	—	1,243	12	1,255	—	1,531	11	1,542
Other debt securities	—	6,022	—	6,022	—	5,645	1	5,646
Total trading debt securities	28,844	57,126	185	86,155	27,607	60,417	241	88,265
Available-for-sale debt securities:								
Securities of U.S. Treasury and federal agencies	45,285	—	—	45,285	39,661	—	—	39,661
Non-U.S. government securities	—	162	—	162	—	71	—	71
Securities of U.S. states and political subdivisions	—	10,332	113	10,445	—	16,832	85	16,917
Federal agency mortgage-backed securities	—	48,137	—	48,137	—	105,886	—	105,886
Non-agency mortgage-backed securities	—	3,284	—	3,284	—	4,522	10	4,532
Collateralized loan obligations	—	3,981	—	3,981	—	5,708	—	5,708
Other debt securities	—	2,137	163	2,300	—	4,378	91	4,469
Total available-for-sale debt securities	45,285	68,033	276	113,594	39,661	137,397	186	177,244
Loans held for sale	—	3,427	793	4,220	—	14,862	1,033	15,895
Mortgage servicing rights (residential)	—	—	9,310	9,310	—	—	6,920	6,920
Derivative assets (gross):								
Interest rate contracts	262	40,503	321	41,086	52	22,296	190	22,538
Commodity contracts	—	5,866	134	6,000	—	5,902	63	5,965
Equity contracts (1)	112	9,051	410	9,573	6,402	9,350	2,019	17,771
Foreign exchange contracts	27	22,175	11	22,213	8	6,573	7	6,588
Credit contracts	—	44	22	66	—	32	14	46
Total derivative assets (gross)	401	77,639	898	78,938	6,462	44,153	2,293	52,908
Equity securities:								
Marketable	18,527	86	3	18,616	29,968	82	4	30,054
Nonmarketable (2)	—	9,750	17	9,767	—	57	8,906	8,963
Total equity securities	18,527	9,836	20	28,383	29,968	139	8,910	39,017
Total assets prior to derivative netting	\$ 93,057	216,061	11,482	320,600	103,698	256,968	19,583	380,249
Derivative netting (3)				(56,164)				(31,430)
Total assets after derivative netting				\$ 264,436				348,819
Derivative liabilities (gross):								
Interest rate contracts	\$ (193)	(40,377)	(2,903)	(43,473)	(28)	(17,712)	(63)	(17,803)
Commodity contracts	—	(3,325)	(120)	(3,445)	—	(2,351)	(66)	(2,417)
Equity contracts (1)	(118)	(6,502)	(1,652)	(8,272)	(5,820)	(10,753)	(2,448)	(19,021)
Foreign exchange contracts	(29)	(26,622)	(35)	(26,686)	(8)	(6,654)	(10)	(6,672)
Credit contracts	—	(33)	(3)	(36)	—	(40)	(3)	(43)
Total derivative liabilities (gross)	(340)	(76,859)	(4,713)	(81,912)	(5,856)	(37,510)	(2,590)	(45,956)
Short-sale and other trading liabilities	(14,791)	(5,513)	—	(20,304)	(15,436)	(5,249)	—	(20,685)
Long-term debt	—	(1,346)	—	(1,346)	—	—	—	—
Total liabilities prior to derivative netting	\$ (15,131)	(83,718)	(4,713)	(103,562)	(21,292)	(42,759)	(2,590)	(66,641)
Derivative netting (3)				61,827				36,532
Total liabilities after derivative netting				\$ (41,735)				(30,109)

(1) During fourth quarter 2022, we changed the technique used to value certain exchanged-traded equity contracts from prices received from exchanges to an internal model. As a result of this change, these instruments are now classified as Level 2.

(2) Excludes \$81 million of nonmarketable equity securities as of December 31, 2021, that are measured at fair value using non-published NAV per share (or its equivalent) as a practical expedient that are not classified in the fair value hierarchy.

(3) Represents balance sheet netting of derivative asset and liability balances, related cash collateral and portfolio level counterparty valuation adjustments. See Note 14 (Derivatives) for additional information.

Level 3 Assets and Liabilities Recorded at Fair Value on a Recurring Basis

Table 15.2 presents the changes in Level 3 assets and liabilities measured at fair value on a recurring basis.

Table 15.2: Changes in Level 3 Fair Value Assets and Liabilities on a Recurring Basis

(in millions)	Balance, beginning of period	Net gains/ (losses) (1)	Purchases (2)	Sales	Settlements	Transfers into Level 3 (3)	Transfers out of Level 3 (4)	Balance, end of period	Net unrealized gains (losses) related to assets and liabilities held at period end (5)
Year ended December 31, 2022									
Trading debt securities	\$ 241	(72)	218	(186)	(6)	22	(32)	185	(73) (6)
Available-for-sale debt securities	186	(36)	327	(26)	(25)	460	(610)	276	(10) (6)
Loans held for sale	1,033	(252)	389	(391)	(207)	237	(16)	793	(170) (7)
Mortgage servicing rights (residential) (8)	6,920	2,001	1,003	(614)	—	—	—	9,310	3,254 (7)
Net derivative assets and liabilities:									
Interest rate contracts	127	(3,280)	—	—	994	(435)	12	(2,582)	(2,073)
Equity contracts	(429)	28	—	(9)	721	(584)	(969)	(1,242)	271
Other derivative contracts	5	(68)	19	(9)	118	(16)	(40)	9	(16)
Total derivative contracts	(297)	(3,320)	19	(18)	1,833	(1,035)	(997)	(3,815)	(1,818) (9)
Equity securities	8,910	4	1	(2)	—	3	(8,896)	20	(2) (6)
Year ended December 31, 2021									
Trading debt securities	\$ 173	7	518	(448)	(12)	34	(31)	241	(8) (6)
Available-for-sale debt securities	2,994	21	809	(112)	(278)	353	(3,601)	186	(4) (6)
Loans held for sale	1,234	(25)	477	(534)	(377)	394	(136)	1,033	(26) (7)
Mortgage servicing rights (residential) (8)	6,125	(842)	1,645	(8)	—	—	—	6,920	1,170 (7)
Net derivative assets and liabilities:									
Interest rate contracts	446	27	—	—	(340)	(5)	(1)	127	(75)
Equity contracts	(314)	(468)	—	—	379	(228)	202	(429)	(266)
Other derivative contracts	39	(114)	3	(3)	77	—	3	5	(36)
Total derivative contracts	171	(555)	3	(3)	116	(233)	204	(297)	(377) (9)
Equity securities	9,233	(267)	1	(68)	—	11	—	8,910	(316) (6)
Year ended December 31, 2020									
Trading debt securities	\$ 223	(53)	600	(589)	(12)	115	(111)	173	(36) (6)
Available-for-sale debt securities	1,565	(34)	43	(68)	(263)	2,255	(504)	2,994	1 (6)
Loans held for sale	1,214	(96)	1,312	(586)	(323)	1,927	(2,214)	1,234	(38) (7)
Mortgage servicing rights (residential) (8)	11,517	(7,068)	1,707	(32)	1	—	—	6,125	(4,693) (7)
Net derivative assets and liabilities:									
Interest rate contracts	214	2,074	—	—	(1,842)	—	—	446	334
Equity contracts	(269)	(316)	—	—	298	(22)	(5)	(314)	(19)
Other derivative contracts	(5)	(63)	8	3	73	22	1	39	11
Total derivative contracts	(60)	1,695	8	3	(1,471)	—	(4)	171	326 (9)
Equity securities	7,850	1,369	2	—	—	23	(11)	9,233	1,370 (6)

- (1) Includes net gains (losses) included in both net income and other comprehensive income. All amounts represent net gains (losses) included in net income except for \$(37) million, \$41 million and \$0 million included in other comprehensive income from AFS debt securities for the years ended December 31, 2022, 2021 and 2020, respectively.
- (2) Includes originations of mortgage servicing rights and loans held for sale.
- (3) All assets and liabilities transferred into Level 3 were previously classified within Level 2.
- (4) All assets and liabilities transferred out of Level 3 are classified as Level 2. During first quarter 2022, we transferred \$8.9 billion of non-marketable equity securities and \$1.4 billion of related economic hedging derivative assets (equity contracts) out of Level 3 due to our election to measure fair value of these instruments as a portfolio. Under this election, the unit of valuation is the portfolio-level, rather than each individual instrument. The unobservable inputs previously significant to the valuation of the instruments individually are no longer significant, as those unobservable inputs offset under the portfolio election.
- (5) Includes net unrealized gains (losses) related to assets and liabilities held at period end included in both net income and other comprehensive income. All amounts represent net unrealized gains (losses) included in net income except for \$(9) million, \$(1) million and \$57 million included in other comprehensive income from AFS debt securities for the years ended December 31, 2022, 2021 and 2020, respectively.
- (6) Included in net gains from trading and securities on our consolidated statement of income.
- (7) Included in mortgage banking income on our consolidated statement of income.
- (8) For additional information on the changes in mortgage servicing rights, see Note 6 (Mortgage Banking Activities).
- (9) Included in mortgage banking income, net gains from trading and securities, and other noninterest income on our consolidated statement of income.

Note 15: Fair Values of Assets and Liabilities (continued)

Table 15.3 provides quantitative information about the valuation techniques and significant unobservable inputs used in the valuation of our Level 3 assets and liabilities measured at fair value on a recurring basis.

The significant unobservable inputs for Level 3 assets inherent in the fair values obtained from third-party vendors are not included in the table, as the specific inputs applied are not

provided by the vendor (see discussion in the “Level 3 Asset and Liability Valuation Processes” section within this Note regarding vendor-developed valuations).

Weighted averages of inputs are calculated using outstanding unpaid principal balance for cash instruments, such as loans and securities, and notional amounts for derivative instruments.

Table 15.3: Valuation Techniques – Recurring Basis

(\$ in millions, except cost to service amounts)	Fair Value Level 3	Valuation Technique	Significant Unobservable Input	Range of Inputs	Weighted Average
December 31, 2022					
Trading and available-for-sale debt securities	\$ 157	Discounted cash flow	Discount rate	2.7 - 12.5 %	6.4
	185	Market comparable pricing	Comparability adjustment	(33.6) - 14.1	(4.8)
	119	Market comparable pricing	Multiples	1.1x - 7.4x	4.0x
Loans held for sale	793	Discounted cash flow	Default rate	0.0 - 25.0 %	0.7
			Discount rate	2.9 - 13.4	9.5
			Loss severity	0.0 - 53.6	15.7
			Prepayment rate	3.5 - 14.2	10.7
Mortgage servicing rights (residential)	9,310	Discounted cash flow	Cost to service per loan (1)	\$ 52 - 550	102
			Discount rate	8.7 - 14.1 %	9.1
			Prepayment rate (2)	8.1 - 21.9	9.4
Net derivative assets and (liabilities):					
Interest rate contracts	(2,411)	Discounted cash flow	Discount rate	3.2 - 4.9	4.2
	(63)	Discounted cash flow	Default rate	0.4 - 5.0	2.3
			Loss severity	50.0 - 50.0	50.0
			Prepayment rate	2.8 - 22.0	18.7
Interest rate contracts: derivative loan commitments	(108)	Discounted cash flow	Fall-out factor	1.0 - 99.0	41.0
			Initial-value servicing	(9.3) - 141.0 bps	11.5
Equity contracts	(1,000)	Discounted cash flow	Conversion factor	(12.2) - 0.0 %	(9.9)
			Weighted average life	0.5 - 1.5 yrs	0.8
	(242)	Option model	Correlation factor	(77.0) - 99.0 %	49.5
			Volatility factor	6.5 - 96.5	37.3
Insignificant Level 3 assets, net of liabilities	29				
Total Level 3 assets, net of liabilities	\$ 6,769				(3)
December 31, 2021					
Trading and available-for-sale debt securities	\$ 136	Discounted cash flow	Discount rate	0.4 - 12.5 %	5.5
	11	Vendor priced			
	280	Market comparable pricing	Comparability adjustment	(30.2) - 19.2	(4.6)
Loans held for sale	1,033	Discounted cash flow	Default rate	0.0 - 29.2 %	1.2
			Discount rate	1.6 - 11.9	5.1
			Loss severity	0.0 - 46.9	15.4
			Prepayment rate	7.5 - 18.2	13.1
Mortgage servicing rights (residential)	6,920	Discounted cash flow	Cost to service per loan (1)	\$ 54 - 585	106
			Discount rate	5.8 - 8.8 %	6.4
			Prepayment rate (2)	12.5 - 21.1	14.7
Net derivative assets and (liabilities):					
Interest rate contracts	87	Discounted cash flow	Default rate	0.0 - 5.0	2.1
			Loss severity	50.0 - 50.0	50.0
			Prepayment rate	2.8 - 22.0	18.7
Interest rate contracts: derivative loan commitments	40	Discounted cash flow	Fall-out factor	1.0 - 99.0	16.8
			Initial-value servicing	(74.8) - 146.0 bps	50.9
Equity contracts	253	Discounted cash flow	Conversion factor	(10.2) - 0.0 %	(9.7)
			Weighted average life	0.5 - 2.0 yrs	1.1
	(682)	Option model	Correlation factor	(77.0) - 99.0 %	23.2
			Volatility factor	6.5 - 72.0	29.1
Nonmarketable equity securities	8,906	Market comparable pricing	Comparability adjustment	(21.6) - (7.7)	(15.5)
Insignificant Level 3 assets, net of liabilities	9				
Total Level 3 assets, net of liabilities	\$ 16,993				(3)

(1) The high end of the range of inputs is for servicing modified loans. For non-modified loans the range is \$52 - \$178 at December 31, 2022, and \$54 - \$199 at December 31, 2021.

(2) Includes a blend of prepayment speeds and expected defaults. Prepayment speeds are influenced by mortgage interest rates as well as our estimation of drivers of borrower behavior.

(3) Consists of total Level 3 assets of \$11.5 billion and \$19.6 billion and total Level 3 liabilities of \$4.7 billion and \$2.6 billion, before netting of derivative balances, at December 31, 2022 and 2021, respectively.

The internal valuation techniques used for our Level 3 assets and liabilities, as presented in Table 15.3, are described as follows:

- **Discounted cash flow** – Discounted cash flow valuation techniques generally consist of developing an estimate of future cash flows that are expected to occur over the life of an instrument and then discounting those cash flows at a rate of return that results in the fair value amount.
- **Market comparable pricing** – Market comparable pricing valuation techniques are used to determine the fair value of certain instruments by incorporating known inputs, such as recent transaction prices, pending transactions, financial metrics of comparable companies, or prices of other similar investments that require significant adjustment to reflect differences in instrument characteristics.
- **Option model** – Option model valuation techniques are generally used for instruments in which the holder has a contingent right or obligation based on the occurrence of a future event, such as the price of a referenced asset going above or below a predetermined strike price. Option models estimate the likelihood of the specified event occurring by incorporating assumptions such as volatility estimates, price of the underlying instrument and expected rate of return.

The unobservable inputs presented in the previous tables are those we consider significant to the fair value of the Level 3 asset or liability. We consider unobservable inputs to be significant if by their exclusion the fair value of the Level 3 asset or liability would be impacted by a predetermined percentage change. We also consider qualitative factors, such as nature of the instrument, type of valuation technique used, and the significance of the unobservable inputs relative to other inputs used within the valuation. Following is a description of the significant unobservable inputs provided in the table.

- **Comparability adjustment** – is an adjustment made to observed market data, such as a transaction price to reflect dissimilarities in underlying collateral, issuer, rating, or other factors used within a market valuation approach, expressed as a percentage of an observed price.
- **Conversion factor** – is the risk-adjusted rate in which a particular instrument may be exchanged for another instrument upon settlement, expressed as a percentage change from a specified rate.
- **Correlation factor** – is the likelihood of one instrument changing in price relative to another based on an established relationship expressed as a percentage of relative change in price over a period over time.
- **Cost to service** – is the expected cost per loan of servicing a portfolio of loans, which includes estimates for unreimbursed expenses (including delinquency and foreclosure costs) that may occur as a result of servicing such loan portfolios.
- **Default rate** – is an estimate of the likelihood of not collecting contractual amounts owed expressed as a constant default rate (CDR).
- **Discount rate** – is a rate of return used to calculate the present value of the future expected cash flow to arrive at the fair value of an instrument. The discount rate consists of a benchmark rate component and a risk premium component. The benchmark rate component, for example, OIS, London Interbank Offered Rate (LIBOR), Secured Overnight Financing Rate (SOFR) or U.S. Treasury rates, is generally observable within the market and is necessary to appropriately reflect the time value of money. The risk premium component reflects the amount

of compensation market participants require due to the uncertainty inherent in the instruments' cash flows resulting from risks such as credit and liquidity.

- **Fall-out factor** – is the expected percentage of loans associated with our interest rate lock commitment portfolio that are likely of not funding.
- **Initial-value servicing** – is the estimated value of the underlying loan, including the value attributable to the embedded servicing right, expressed in basis points of outstanding unpaid principal balance.
- **Loss severity** – is the estimated percentage of contractual cash flows lost in the event of a default.
- **Multiples** – are financial ratios of comparable public companies, such as ratios of enterprise value or market value of equity to earnings before interest, depreciation, and amortization (EBITDA), revenue, net income or book value, adjusted to reflect dissimilarities in operational, financial, or marketability to the comparable public company used in a market valuation approach.
- **Prepayment rate** – is the estimated rate at which forecasted prepayments of principal of the related loan or debt instrument are expected to occur, expressed as a constant prepayment rate (CPR).
- **Volatility factor** – is the extent of change in price an item is estimated to fluctuate over a specified period of time expressed as a percentage of relative change in price over a period over time.
- **Weighted average life** – is the weighted average number of years an investment is expected to remain outstanding based on its expected cash flows reflecting the estimated date the issuer will call or extend the maturity of the instrument or otherwise reflecting an estimate of the timing of an instrument's cash flows whose timing is not contractually fixed.

Interrelationships and Uncertainty of Inputs Used in Recurring Level 3 Fair Value Measurements

Usage of the valuation techniques presented in Table 15.3 requires determination of relevant inputs and assumptions, some of which represent significant unobservable inputs. Accordingly, changes in these unobservable inputs may have a significant impact on fair value.

Certain of these unobservable inputs will (in isolation) have a directionally consistent impact on the fair value of the instrument for a given change in that input. Alternatively, the fair value of the instrument may move in an opposite direction for a given change in another input. Where multiple inputs are used within the valuation technique of an asset or liability, a change in one input in a certain direction may be offset by an opposite change in another input having a potentially muted impact to the overall fair value of that particular instrument. Additionally, a change in one unobservable input may result in a change to another unobservable input (that is, changes in certain inputs are interrelated to one another), which may counteract or magnify the fair value impact.

DEBT SECURITIES AND LOANS HELD FOR SALE The internal models used to determine fair value for these Level 3 instruments use certain significant unobservable inputs within a discounted cash flow or market comparable pricing valuation technique. Such inputs include discount rate, prepayment rate, default rate, loss severity, multiples, and comparability adjustment.

These Level 3 assets would decrease (increase) in value based upon an increase (decrease) in discount rate, default rate or loss severity inputs and would generally decrease (increase) in

Note 15: Fair Values of Assets and Liabilities (continued)

value based upon an increase (decrease) in prepayment rate. Conversely, these Level 3 assets would increase (decrease) in value based upon an increase (decrease) in multiples. The comparability adjustment input may have a positive or negative impact on fair value depending on the change in fair value of the item the comparability adjustment references.

Generally, a change in the assumption used for the default rate is accompanied by a directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates. Unobservable inputs for comparability adjustment, multiples, and loss severity do not increase or decrease based on movements in the other significant unobservable inputs for these Level 3 assets.

MORTGAGE SERVICING RIGHTS The discounted cash flow models used to determine fair value of Level 3 MSR's utilize certain significant unobservable inputs including prepayment rate, discount rate and costs to service. An increase in any of these unobservable inputs will reduce the fair value of the MSR's and alternatively, a decrease in any one of these inputs would result in the MSR's increasing in value. Generally, a decrease in discount rates increases the value of MSR's, unless accompanied by a related update to our prepayment rates. The cost to service assumption generally does not increase or decrease based on movements in the discount rate or the prepayment rate. The sensitivity of our residential MSR's is discussed further in Note 6 (Mortgage Banking Activities).

DERIVATIVE INSTRUMENTS Level 3 derivative instruments are valued using market comparable pricing, option pricing and discounted cash flow valuation techniques which use certain unobservable inputs to determine fair value. Such inputs consist of prepayment rate, default rate, loss severity, initial-value servicing, fall-out factor, volatility factor, weighted average life, conversion factor, and correlation factor.

Level 3 derivative assets (liabilities) where we are long the underlying would decrease (increase) in value upon an increase (decrease) in default rate, fall-out factor, conversion factor, or loss severity inputs. Conversely, Level 3 derivative assets (liabilities) would generally increase (decrease) in value upon an

increase (decrease) in prepayment rate, initial-value servicing, weighted average life or volatility factor inputs. The inverse of the above relationships would occur for instruments when we are short the underlying. The correlation factor input may have a positive or negative impact on the fair value of derivative instruments depending on the change in fair value of the item the correlation factor references.

Generally, for derivative instruments for which we are subject to changes in the value of the underlying referenced instrument, a change in the assumption used for default rate is accompanied by directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates. Unobservable inputs for loss severity, initial-value servicing, fall-out factor, volatility factor, weighted average life, conversion factor, and correlation factor do not increase or decrease based on movements in other significant unobservable inputs for these Level 3 instruments.

NONMARKETABLE EQUITY SECURITIES Level 3 nonmarketable equity securities are valued using a market comparable pricing valuation technique, with a comparability adjustment as the single significant unobservable input. The comparability adjustment input may have a positive or negative impact on fair value depending on the change in fair value of the item the comparability adjustment references.

Assets and Liabilities Recorded at Fair Value on a Nonrecurring Basis

We may be required, from time to time, to measure certain assets at fair value on a nonrecurring basis in accordance with GAAP. These adjustments to fair value usually result from application of LOCOM accounting, write-downs of individual assets, or application of the measurement alternative for certain nonmarketable equity securities.

Table 15.4 provides the fair value hierarchy and fair value at the date of the nonrecurring fair value adjustment for all assets that were still held as of December 31, 2022 and 2021, and for which a nonrecurring fair value adjustment was recorded during the years then ended.

Table 15.4: Fair Value on a Nonrecurring Basis

(in millions)	December 31, 2022			December 31, 2021		
	Level 2	Level 3	Total	Level 2	Level 3	Total
Loans held for sale (1)	\$ 838	554	1,392	3,911	1,407	5,318
Loans:						
Commercial	285	—	285	476	—	476
Consumer	512	—	512	380	—	380
Total loans	797	—	797	856	—	856
Mortgage servicing rights (commercial)	—	75	75	—	567	567
Nonmarketable equity securities	1,926	2,818	4,744	6,262	765	7,027
Other assets	1,862	296	2,158	1,373	175	1,548
Total assets at fair value on a nonrecurring basis	\$ 5,423	3,743	9,166	12,402	2,914	15,316

(1) Predominantly consists of commercial mortgages and residential mortgage – first lien loans.

Table 15.5 presents the gains (losses) on certain assets held at the end of the reporting periods presented for which a nonrecurring fair value adjustment was recognized in earnings during the respective periods.

Table 15.5: Gains (Losses) on Assets with Nonrecurring Fair Value Adjustment

(in millions)	Year ended December 31,		
	2022	2021	2020
Loans held for sale	\$ (120)	33	12
Loans:			
Commercial	(96)	(230)	(754)
Consumer	(739)	(564)	(260)
Total loans	(835)	(794)	(1,014)
Mortgage servicing rights (commercial)	4	33	(37)
Nonmarketable equity securities (1)	(1,191)	4,407	435
Other assets (2)	(275)	(388)	(469)
Total	\$ (2,417)	3,291	(1,073)

- (1) Includes impairment of nonmarketable equity securities and observable price changes related to nonmarketable equity securities accounted for under the measurement alternative.
- (2) Includes impairment of operating lease ROU assets, valuation of physical commodities, valuation losses on foreclosed real estate and other collateral owned, and impairment of private equity and venture capital investments in consolidated portfolio companies.

Table 15.6 provides quantitative information about the valuation techniques and significant unobservable inputs used in the valuation of our Level 3 assets that are measured at fair value on a nonrecurring basis and determined using an internal model. The table is limited to financial instruments that had nonrecurring fair value adjustments during the periods presented. Weighted averages of inputs are calculated using outstanding unpaid principal balance for cash instruments, such as loans, and carrying value prior to the nonrecurring fair value measurement for nonmarketable equity securities and private equity and venture capital investments in consolidated portfolio companies.

Table 15.6: Valuation Techniques – Nonrecurring Basis

(\$ in millions)	Fair Value Level 3	Valuation Technique (1)	Significant Unobservable Input (1)	Range of Inputs Positive (Negative)	Weighted Average
December 31, 2022					
Loans held for sale (2)	\$ 143	Discounted cash flow	Default rate (3)	0.1 - 86.1 %	13.8
			Discount rate	3.8 - 13.8	9.0
			Loss severity	8.1 - 43.8	18.6
			Prepayment rate (4)	2.3 - 23.4	18.6
	411	Market comparable pricing	Comparability adjustment	(8.2) - (0.9)	(4.3)
Mortgage servicing rights (commercial)	75	Discounted cash flow	Cost to service per loan	\$ 3,775 - 3,775	3,775
			Discount rate	5.2 - 5.2 %	5.2
			Prepayment rate	0.0 - 20.6	6.7
Nonmarketable equity securities	1,461	Market comparable pricing	Comparability adjustment	(100.0) - (4.0)	(30.1)
	1,352	Market comparable pricing	Multiples	0.8x - 18.7x	9.9x
Other assets (5)	234	Market comparable pricing	Multiples	6.4 - 8.0	7.1
Insignificant Level 3 assets	67				
Total	\$ 3,743				
December 31, 2021					
Loans held for sale (2)	\$ 1,407	Discounted cash flow	Default rate (3)	0.2 - 78.3 %	25.6
			Discount rate	0.6 - 12.0	3.3
			Loss severity	0.4 - 45.6	4.8
			Prepayment rate (4)	5.4 - 100.0	38.9
Mortgage servicing rights (commercial)	567	Discounted cash flow	Cost to service per loan	\$ 150 - 3,381	2,771
			Discount rate	4.0 - 4.5 %	4.0
			Prepayment rate	0.0 - 20.6	5.5
Nonmarketable equity securities	745	Market comparable pricing	Comparability adjustment	(100.0) - (33.0)	(59.0)
	15	Market comparable pricing	Multiples	2.0x - 3.3x	2.8x
	5	Discounted cash flow	Discount rate	10.5 - 10.5 %	10.5
Other assets	175	Discounted cash flow	Discount rate	0.2 - 4.4	2.9
Total	\$ 2,914				

- (1) Refer to the narrative following Table 15.3 for a definition of the valuation technique(s) and significant unobservable inputs used in the valuation of loans held for sale, mortgage servicing rights, certain nonmarketable equity securities, and other assets.
- (2) Consists of approximately \$400 million and \$1.2 billion of government insured/guaranteed loans purchased from GNMA-guaranteed mortgage securitizations at December 31, 2022 and 2021, respectively, and approximately \$150 million and \$200 million of other mortgage loans that are not government insured/guaranteed at December 31, 2022 and 2021, respectively.
- (3) Applies only to non-government insured/guaranteed loans.
- (4) Includes the impact on prepayment rate of expected defaults for government insured/guaranteed loans, which impact the frequency and timing of early resolution of loans.
- (5) Represents private equity and venture capital investments in consolidated portfolio companies.

Note 15: Fair Values of Assets and Liabilities (continued)

Fair Value Option

The fair value option is an irrevocable election, generally only permitted upon initial recognition of financial assets or liabilities, to measure eligible financial instruments at fair value with changes in fair value reflected in earnings. We may elect the fair value option to align the measurement model with how the financial assets or liabilities are managed or to reduce complexity or accounting asymmetry. Following is a discussion of the portfolios for which we elected the fair value option.

LOANS HELD FOR SALE (LHFS) LHFS measured at fair value include residential mortgage loan originations for which an active secondary market and readily available market prices exist to reliably support our valuations. Loan origination fees on these loans are recorded when earned, and related direct loan origination costs are recognized when incurred. We believe fair value measurement for LHFS reduces certain timing differences and better matches changes in the value of these assets with changes in the value of derivatives used as economic hedges for these assets.

Additionally we purchase loans for market-making purposes to support the buying and selling demands of our customers in

our trading business. These loans are generally held for a short period of time and managed within parameters of internally approved market risk limits. Fair value measurement best aligns with our risk management practices. Fair value for these loans is generally determined using readily available market data based on recent transaction prices for similar loans.

LONG-TERM DEBT We have elected to account for certain structured debt liabilities under the fair value option. These exposures relate to our trading activities and fair value accounting better aligns with our risk management practices and reduces complexity.

For long-term debt carried at fair value, the change in fair value attributable to instrument-specific credit risk is recorded in OCI and all other changes in fair value are recorded in earnings.

Table 15.7 reflects differences between the fair value carrying amount of the assets and liabilities for which we have elected the fair value option and the contractual aggregate unpaid principal amount at maturity.

Table 15.7: Fair Value Option

(in millions)	December 31, 2022			December 31, 2021		
	Fair value carrying amount	Aggregate unpaid principal	Fair value carrying amount less aggregate unpaid principal	Fair value carrying amount	Aggregate unpaid principal	Fair value carrying amount less aggregate unpaid principal
Loans held for sale (1)	\$ 4,220	4,614	(394)	15,895	15,750	145
Long-term debt	(1,346)	(1,775)	429	—	—	—

(1) Nonaccrual loans and loans 90 days or more past due and still accruing included in LHFS for which we have elected the fair value option were insignificant at December 31, 2022 and 2021.

Table 15.8 reflects amounts included in earnings related to initial measurement and subsequent changes in fair value, by income statement line item, for assets and liabilities for which

the fair value option was elected. Amounts recorded in net interest income are excluded from the table below.

Table 15.8: Gains (Losses) on Changes in Fair Value Included in Earnings

(in millions)	Year ended December 31,								
	2022			2021			2020		
	Mortgage banking noninterest income	Net gains from trading and securities	Other noninterest income	Mortgage banking noninterest income	Net gains from trading and securities	Other noninterest income	Mortgage banking noninterest income	Net gains from trading and securities	Other noninterest income
Loans held for sale	\$ (681)	6	—	1,972	54	2	2,719	28	1
Long-term debt	—	52	—	—	—	—	—	—	—

For performing loans, instrument-specific credit risk gains or losses are derived principally by determining the change in fair value of the loans due to changes in the observable or implied credit spread. Credit spread is the market yield on the loans less the relevant risk-free benchmark interest rate. For nonperforming loans, we attribute all changes in fair value to instrument-specific credit risk. For LHFS accounted for under the fair value option, instrument-specific credit gains or losses for the years ended December 31, 2022, 2021 and 2020 were insignificant.

For long-term debt, instrument-specific credit risk gains or losses represent the impact of changes in fair value due to changes in our credit spread and are derived using observable secondary bond market information. These impacts are recorded in OCI. See amounts relating to debit valuation adjustments (DVA) within Note 24 (Other Comprehensive Income) for additional information.

Disclosures about Fair Value of Financial Instruments

Table 15.9 presents a summary of fair value estimates for financial instruments that are not carried at fair value on a recurring basis. Some financial instruments are excluded from the scope of this table, such as certain insurance contracts, certain nonmarketable equity securities, and leases. This table also excludes assets and liabilities that are not financial instruments such as the value of the long-term relationships with our deposit, credit card and trust customers, MSRs, premises and equipment, goodwill and deferred taxes.

Loan commitments, standby letters of credit and commercial and similar letters of credit are not included in Table 15.9. A reasonable estimate of the fair value of these instruments is the carrying value of deferred fees plus the allowance for unfunded credit commitments, which totaled \$737 million and \$1.4 billion at December 31, 2022 and 2021, respectively.

The total of the fair value calculations presented does not represent, and should not be construed to represent, the underlying fair value of the Company.

Table 15.9: Fair Value Estimates for Financial Instruments

(in millions)	Carrying amount	Estimated fair value			Total
		Level 1	Level 2	Level 3	
December 31, 2022					
Financial assets					
Cash and due from banks (1)	\$ 34,596	34,596	—	—	34,596
Interest-earning deposits with banks (1)	124,561	124,338	223	—	124,561
Federal funds sold and securities purchased under resale agreements (1)	68,036	—	68,036	—	68,036
Held-to-maturity debt securities	297,059	14,285	238,552	2,684	255,521
Loans held for sale	2,884	—	2,208	719	2,927
Loans, net (2)	928,049	—	57,532	836,831	894,363
Nonmarketable equity securities (cost method)	4,900	—	—	4,961	4,961
Total financial assets	\$ 1,460,085	173,219	366,551	845,195	1,384,965
Financial liabilities					
Deposits (3)	\$ 66,887	—	46,745	18,719	65,464
Short-term borrowings	50,964	—	50,970	—	50,970
Long-term debt (4)	173,502	—	172,783	999	173,782
Total financial liabilities	\$ 291,353	—	270,498	19,718	290,216
December 31, 2021					
Financial assets					
Cash and due from banks (1)	\$ 24,616	24,616	—	—	24,616
Interest-earning deposits with banks (1)	209,614	209,452	162	—	209,614
Federal funds sold and securities purchased under resale agreements (1)	66,223	—	66,223	—	66,223
Held-to-maturity debt securities	272,022	16,825	252,717	2,844	272,386
Loans held for sale	7,722	—	6,300	1,629	7,929
Loans, net (2)	868,278	—	63,404	820,559	883,963
Nonmarketable equity securities (cost method)	3,584	—	—	3,646	3,646
Total financial assets	\$ 1,452,059	250,893	388,806	828,678	1,468,377
Financial liabilities					
Deposits (3)	\$ 30,012	—	14,401	15,601	30,002
Short-term borrowings	34,409	—	34,409	—	34,409
Long-term debt (4)	160,660	—	166,682	1,402	168,084
Total financial liabilities	\$ 225,081	—	215,492	17,003	232,495

(1) Amounts consist of financial instruments for which carrying value approximates fair value.

(2) Excludes lease financing with a carrying amount of \$14.7 billion and \$14.5 billion at December 31, 2022 and 2021, respectively.

(3) Excludes deposit liabilities with no defined or contractual maturity of \$1.3 trillion and \$1.5 trillion at December 31, 2022 and 2021, respectively.

(4) Excludes obligations under finance leases of \$22 million and \$26 million at December 31, 2022 and 2021, respectively.

Note 16: Securitizations and Variable Interest Entities

Involvement with Variable Interest Entities (VIEs)

In the normal course of business, we enter into various types of on- and off-balance sheet transactions with special purpose entities (SPEs), which are corporations, trusts, limited liability companies or partnerships that are established for a limited purpose. SPEs are often formed in connection with securitization transactions whereby financial assets are transferred to an SPE. SPEs formed in connection with securitization transactions are generally considered variable interest entities (VIEs). The VIE may alter the risk profile of the asset by entering into derivative transactions or obtaining credit support, and issues various forms of interests in those assets to investors. When we transfer financial assets from our consolidated balance sheet to a VIE in connection with a securitization, we typically receive cash and sometimes other interests in the VIE as proceeds for the assets we transfer. In certain transactions with VIEs, we may retain the right to service the transferred assets and repurchase the transferred assets if the outstanding balance of the assets falls below the level at which the cost to service the assets exceed the benefits. In addition, we may purchase the right to service loans transferred to a VIE by a third party.

In connection with our securitization or other VIE activities, we have various forms of ongoing involvement with VIEs, which may include:

- underwriting securities issued by VIEs and subsequently making markets in those securities;
- providing credit enhancement on securities issued by VIEs through the use of letters of credit or financial guarantees;
- entering into other derivative contracts with VIEs;
- holding senior or subordinated interests in VIEs;
- acting as servicer or investment manager for VIEs;
- providing administrative or trustee services to VIEs; and
- providing seller financing to VIEs.

Loan Sales and Securitization Activity

We periodically transfer consumer and commercial loans and other types of financial assets in securitization and whole loan sale transactions.

MORTGAGE LOANS SOLD TO U.S. GOVERNMENT SPONSORED ENTITIES AND TRANSACTIONS WITH GINNIE MAE In the normal course of business we sell originated and purchased residential and commercial mortgage loans to government-sponsored entities (GSEs). These loans are generally transferred into securitizations sponsored by the GSEs, which provide certain credit guarantees to investors and servicers. We also transfer mortgage loans into securitization pools pursuant to Government National Mortgage Association (GNMA) guidelines which are insured by the Federal Housing Administration (FHA) or guaranteed by the Department of Veterans Affairs (VA). Mortgage loans eligible for securitization with the GSEs or GNMA are considered conforming loans. The GSEs or GNMA design the structure of these securitizations, sponsor the involved VIEs, and have power over the activities most significant to the VIE.

We account for loans transferred in conforming mortgage loan securitization transactions as sales and do not consolidate the VIEs as we are not the primary beneficiary. In exchange for the transfer of loans, we typically receive securities issued by the VIEs which we sell to third parties for cash or hold for investment purposes as HTM or AFS securities. We also retain servicing rights on the transferred loans. As a servicer, we retain the option

to repurchase loans from GNMA loan securitization pools, which becomes exercisable when three scheduled loan payments remain unpaid by the borrower. During the years ended December 31, 2022, 2021 and 2020, we repurchased loans of \$2.2 billion, \$4.6 billion, and \$30.3 billion, respectively, which predominantly represented repurchases of government insured loans. We recorded assets and related liabilities of \$743 million and \$107 million at December 31, 2022 and 2021, respectively, where we did not exercise our option to repurchase eligible loans.

Upon transfers of loans, we also provide indemnification for losses incurred due to material breaches of contractual representations and warranties as well as other recourse arrangements. At December 31, 2022 and 2021, our liability for these repurchase and recourse arrangements was \$167 million and \$173 million, respectively, and the maximum exposure to loss was \$13.8 billion and \$13.3 billion at December 31, 2022 and 2021, respectively.

Substantially all residential servicing activity is related to assets transferred to GSE and GNMA securitizations. See Note 6 (Mortgage Banking Activities) for additional information about residential and commercial servicing rights, advances and servicing fees.

NONCONFORMING MORTGAGE LOAN SECURITIZATIONS In the normal course of business, we sell nonconforming residential and commercial mortgage loans in securitization transactions that we design and sponsor. Nonconforming mortgage loan securitizations do not involve a government credit guarantee, and accordingly, beneficial interest holders are subject to credit risk of the underlying assets held by the securitization VIE. We typically originate the transferred loans, account for the transfers as sales and do not consolidate the VIE. We also typically retain the right to service the loans and may hold other beneficial interests issued by the VIEs, such as debt securities held for investment purposes. Our servicing role related to nonconforming commercial mortgage loan securitizations is limited to primary or master servicer and the most significant decisions impacting the performance of the VIE are generally made by the special servicer or the controlling class security holder. For our residential nonconforming mortgage loan securitizations accounted for as sales, we either do not hold variable interests that we consider potentially significant or are not the primary servicer for a majority of the VIE assets.

WHOLE LOAN SALE TRANSACTIONS We also sell whole loans to VIEs where we have continuing involvement in the form of financing. We account for these transfers as sales, and do not consolidate the VIEs as we do not have the power to direct the most significant activities of the VIEs.

Table 16.1 presents information about transfers of assets during the periods presented for which we recorded the transfers as sales and have continuing involvement with the transferred assets. In connection with these transfers, we received proceeds and recorded servicing assets, securities, and loans. Each of these interests are initially measured at fair value. Servicing rights are classified as Level 3 measurements, and generally securities are classified as Level 2. Substantially all transfers were related to residential mortgage securitizations with the GSEs or GNMA and resulted in no gain or loss because the loans are measured at fair value on a recurring basis. Additionally, we may transfer certain government insured loans that we previously repurchased. These

loans are carried at the lower of cost or market, and we recognize gains on such transfers when the market value is greater than the carrying value of the loan when it is sold.

Table 16.1: Transfers with Continuing Involvement

(in millions)	Year ended December 31,					
	2022		2021		2020	
	Residential mortgages	Commercial mortgages	Residential mortgages	Commercial mortgages	Residential mortgages	Commercial mortgages
Assets sold	\$ 75,582	13,735	157,063	18,247	177,441	11,744
Proceeds from transfer (1)	75,634	13,963	157,852	18,563	177,478	12,034
Net gains (losses) on sale	52	228	789	316	37	290
Continuing involvement (2):						
Servicing rights recognized	\$ 966	128	1,636	166	1,808	161
Securities recognized (3)	2,062	189	23,188	173	31,567	112
Loans recognized	—	—	926	—	—	—

(1) Represents cash proceeds and the fair value of non-cash beneficial interests recognized at securitization settlement.

(2) Represents assets or liabilities recognized at securitization settlement date related to our continuing involvement in the transferred assets.

(3) Represents debt securities obtained at securitization settlement held for investment purposes that are classified as available-for-sale or held-to-maturity, which predominantly relate to agency securities. Excludes trading debt securities held temporarily for market-marking purposes, which are sold to third parties at or shortly after securitization settlement, of \$19.0 billion, \$40.7 billion, and \$37.6 billion, during the years ended December 31, 2022, 2021 and 2020, respectively.

In the normal course of business, we purchase certain non-agency securities at initial securitization or subsequently in the secondary market, which we hold for investment. We also provide seller financing in the form of loans. During the years ended December 31, 2022, 2021 and 2020, we received cash flows of \$456 million, \$686 million, and \$198 million, respectively, related to principal and interest payments on these securities and loans, which exclude cash flows related to trading activities and to the sale of our student loan portfolio.

Table 16.2 presents the key weighted-average assumptions we used to initially measure residential MSRs recognized during the periods presented.

Table 16.2: Residential MSRs – Assumptions at Securitization Date

	Year ended December 31,		
	2022	2021	2020
Prepayment rate (1)	12.4 %	13.7	15.4
Discount rate	8.0	5.9	6.5
Cost to service (\$ per loan)	\$ 110	91	96

(1) Includes a blend of prepayment speeds and expected defaults. Prepayment speeds are influenced by mortgage interest rates as well as our estimation of drivers of borrower behavior.

See Note 15 (Fair Values of Assets and Liabilities) and Note 6 (Mortgage Banking Activities) for additional information on key assumptions for residential MSRs.

SALE OF STUDENT LOAN PORTFOLIO In the year ended December 31, 2021, we sold \$9.5 billion of student loans, servicing-released. For the same period, we received \$9.9 billion in proceeds from the sales and recognized \$355 million of gains, which are included in other noninterest income on our consolidated statement of income. In connection with the sales, we provided \$3.8 billion of collateralized loan financing to a third-party sponsored VIE, and received cash flows of \$3.8 billion which fully repaid these loans. We do not consolidate the VIE as we do not have power over the significant activities of the entity.

RESECURITIZATION ACTIVITIES We enter into resecuritization transactions as part of our trading activities to accommodate the investment and risk management activities of our customers. In resecuritization transactions, we transfer trading debt securities to VIEs in exchange for new beneficial interests that are sold to third parties at or shortly after securitization settlement. This activity is performed for customers seeking a specific return or risk profile. Substantially all of our transactions involve the resecuritization of conforming mortgage-backed securities issued by the GSEs or guaranteed by GNMA. We do not consolidate the resecuritization VIEs as we share in the decision-making power with third parties and do not hold significant economic interests in the VIEs other than for market-making activities. We transferred \$17.0 billion, \$39.6 billion, and \$77.2 billion of securities to resecuritization VIEs during the years ended December 31, 2022, 2021 and 2020, respectively. These amounts are not included in Table 16.1. Related total VIE assets were \$112.0 billion and \$117.7 billion at December 31, 2022 and 2021, respectively. As of December 31, 2022 and 2021, we held \$793 million and \$817 million of securities, respectively, of which \$428 million and \$607 million related to resecuritized securities transacted during the years ended December 31, 2022 and 2021, respectively.

Note 16: Securitizations and Variable Interest Entities (continued)

Sold or Securitized Loans Serviced for Others

Table 16.3 presents information about loans that we sold or securitized in which we have ongoing involvement as servicer. Delinquent loans include loans 90 days or more past due and loans in bankruptcy, regardless of delinquency status. For loans sold or securitized where servicing is our only form of continuing involvement, we generally experience a loss only if we were required to repurchase a delinquent loan or foreclosed asset due

to a breach in representations and warranties associated with our loan sale or servicing contracts. Table 16.3 excludes mortgage loans in GSE or GNMA securitizations of \$704.5 billion and \$736.8 billion at December 31, 2022 and 2021, respectively. Delinquent loans and foreclosed assets related to GSEs and GNMA were \$4.6 billion and \$10.3 billion at December 31, 2022 and 2021, respectively.

Table 16.3: Sold or Securitized Loans Serviced for Others

(in millions)	Total loans		Delinquent loans and foreclosed assets (1)		Net charge-offs	
	Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021	Year ended December 31,	
Commercial	\$ 67,029	65,655	912	1,617	49	143
Residential	9,201	9,288	501	764	14	22
Total off-balance sheet sold or securitized loans	\$ 76,230	74,943	1,413	2,381	63	165

(1) Includes \$274 million and \$403 million of commercial foreclosed assets and \$25 million and \$29 million of residential foreclosed assets at December 31, 2022 and 2021, respectively.

Transactions with Unconsolidated VIEs

MORTGAGE LOAN SECURITIZATIONS Table 16.4 includes nonconforming mortgage loan securitizations where we originate and transfer the loans to the unconsolidated securitization VIEs that we sponsor. For additional information about these VIEs, see the “Loan Sales and Securitization Activity” section within this Note. Nonconforming mortgage loan securitizations also include commercial mortgage loan securitizations sponsored by third parties where we did not originate or transfer the loans but serve as master servicer and invest in securities that could be potentially significant to the VIE.

Conforming loan securitization and resecuritization transactions involving the GSEs and GNMA are excluded from Table 16.4 because we are not the sponsor or we do not have power over the activities most significant to the VIEs. Additionally, due to the nature of the guarantees provided by the GSEs and the FHA and VA, our credit risk associated with these VIEs is limited. For additional information about conforming mortgage loan securitizations and resecuritizations, see the “Loan Sales and Securitization Activity” and “Resecuritization Activities” sections within this Note.

COMMERCIAL REAL ESTATE LOANS We may transfer purchased industrial development bonds and GSE credit enhancements to VIEs in exchange for beneficial interests. We may also acquire such beneficial interests in transactions where we do not act as a transferor. We own all of the beneficial interests and may also service the underlying mortgages that serve as collateral to the bonds. The GSEs have the power to direct the servicing and workout activities of the VIE in the event of a default, therefore we do not have control over the key decisions of the VIEs.

OTHER VIE STRUCTURES We engage in various forms of structured finance arrangements with other VIEs, including asset-backed finance structures and other securitizations collateralized by asset classes other than mortgages. Collateral may include rental properties, asset-backed securities, student loans and mortgage loans. We may participate in structuring or marketing the arrangements as well as provide financing, service one or more of the underlying assets, or enter into derivatives with the VIEs. We may also receive fees for those services. We are not the primary beneficiary of these structures because we do not have power to direct the most significant activities of the VIEs.

Table 16.4 provides a summary of our exposure to the unconsolidated VIEs described above, which includes investments in securities, loans, guarantees, liquidity agreements, commitments and certain derivatives. We exclude certain transactions with unconsolidated VIEs when our continuing involvement is temporary or administrative in nature or insignificant in size.

In Table 16.4, “Total VIE assets” represents the remaining principal balance of assets held by unconsolidated VIEs using the most current information available. “Carrying value” is the amount in our consolidated balance sheet related to our involvement with the unconsolidated VIEs. “Maximum exposure to loss” is determined as the carrying value of our investment in the VIEs excluding the unconditional repurchase options that have not been exercised, plus the remaining undrawn liquidity and lending commitments, the notional amount of net written derivative contracts, and generally the notional amount of, or stressed loss estimate for, other commitments and guarantees.

Debt, guarantees and other commitments include amounts related to lending arrangements, liquidity agreements, and certain loss sharing obligations associated with loans originated, sold, and serviced under certain GSE programs.

“Maximum exposure to loss” represents estimated loss that would be incurred under severe, hypothetical circumstances, for which we believe the possibility is extremely remote, such as where the value of our interests and any associated collateral declines to zero, without any consideration of recovery or offset from any economic hedges. Accordingly, this disclosure is not an indication of expected loss.

Table 16.4: Unconsolidated VIEs

(in millions)	Total VIE assets	Carrying value – asset (liability)					
		Loans	Debt securities (1)	Equity securities	All other assets (2)	Debt and other liabilities	Net assets
December 31, 2022							
Nonconforming mortgage loan securitizations	\$ 154,464	—	2,420	—	617	(13)	3,024
Commercial real estate loans	5,627	5,611	—	—	16	—	5,627
Other	2,174	292	1	43	21	—	357
Total	\$ 162,265	5,903	2,421	43	654	(13)	9,008
Maximum exposure to loss							
		Loans	Debt securities (1)	Equity securities	All other assets (2)	Debt, guarantees, and other commitments	Total exposure
Nonconforming mortgage loan securitizations	\$	—	2,420	—	617	13	3,050
Commercial real estate loans		5,611	—	—	16	705	6,332
Other		292	1	43	21	228	585
Total	\$	5,903	2,421	43	654	946	9,967
Carrying value – asset (liability)							
(in millions)	Total VIE assets	Loans	Debt securities (1)	Equity securities	All other assets (2)	Debt and other liabilities	Net assets
December 31, 2021							
Nonconforming mortgage loan securitizations	\$ 146,482	—	2,620	—	694	—	3,314
Commercial real estate loans	5,489	5,481	—	—	8	—	5,489
Other	3,196	531	3	62	49	(1)	644
Total	\$ 155,167	6,012	2,623	62	751	(1)	9,447
Maximum exposure to loss							
		Loans	Debt securities (1)	Equity securities	All other assets (2)	Debt, guarantees, and other commitments	Total exposure
Nonconforming mortgage loan securitizations	\$	—	2,620	—	694	27	3,341
Commercial real estate loans		5,481	—	—	8	710	6,199
Other		531	3	62	49	229	874
Total	\$	6,012	2,623	62	751	966	10,414

(1) Includes \$172 million and \$352 million of securities classified as trading at December 31, 2022 and 2021, respectively.

(2) All other assets includes mortgage servicing rights, derivative assets, and other assets (predominantly servicing advances).

INVOLVEMENT WITH TAX CREDIT VIES In addition to the unconsolidated VIEs in Table 16.4, we may invest in or provide funding to affordable housing, renewable energy or similar projects that are designed to generate a return primarily through the realization of federal tax credits and other tax benefits. The projects are typically managed by third-party sponsors who have the power over the VIE's assets, therefore, we do not consolidate the VIEs. The carrying value of our equity investments in tax credit VIEs was \$18.7 billion and \$17.0 billion at December 31, 2022 and 2021, respectively. We also had loans to tax credit VIEs with a carrying value of \$2.0 billion and \$1.9 billion at December 31, 2022 and 2021, respectively.

Our maximum exposure to loss for tax credit VIEs at December 31, 2022 and 2021, was \$28.0 billion and \$24.7 billion, respectively. Our maximum exposure to loss included total unfunded equity and lending commitments of \$7.3 billion and \$5.6 billion at December 31, 2022 and 2021, respectively. See Note 17 (Guarantees and Other Commitments) for additional information about unfunded capital commitments.

Our affordable housing equity investments qualify for the low-income housing tax credit (LIHTC). For these investments we are periodically required to provide additional financial support during the investment period, or at the discretion of project sponsors. A liability is recognized for unfunded commitments that are both legally binding and probable of funding. These commitments are predominantly funded within three years of initial investment. Our liability for affordable housing equity investment unfunded commitments was \$4.8 billion at December 31, 2022, and \$4.9 billion at December 31, 2021, and was included in long-term debt on our consolidated balance sheet.

Table 16.5 summarizes the amortization of our LIHTC investments and the related tax credits and other tax benefits that are recognized in income tax expense/(benefit) on our consolidated statement of income.

Table 16.5: LIHTC Investments

(in millions)	Year ended December 31,		
	2022	2021	2020
Proportional amortization of investments	\$ 1,549	1,545	1,407
Tax credits and other tax benefits	(1,834)	(1,783)	(1,639)
Net expense/(benefit) recognized within income tax expense	\$ (285)	(238)	(232)

Note 16: Securitizations and Variable Interest Entities (continued)

Consolidated VIEs

We consolidate VIEs where we are the primary beneficiary. We are the primary beneficiary of the following structure types:

COMMERCIAL AND INDUSTRIAL LOANS AND LEASES We may securitize dealer floor plan loans in a revolving master trust entity. As servicer and residual interest holder, we control the key decisions of the trust and consolidate the entity. The total VIE assets held by the master trust represent a majority of the total VIE assets presented for this category in Table 16.6. In a separate transaction structure, we may provide the majority of debt and equity financing to an SPE that engages in lending and leasing to specific vendors and service the underlying collateral.

OTHER VIE STRUCTURES Other VIEs are predominantly related to municipal tender option bond (MTOB) transactions. MTOBs are vehicles to finance the purchase of municipal bonds through the issuance of short-term debt to investors. Our involvement with MTOBs includes serving as the residual interest holder, which provides control over the key decisions of the VIE, as well as the

remarketing agent or liquidity provider related to the debt issued to investors. We may also securitize nonconforming mortgage loans, in which our involvement includes servicer of the underlying assets and holder of subordinate or senior securities issued by the VIE. During second quarter 2022, we purchased the outstanding mortgage loans from the VIEs and extinguished the related debt associated with such securitizations.

Table 16.6 presents a summary of financial assets and liabilities of our consolidated VIEs. The carrying value represents assets and liabilities recorded on our consolidated balance sheet. "Total VIE assets" includes affiliate balances that are eliminated upon consolidation, and therefore in some instances will differ from the carrying value of assets.

On our consolidated balance sheet, we separately disclose (1) the consolidated assets of certain VIEs that can only be used to settle the liabilities of those VIEs, and (2) the consolidated liabilities of certain VIEs for which the VIE creditors do not have recourse to Wells Fargo.

Table 16.6: Transactions with Consolidated VIEs

(in millions)	Total VIE assets	Carrying value – asset (liability)				
		Loans	Debt securities	All other assets (1)	Long-term debt	All other liabilities (2)
December 31, 2022						
Commercial and industrial loans and leases	\$ 7,148	4,802	—	190	—	(129)
Other	72	—	71	1	—	(72)
Total consolidated VIEs	\$ 7,220	4,802	71	191	—	(201)
December 31, 2021						
Commercial and industrial loans and leases	\$ 7,013	4,099	—	231	—	(188)
Other	516	377	71	3	(149)	(71)
Total consolidated VIEs	\$ 7,529	4,476	71	234	(149)	(259)

(1) All other assets includes cash and due from banks, and other assets.

(2) All other liabilities includes short-term borrowings, and accrued expenses and other liabilities.

Other Transactions

In addition to the transactions included in the previous tables, we have used wholly-owned trust preferred security VIEs to issue debt securities or preferred equity exclusively to third-party investors. As the sole assets of the VIEs are receivables from us, we do not consolidate the VIEs even though we own all of the voting equity shares of the VIEs, have fully guaranteed the obligations of the VIEs, and may have the right to redeem the third-party securities under certain circumstances. On our consolidated balance sheet, we reported the debt securities issued to the VIEs as long-term junior subordinated debt. See Note 10 (Long-Term Debt) for additional information about the trust preferred securities.

Note 17: Guarantees and Other Commitments

Guarantees are contracts that contingently require us to make payments to a guaranteed party based on an event or a change in

an underlying asset, liability, rate or index. Table 17.1 shows carrying value and maximum exposure to loss on our guarantees.

Table 17.1: Guarantees – Carrying Value and Maximum Exposure to Loss

(in millions)	Carrying value of obligation	Expires in one year or less	Expires after one year through three years	Expires after three years through five years	Expires after five years	Maximum exposure to loss		
						Total	Non-investment grade	
December 31, 2022								
Standby letters of credit (1)	\$ 112	14,014	4,694	3,058	53	21,819	7,071	
Direct pay letters of credit (1)	13	1,593	2,734	465	5	4,797	1,283	
Loans and LHFS sold with recourse (2)	16	322	1,078	3,408	8,906	13,714	11,399	
Exchange and clearing house guarantees (3)	—	4,623	—	—	—	4,623	—	
Other guarantees and indemnifications (4)	—	548	1	10	201	760	515	
Total guarantees	\$ 141	21,100	8,507	6,941	9,165	45,713	20,268	
December 31, 2021								
Standby letters of credit (1)	\$ 119	13,816	5,260	1,572	460	21,108	6,939	
Direct pay letters of credit (1)	6	1,597	2,137	1,283	4	5,021	1,373	
Loans and LHFS sold with recourse (2)	20	71	943	3,610	8,650	13,274	11,268	
Exchange and clearing house guarantees (3)	—	—	—	—	8,100	8,100	—	
Other guarantees and indemnifications (4)	—	797	2	12	263	1,074	756	
Total guarantees	\$ 145	16,281	8,342	6,477	17,477	48,577	20,336	

(1) Standby and direct pay letters of credit are reported net of syndications and participations.

(2) Represents recourse provided, predominantly to the GSEs, on loans sold under various programs and arrangements.

(3) In 2022, we changed our presentation for maximum exposure to loss for these guarantees. As the agreements that include these guarantees automatically renew annually, we believe presentation of these amounts within the expires in one year or less category better aligns with the committed term.

(4) Includes indemnifications provided to certain third-party clearing agents. Estimated maximum exposure to loss was \$157 million and \$216 million with related collateral of \$1.3 billion and \$2.3 billion as of December 31, 2022 and 2021, respectively.

Maximum exposure to loss represents the estimated loss that would be incurred under an assumed hypothetical circumstance, despite what we believe is a remote possibility, where the value of our interests and any associated collateral declines to zero. Maximum exposure to loss estimates in Table 17.1 do not reflect economic hedges or collateral we could use to offset or recover losses we may incur under our guarantee agreements. Accordingly, these amounts are not an indication of expected loss. We believe the carrying value is more representative of our current exposure to loss than maximum exposure to loss. The carrying value represents the fair value of the guarantee, if any, and also includes an ACL for guarantees, if applicable. In determining the ACL for guarantees, we consider the credit risk of the related contingent obligation.

For our guarantees in Table 17.1, non-investment grade represents those guarantees on which we have a higher risk of performance under the terms of the guarantee, which is determined based on an external rating or an internal credit grade that is below investment grade.

STANDBY LETTERS OF CREDIT We issue standby letters of credit, which include performance and financial guarantees, for customers in connection with contracts between our customers and third parties. Standby letters of credit are conditional lending commitments where we are obligated to make payment to a third party on behalf of a customer if the customer fails to meet their contractual obligations. Total maximum exposure to loss includes the portion of multipurpose lending facilities for which we have issued standby letters of credit under the commitments.

DIRECT PAY LETTERS OF CREDIT We issue direct pay letters of credit to serve as credit enhancements for certain bond issuances. Beneficiaries (bond trustees) may draw upon these

instruments to make scheduled principal and interest payments, redeem all outstanding bonds because a default event has occurred, or for other reasons as permitted by the agreement.

WRITTEN OPTIONS We enter into written foreign currency options and over-the-counter written equity put options that are derivative contracts that have the characteristics of a guarantee. Written put options give the counterparty the right to sell to us an underlying instrument held by the counterparty at a specified price by a specified date. While these derivative transactions expose us to risk if the option is exercised, we manage this risk by entering into offsetting trades or by taking short positions in the underlying instrument. We offset market risk related to options written to customers with cash securities or other offsetting derivative transactions. Additionally, for certain of these contracts, we require the counterparty to pledge the underlying instrument as collateral for the transaction. Our ultimate obligation under written options is based on future market conditions and is only quantifiable at settlement. The fair value of written options represents our view of the probability that we will be required to perform under the contract. The fair value of these written options was a liability of \$15 million, and an asset of \$280 million at December 31, 2022 and 2021, respectively. The fair value may be an asset as a result of deferred premiums on certain option trades. The maximum exposure to loss represents the notional value of these derivative contracts. At December 31, 2022, the maximum exposure to loss was \$23.4 billion, with \$21.3 billion expiring in three years or less compared with \$17.2 billion and \$16.7 billion, respectively, at December 31, 2021. See Note 14 (Derivatives) for additional information regarding written derivative contracts.

Note 17: Guarantees and Other Commitments (continued)

LOANS AND LHFS SOLD WITH RECOURSE In certain sales and securitizations of loans, including mortgage loans, we provide recourse to the buyer whereby we are required to indemnify the buyer for any loss on the loan up to par value plus accrued interest. We provide recourse, predominantly to GSEs, on loans sold under various programs and arrangements. Substantially all of these programs and arrangements require that we share in the loans' credit exposure for their remaining life by providing recourse to the GSE, up to 33.33% of actual losses incurred on a pro-rata basis in the event of borrower default. Under the remaining recourse programs and arrangements, if certain events occur within a specified period of time from transfer date, we have to provide limited recourse to the buyer to indemnify them for losses incurred for the remaining life of the loans. The maximum exposure to loss reported in Table 17.1 represents the outstanding principal balance of the loans sold or securitized that are subject to recourse provisions or the maximum losses per the contractual agreements. However, we believe the likelihood of loss of the entire balance due to these recourse agreements is remote, and amounts paid can be recovered in whole or in part from the sale of collateral. We also provide representation and warranty guarantees on loans sold under the various recourse programs and arrangements. Our loss exposure relative to these guarantees is separately considered and provided for, as necessary, in determination of our liability for loan repurchases due to breaches of representation and warranties.

EXCHANGE AND CLEARING HOUSE GUARANTEES We are members of several securities and derivatives exchanges and clearing houses, both in the U.S. and in countries outside the U.S., that we use to clear our trades and those of our customers. It is common that all members in these organizations are required to collectively guarantee the performance of other members and of the organization. Our obligations under the guarantees are generally a pro-rata share based on either a fixed amount or a multiple of the guarantee fund we are required to maintain with these organizations. Some membership rules require members to assume a pro-rata share of losses resulting from another member's default or from non-member default losses after applying the guarantee fund. We have not recorded a liability for these arrangements as of the dates presented in Table 17.1 because we believe the likelihood of loss is remote.

OTHER GUARANTEES AND INDEMNIFICATIONS We have contingent performance arrangements related to various customer relationships and lease transactions. We are required to pay the counterparties to these agreements if third parties default on certain obligations.

Under certain factoring arrangements, we may be required to purchase trade receivables from third parties, if receivable debtors default on their payment obligations.

We use certain third-party clearing agents to clear and settle transactions on behalf of some of our institutional brokerage customers. We indemnify the clearing agents against loss that could occur for non-performance by our customers on transactions that are not sufficiently collateralized. Transactions subject to the indemnifications may include customer obligations related to the settlement of margin accounts and short positions, such as written call options and securities borrowing transactions.

We enter into other types of indemnification agreements in the ordinary course of business under which we agree to indemnify third parties against any damages, losses and expenses incurred in connection with legal and other proceedings arising from relationships or transactions with us. These

relationships or transactions include those arising from service as a director or officer of the Company, underwriting agreements relating to our securities, acquisition agreements and various other business transactions or arrangements. Because the extent of our obligations under these agreements depends entirely upon the occurrence of future events, we are unable to determine our potential future liability under these agreements. We do, however, record a liability for residential mortgage loans that we expect to repurchase pursuant to various representations and warranties.

MERCHANT PROCESSING SERVICES We provide debit and credit card transaction processing services through payment networks directly for merchants and as a sponsor for merchant processing servicers, including our joint venture with a third party that is accounted for as an equity method investment. In our role as the merchant acquiring bank, we have a potential obligation in connection with payment and delivery disputes between the merchant and the cardholder that are resolved in favor of the cardholder, referred to as a charge-back transaction. If we are unable to collect the amounts from the merchant, we incur a loss for the refund to the cardholder. We are secondarily obligated to make a refund for transactions involving sponsored merchant processing servicers. We generally have a low likelihood of loss in connection with our merchant processing services because most products and services are delivered when purchased and amounts are generally refunded when items are returned to the merchant. In addition, we may reduce our risk in connection with these transactions by withholding future payments and requiring cash or other collateral. We estimate our potential maximum exposure to be the total merchant transaction volume processed in the preceding four months, which is generally the lifecycle for a charge-back transaction. As of December 31, 2022, our potential maximum exposure was approximately \$759.6 billion, and related losses, including those from our joint venture entity, were insignificant.

GUARANTEES OF SUBSIDIARIES In the normal course of business, the Parent may provide counterparties with guarantees related to its subsidiaries' obligations. These obligations are included in the Company's consolidated balance sheet or are reflected as off-balance sheet commitments, and therefore, the Parent has not recognized a separate liability for these guarantees. The Parent fully and unconditionally guarantees the payment of principal, interest, and any other amounts that may be due on securities that its 100% owned finance subsidiary, Wells Fargo Finance LLC, may issue. These securities are not guaranteed by any other subsidiary of the Parent. The guaranteed liabilities were \$948 million and \$1.2 billion at December 31, 2022 and 2021, respectively. These guarantees rank on parity with all of the Parent's other unsecured and unsubordinated indebtedness. The assets of the Parent consist primarily of equity in its subsidiaries, and the Parent is a separate and distinct legal entity from its subsidiaries. As a result, the Parent's ability to address claims of holders of these debt securities against the Parent under the guarantee depends on the Parent's receipt of dividends, loan payments and other funds from its subsidiaries. If any of the Parent's subsidiaries becomes insolvent, the direct creditors of that subsidiary will have a prior claim on that subsidiary's assets. The rights of the Parent and the rights of the Parent's creditors will be subject to that prior claim unless the Parent is also a direct creditor of that subsidiary. For additional information regarding other restrictions on the Parent's ability to receive dividends, loan payments and other funds from its

subsidiaries, see Note 25 (Regulatory Capital Requirements and Other Restrictions).

OTHER COMMITMENTS To meet the financing needs of our customers, we may enter into commitments to purchase debt and equity securities to provide capital for their funding, liquidity or other future needs. As of December 31, 2022 and 2021, we had commitments to purchase debt securities of \$100 million and \$18 million and commitments to purchase equity securities of \$3.8 billion and \$2.4 billion, respectively.

As part of maintaining our memberships in certain clearing organizations, we are required to stand ready to provide liquidity to sustain market clearing activity in the event unforeseen events occur or are deemed likely to occur. Certain of these obligations are guarantees of other members' performance and accordingly are included in Table 17.1 in Other guarantees and indemnifications.

We have commitments to enter into resale and securities borrowing agreements as well as repurchase and securities lending agreements with certain counterparties, including central clearing organizations. The amount of our unfunded contractual commitments for resale and securities borrowing agreements was \$19.9 billion and \$11.0 billion as of December 31, 2022 and 2021, respectively. The amount of our unfunded contractual commitments for repurchase and securities lending agreements was \$1.6 billion and \$1.3 billion as of December 31, 2022 and 2021, respectively.

Given the nature of these commitments, they are excluded from Table 5.4 (Unfunded Credit Commitments) in Note 5 (Loans and Related Allowance for Credit Losses).

Note 18: Pledged Assets and Collateral

Pledged Assets

Table 18.1 provides the carrying amount of on-balance sheet pledged assets as well as the fair value of other pledged collateral not recognized on our consolidated balance sheet, which we have received from third parties, have the right to repledge and have repledged. These amounts include assets pledged in transactions accounted for as secured borrowings, which are presented parenthetically on our consolidated balance sheet.

TRADING RELATED ACTIVITY Our trading businesses may pledge debt and equity securities in connection with securities sold under agreements to repurchase (repurchase agreements) and securities lending arrangements. The collateral that we pledge related to our trading activities may include our own collateral as well as collateral that we have received from third parties and have the right to repledge. All of the collateral we pledge related to trading activity is eligible to be repledged or sold by the secured party.

NON-TRADING RELATED ACTIVITY As part of our liquidity management strategy, we may pledge loans, debt securities, and other financial assets to secure trust and public deposits, borrowings and letters of credit from Federal Home Loan Banks (FHLBs) and the Board of Governors of the Federal Reserve System (FRB) and for other purposes as required or permitted by law or insurance statutory requirements. Substantially all of the non-trading activity pledged collateral is not eligible to be repledged or sold by the secured party.

VIE RELATED We pledge assets in connection with various types of transactions entered into with VIEs. These pledged assets can only be used to settle the liabilities of those entities.

We also have loans recorded on our consolidated balance sheet which represent certain delinquent loans that are eligible for repurchase from GNMA loan securitizations. See Note 16 (Securitizations and Variable Interest Entities) for additional information on consolidated VIE assets.

Table 18.1: Pledged Assets

(in millions)	Dec 31, 2022	Dec 31, 2021
Related to trading activities:		
Off-balance sheet repledged third-party owned debt and equity securities	\$ 38,191	31,087
Trading debt securities and other	28,284	14,216
Equity securities	1,477	984
Total pledged assets related to trading activities	67,952	46,287
Related to non-trading activities:		
Loans	344,000	288,698
Debt securities:		
Available-for-sale	50,538	65,198
Held-to-maturity	17,477	13,843
Equity securities	141	1,600
Total pledged assets related to non-trading activities	412,156	369,339
Related to VIEs:		
Consolidated VIE assets	5,064	4,781
Loans eligible for repurchase from GNMA securitizations	749	109
Total pledged assets related to VIEs	5,813	4,890
Total pledged assets	\$ 485,921	420,516

Securities and Other Collateralized Financing Activities

We enter into resale and repurchase agreements and securities borrowing and lending agreements (collectively, "securities financing activities") typically to finance trading positions (including securities and derivatives), acquire securities to cover short trading positions, accommodate customers' financing needs, and settle other securities obligations. These activities are conducted through our broker-dealer subsidiaries and, to a lesser extent, through other bank entities. Our securities financing activities primarily involve high-quality, liquid securities such as U.S. Treasury securities and government agency securities and, to a lesser extent, less liquid securities, including equity securities, corporate bonds and asset-backed securities. We account for these transactions as collateralized financings in which we typically receive or pledge securities as collateral. We believe these financing transactions generally do not have material credit risk given the collateral provided and the related monitoring processes. We also enter into resale agreements

involving collateral other than securities, such as loans, as part of our commercial lending business activities.

OFFSETTING OF SECURITIES AND OTHER COLLATERALIZED FINANCING ACTIVITIES Table 18.2 presents resale and repurchase agreements subject to master repurchase agreements (MRA) and securities borrowing and lending agreements subject to master securities lending agreements (MSLA). Where legally enforceable, these master netting arrangements give the ability, in the event of default by the counterparty, to liquidate securities held as collateral and to offset receivables and payables with the same counterparty. Collateralized financings, and those with a single counterparty, are presented net on our consolidated balance sheet, provided certain criteria are met that permit balance sheet netting. The majority of transactions subject to these agreements do not meet those criteria and thus are not eligible for balance sheet netting.

Collateral we pledged consists of non-cash instruments, such as securities or loans, and is not netted on our consolidated

balance sheet against the related liability. Collateral we received includes securities or loans and is not recognized on our consolidated balance sheet. Collateral pledged or received may be increased or decreased over time to maintain certain contractual thresholds, as the assets underlying each arrangement fluctuate in value. Generally, these agreements require collateral to exceed the asset or liability recognized on the balance sheet. The following table includes the amount of collateral pledged or received related to exposures subject to

enforceable MRAs or MSLAs. While these agreements are typically over-collateralized, U.S. GAAP requires disclosure in this table to limit the reported amount of such collateral to the amount of the related recognized asset or liability for each counterparty.

In addition to the amounts included in Table 18.2, we also have balance sheet netting related to derivatives that is disclosed in Note 14 (Derivatives).

Table 18.2: Offsetting – Securities and Other Collateralized Financing Activities

(in millions)	Dec 31, 2022	Dec 31, 2021
Assets:		
Resale and securities borrowing agreements		
Gross amounts recognized	\$ 114,729	103,140
Gross amounts offset in consolidated balance sheet (1)	(24,464)	(14,074)
Net amounts in consolidated balance sheet (2)	90,265	89,066
Collateral not recognized in consolidated balance sheet (3)	(89,592)	(88,330)
Net amount (4)	\$ 673	736
Liabilities:		
Repurchase and securities lending agreements		
Gross amounts recognized	\$ 55,054	35,043
Gross amounts offset in consolidated balance sheet (1)	(24,464)	(14,074)
Net amounts in consolidated balance sheet (5)	30,590	20,969
Collateral pledged but not netted in consolidated balance sheet (6)	(30,383)	(20,820)
Net amount (4)	\$ 207	149

- (1) Represents recognized amount of resale and repurchase agreements with counterparties subject to enforceable MRAs that have been offset in our consolidated balance sheet.
- (2) Includes \$68.0 billion and \$66.2 billion classified on our consolidated balance sheet in federal funds sold and securities purchased under resale agreements at December 31, 2022 and 2021, respectively. Also includes \$22.3 billion and \$22.9 billion classified on our consolidated balance sheet in loans at December 31, 2022 and 2021, respectively.
- (3) Represents the fair value of collateral we have received under enforceable MRAs or MSLAs, limited in the table above to the amount of the recognized asset due from each counterparty. At December 31, 2022 and 2021, we have received total collateral with a fair value of \$136.6 billion and \$124.4 billion, respectively, all of which we have the right to sell or repledge. These amounts include securities we have sold or repledged to others with a fair value of \$59.1 billion and \$28.8 billion at December 31, 2022 and 2021, respectively.
- (4) Represents the amount of our exposure (assets) or obligation (liabilities) that is not collateralized and/or is not subject to an enforceable MRA or MSLA.
- (5) Amount is classified in short-term borrowings on our consolidated balance sheet.
- (6) Represents the fair value of collateral we have pledged, related to enforceable MRAs or MSLAs, limited in the table above to the amount of the recognized liability owed to each counterparty. At December 31, 2022 and 2021, we have pledged total collateral with a fair value of \$56.3 billion and \$35.9 billion, respectively, substantially all of which may be sold or repledged by the counterparty.

REPURCHASE AND SECURITIES LENDING AGREEMENTS Securities sold under repurchase agreements and securities lending arrangements are effectively short-term collateralized borrowings. In these transactions, we receive cash in exchange for transferring securities as collateral and recognize an obligation to reacquire the securities for cash at the transaction's maturity. These types of transactions create risks, including (1) the counterparty may fail to return the securities at maturity, (2) the fair value of the securities transferred may decline below the amount of our obligation to reacquire the securities, and therefore create an obligation for us to pledge additional amounts, and (3) the counterparty may accelerate the maturity on demand, requiring us to reacquire the security prior to contractual maturity. We attempt to mitigate these risks in various ways. Our collateral primarily consists of highly liquid securities. In addition, we underwrite and monitor the financial strength of our counterparties, monitor the fair value of collateral pledged relative to contractually required repurchase amounts, and monitor that our collateral is properly returned through the clearing and settlement process in advance of our cash repayment. Table 18.3 provides the gross amounts recognized on our consolidated balance sheet (before the effects of offsetting) of our liabilities for repurchase and securities lending agreements disaggregated by underlying collateral type.

Note 18: Pledged Assets and Collateral (continued)

Table 18.3: Gross Obligations by Underlying Collateral Type

(in millions)	Dec 31, 2022	Dec 31, 2021
Repurchase agreements:		
Securities of U.S. Treasury and federal agencies	\$ 27,857	14,956
Securities of U.S. States and political subdivisions	83	1
Federal agency mortgage-backed securities	8,386	3,432
Non-agency mortgage-backed securities	682	809
Corporate debt securities	6,541	8,899
Asset-backed securities	1,529	358
Equity securities	711	919
Other	300	409
Total repurchases	46,089	29,783
Securities lending arrangements:		
Securities of U.S. Treasury and federal agencies	278	33
Federal agency mortgage-backed securities	58	17
Corporate debt securities	206	80
Equity securities (1)	8,356	5,050
Other	67	80
Total securities lending	8,965	5,260
Total repurchases and securities lending	\$ 55,054	35,043

(1) Equity securities are generally exchange traded and represent collateral received from third parties that has been repledged. We received the collateral through either margin lending agreements or contemporaneous securities borrowing transactions with other counterparties.

Table 18.4 provides the contractual maturities of our gross obligations under repurchase and securities lending agreements.

Table 18.4: Contractual Maturities of Gross Obligations

(in millions)	Overnight/ continuous	Up to 30 days	30-90 days	>90 days	Total gross obligation
December 31, 2022					
Repurchase agreements	\$ 36,251	734	2,884	6,220	46,089
Securities lending arrangements	8,965	—	—	—	8,965
Total repurchases and securities lending (1)	\$ 45,216	734	2,884	6,220	55,054
December 31, 2021					
Repurchase agreements	\$ 16,452	3,570	4,276	5,485	29,783
Securities lending arrangements	4,810	—	—	450	5,260
Total repurchases and securities lending (1)	\$ 21,262	3,570	4,276	5,935	35,043

(1) Securities lending is executed under agreements that allow either party to terminate the transaction without notice, while repurchase agreements have a term structure to them that technically matures at a point in time. The overnight/continuous repurchase agreements require election of both parties to roll the trade rather than the election to terminate the arrangement as in securities lending.

Note 19: Operating Segments

Our management reporting is organized into four reportable operating segments: Consumer Banking and Lending; Commercial Banking; Corporate and Investment Banking; and Wealth and Investment Management. All other business activities that are not included in the reportable operating segments have been included in Corporate. We define our reportable operating segments by type of product and customer segment, and their results are based on our management reporting process. The management reporting process measures the performance of the reportable operating segments based on the Company's management structure, and the results are regularly reviewed with our Chief Executive Officer and relevant senior management. The management reporting process is based on U.S. GAAP and includes specific adjustments, such as funds transfer pricing for asset/liability management, shared revenue and expenses, and taxable-equivalent adjustments to consistently reflect income from taxable and tax-exempt sources, which allows management to assess performance consistently across the operating segments.

Consumer Banking and Lending offers diversified financial products and services for consumers and small businesses with annual sales generally up to \$10 million. These financial products and services include checking and savings accounts, credit and debit cards as well as home, auto, personal, and small business lending.

Commercial Banking provides financial solutions to private, family owned and certain public companies. Products and services include banking and credit products across multiple industry sectors and municipalities, secured lending and lease products, and treasury management.

Corporate and Investment Banking delivers a suite of capital markets, banking, and financial products and services to corporate, commercial real estate, government and institutional clients globally. Products and services include corporate banking, investment banking, treasury management, commercial real estate lending and servicing, equity and fixed income solutions as well as sales, trading, and research capabilities.

Wealth and Investment Management provides personalized wealth management, brokerage, financial planning, lending, private banking, trust and fiduciary products and services to affluent, high-net worth and ultra-high-net worth clients. We operate through financial advisors in our brokerage and wealth offices, consumer bank branches, independent offices, and digitally through WellsTrade® and Intuitive Investor®.

Corporate includes corporate treasury and enterprise functions, net of allocations (including funds transfer pricing, capital, liquidity and certain expenses), in support of the reportable operating segments as well as our investment portfolio and affiliated venture capital and private equity businesses. In addition, Corporate includes all restructuring charges related to our efficiency initiatives. See Note 20 (Revenue and Expenses) for additional information on restructuring charges. Corporate also includes certain lines of business that management has determined are no longer consistent with the long-term strategic goals of the Company as well as results for previously divested businesses.

Basis of Presentation

FUNDS TRANSFER PRICING Corporate treasury manages a funds transfer pricing methodology that considers interest rate risk, liquidity risk, and other product characteristics. Operating segments pay a funding charge for their assets and receive a funding credit for their deposits, both of which are included in net interest income. The net impact of the funding charges or credits is recognized in corporate treasury.

REVENUE AND EXPENSE SHARING When lines of business jointly serve customers, the line of business that is responsible for providing the product or service recognizes revenue or expense with a referral fee paid or an allocation of cost to the other line of business based on established internal revenue-sharing agreements.

When a line of business uses a service provided by another line of business or enterprise function (included in Corporate), expense is generally allocated based on the cost and use of the service provided.

TAXABLE-EQUIVALENT ADJUSTMENTS Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

Note 19: Operating Segments (continued)

Table 19.1 presents our results by operating segment.

Table 19.1: Operating Segments

(in millions)	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Reconciling Items (1)	Consolidated Company
Year ended December 31, 2022							
Net interest income (2)	\$ 27,044	7,289	8,733	3,927	(1,607)	(436)	44,950
Noninterest income	8,766	3,631	6,509	10,895	609	(1,575)	28,835
Total revenue	35,810	10,920	15,242	14,822	(998)	(2,011)	73,785
Provision for credit losses	2,276	(534)	(185)	(25)	2	—	1,534
Noninterest expense	26,277	6,058	7,560	11,613	5,774	—	57,282
Income (loss) before income tax expense (benefit)	7,257	5,396	7,867	3,234	(6,774)	(2,011)	14,969
Income tax expense (benefit)	1,816	1,366	1,989	812	(1,885)	(2,011)	2,087
Net income (loss) before noncontrolling interests	5,441	4,030	5,878	2,422	(4,889)	—	12,882
Less: Net income (loss) from noncontrolling interests	—	12	—	—	(312)	—	(300)
Net income (loss)	\$ 5,441	4,018	5,878	2,422	(4,577)	—	13,182
Year ended December 31, 2021							
Net interest income (2)	\$ 22,807	4,960	7,410	2,570	(1,541)	(427)	35,779
Noninterest income	12,070	3,589	6,429	11,776	10,036	(1,187)	42,713
Total revenue	34,877	8,549	13,839	14,346	8,495	(1,614)	78,492
Provision for credit losses	(1,178)	(1,500)	(1,439)	(95)	57	—	(4,155)
Noninterest expense	24,648	5,862	7,200	11,734	4,387	—	53,831
Income (loss) before income tax expense (benefit)	11,407	4,187	8,078	2,707	4,051	(1,614)	28,816
Income tax expense (benefit)	2,852	1,045	2,019	680	596	(1,614)	5,578
Net income before noncontrolling interests	8,555	3,142	6,059	2,027	3,455	—	23,238
Less: Net income (loss) from noncontrolling interests	—	8	(3)	—	1,685	—	1,690
Net income	\$ 8,555	3,134	6,062	2,027	1,770	—	21,548
Year ended December 31, 2020							
Net interest income (2)	\$ 23,378	6,134	7,509	2,988	441	(494)	39,956
Noninterest income	10,638	3,041	6,419	10,225	4,916	(931)	34,308
Total revenue	34,016	9,175	13,928	13,213	5,357	(1,425)	74,264
Provision for credit losses	5,662	3,744	4,946	249	(472)	—	14,129
Noninterest expense	26,976	6,323	7,703	10,912	5,716	—	57,630
Income (loss) before income tax expense (benefit)	1,378	(892)	1,279	2,052	113	(1,425)	2,505
Income tax expense (benefit)	302	(208)	330	514	(670)	(1,425)	(1,157)
Net income (loss) before noncontrolling interests	1,076	(684)	949	1,538	783	—	3,662
Less: Net income (loss) from noncontrolling interests	—	5	(1)	—	281	—	285
Net income (loss)	\$ 1,076	(689)	950	1,538	502	—	3,377
Year ended December 31, 2022							
Loans (average)	\$ 332,433	206,032	296,984	85,228	9,143	—	929,820
Assets (average)	379,213	227,935	557,396	91,748	638,017	—	1,894,309
Deposits (average)	883,130	186,079	161,720	164,883	28,457	—	1,424,269
Loans (period-end)	340,529	223,529	298,377	84,273	9,163	—	955,871
Assets (period-end)	387,710	250,198	550,177	91,717	601,214	—	1,881,016
Deposits (period-end)	859,695	173,942	157,217	138,760	54,371	—	1,383,985
Year ended December 31, 2021							
Loans (average)	\$ 333,885	181,237	257,036	82,364	9,766	—	864,288
Assets (average)	388,208	198,761	523,344	88,503	743,089	—	1,941,905
Deposits (average)	834,739	197,269	189,176	176,562	40,066	—	1,437,812
Loans (period-end)	326,574	190,348	284,374	84,101	9,997	—	895,394
Assets (period-end)	378,620	210,810	546,549	90,754	721,335	—	1,948,068
Deposits (period-end)	883,674	205,428	168,609	192,548	32,220	—	1,482,479

- (1) Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.
- (2) Net interest income is interest earned on assets minus the interest paid on liabilities to fund those assets. Segment interest earned includes actual interest income on segment assets as well as a funding credit for their deposits. Segment interest paid on liabilities includes actual interest expense on segment liabilities as well as a funding charge for their assets.

Note 20: Revenue and Expenses

Revenue

Our revenue includes net interest income on financial instruments and noninterest income. Table 20.1 presents our

revenue by operating segment. For additional description of our operating segments, including additional financial information and the underlying management accounting process, see Note 19 (Operating Segments).

Table 20.1: Revenue by Operating Segment

(in millions)	Consumer Banking and Lending	Commercial Banking	Corporate and Investment Banking	Wealth and Investment Management	Corporate	Reconciling Items (1)	Consolidated Company
Year ended December 31, 2022							
Net interest income (2)	\$ 27,044	7,289	8,733	3,927	(1,607)	(436)	44,950
Noninterest income:							
Deposit-related fees	3,093	1,131	1,068	24	—	—	5,316
Lending-related fees (2)	129	491	769	8	—	—	1,397
Investment advisory and other asset-based fees (3)	—	42	107	8,847	8	—	9,004
Commissions and brokerage services fees	—	—	311	1,931	—	—	2,242
Investment banking fees	(3)	60	1,492	—	(110)	—	1,439
Card fees:							
Card interchange and network revenue (4)	3,590	224	60	4	—	—	3,878
Other card fees (2)	477	—	—	—	—	—	477
Total card fees	4,067	224	60	4	—	—	4,355
Mortgage banking (2)	1,100	—	296	(12)	(1)	—	1,383
Net gains (losses) from trading activities (2)	—	(6)	1,886	58	178	—	2,116
Net gains from debt securities (2)	—	5	—	—	146	—	151
Net gains (losses) from equity securities (2)	(5)	64	(5)	(2)	(858)	—	(806)
Lease income (2)	—	710	15	—	544	—	1,269
Other (2)	385	910	510	37	702	(1,575)	969
Total noninterest income	8,766	3,631	6,509	10,895	609	(1,575)	28,835
Total revenue	\$ 35,810	10,920	15,242	14,822	(998)	(2,011)	73,785
Year ended December 31, 2021							
Net interest income (2)	\$ 22,807	4,960	7,410	2,570	(1,541)	(427)	35,779
Noninterest income:							
Deposit-related fees	3,045	1,285	1,112	28	5	—	5,475
Lending-related fees (2)	145	532	761	8	(1)	—	1,445
Investment advisory and other asset-based fees (3)	—	10	52	9,574	1,375	—	11,011
Commissions and brokerage services fees	—	—	290	2,010	(1)	—	2,299
Investment banking fees	(11)	53	2,405	1	(94)	—	2,354
Card fees:							
Card interchange and network revenue (4)	3,426	196	45	4	—	—	3,671
Other card fees (2)	504	—	—	—	—	—	504
Total card fees	3,930	196	45	4	—	—	4,175
Mortgage banking (2)	4,490	—	480	(12)	(2)	—	4,956
Net gains (losses) from trading activities (2)	—	—	272	21	(9)	—	284
Net gains from debt securities (2)	—	44	—	—	509	—	553
Net gains (losses) from equity securities (2)	(2)	132	289	79	5,929	—	6,427
Lease income (2)	—	682	33	—	281	—	996
Other (2)	473	655	690	63	2,044	(1,187)	2,738
Total noninterest income	12,070	3,589	6,429	11,776	10,036	(1,187)	42,713
Total revenue	\$ 34,877	8,549	13,839	14,346	8,495	(1,614)	78,492
Year ended December 31, 2020							
Net interest income (2)	\$ 23,378	6,134	7,509	2,988	441	(494)	39,956
Noninterest income:							
Deposit-related fees	2,904	1,219	1,062	27	9	—	5,221
Lending-related fees (2)	158	531	684	9	(1)	—	1,381
Investment advisory and other asset-based fees (3)	—	32	95	8,085	1,651	—	9,863
Commissions and brokerage services fees	—	—	315	2,078	(9)	—	2,384
Investment banking fees	(8)	76	1,952	14	(169)	—	1,865
Card fees:							
Card interchange and network revenue (4)	2,805	170	51	3	1	—	3,030
Other card fees (2)	513	—	—	—	1	—	514
Total card fees	3,318	170	51	3	2	—	3,544
Mortgage banking (2)	3,224	—	282	(13)	—	—	3,493
Net gains (losses) from trading activities (2)	1	(4)	1,190	25	(40)	—	1,172
Net gains from debt securities (2)	6	—	—	—	867	—	873
Net gains (losses) from equity securities (2)	10	(147)	212	(101)	691	—	665
Lease income (2)	—	646	20	—	579	—	1,245
Other (2)	1,025	518	556	98	1,336	(931)	2,602
Total noninterest income	10,638	3,041	6,419	10,225	4,916	(931)	34,308
Total revenue	\$ 34,016	9,175	13,928	13,213	5,357	(1,425)	74,264

(1) Taxable-equivalent adjustments related to tax-exempt income on certain loans and debt securities are included in net interest income, while taxable-equivalent adjustments related to income tax credits for low-income housing and renewable energy investments are included in noninterest income, in each case with corresponding impacts to income tax expense (benefit). Adjustments are included in Corporate, Commercial Banking, and Corporate and Investment Banking and are eliminated to reconcile to the Company's consolidated financial results.

(2) These revenue types are related to financial assets and liabilities, including loans, leases, securities and derivatives, with additional details included in other footnotes to our financial statements.

(3) We earned trailing commissions of \$989 million, \$1.2 billion, and \$1.1 billion for the years ended December 31, 2022, 2021 and 2020, respectively.

(4) The cost of credit card rewards and rebates of \$2.2 billion, \$1.6 billion and \$1.3 billion for the years ended December 31, 2022, 2021 and 2020, respectively, are presented net against the related revenue.

Note 20: Revenue and Expenses (continued)

We provide services to customers which have related performance obligations that we complete to recognize revenue. Our revenue is generally recognized either immediately upon the completion of our service or over time as we perform services. Any services performed over time generally require that we render services each period and therefore we measure our progress in completing these services based upon the passage of time.

DEPOSIT-RELATED FEES are earned in connection with depository accounts for commercial and consumer customers and include fees for account charges, overdraft services, cash network fees, wire transfer and other remittance fees, and safe deposit box fees. Account charges include fees for periodic account maintenance activities and event-driven services such as stop payment fees. Our obligation for event-driven services is satisfied at the time of the event when the service is delivered, while our obligation for maintenance services is satisfied over the course of each month. Our obligation for overdraft services is satisfied at the time of the overdraft. Cash network fees are earned for processing ATM transactions, and our obligation is completed upon settlement of ATM transactions. Wire transfer and other remittance fees consist of fees earned for providing funds transfer services and issuing cashier's checks and money orders. Our obligation is satisfied at the time of the performance of the funds transfer service or upon issuance of the cashier's check or money order. Safe deposit box fees are generally recognized over time as we provide the services.

INVESTMENT ADVISORY AND OTHER ASSET-BASED FEES are earned for providing brokerage advisory, asset management and trust services. These fees were impacted by the sales of our Corporate Trust Services business and Wells Fargo Asset Management, which closed in fourth quarter 2021.

Fees from advisory account relationships with brokerage customers are charged based on a percentage of the market value of the client's assets. Services and obligations related to providing investment advice, active management of client assets, and assistance with selecting and engaging a third-party advisory manager are generally satisfied over a month or quarter. Trailing commissions are earned for selling shares to investors and our obligation is satisfied at the time shares are sold. However, these fees are received and recognized over time during the period the customer owns the shares and we remain the broker of record. The amount of trailing commissions is variable based on the length of time the customer holds the shares and on changes in the value of the underlying assets.

Asset management services include managing and administering assets, including mutual funds, and institutional separate accounts. Fees for these services are generally determined based on a tiered scale relative to the market value of assets under management (AUM). In addition to AUM, we have client assets under administration (AUA) that earn various administrative fees which are generally based on the extent of the services provided to administer the account. Services with AUM and AUA-based fees are generally satisfied over time.

Trust services include acting as a trustee or agent for personal trust and agency assets. Obligations for trust services are generally satisfied over time; however, obligations for activities that are transitional in nature are satisfied at the time of the transaction.

COMMISSIONS AND BROKERAGE SERVICES FEES are earned for providing brokerage services.

Commissions from transactional accounts with brokerage customers are earned for executing transactions at the client's direction. Our obligation is generally satisfied upon the execution of the transaction and the fees are based on the size and number of transactions executed.

Fees earned from other brokerage services include securities clearance, omnibus and networking fees received from mutual fund companies in return for providing record keeping and other administrative services, and annual account maintenance fees charged to customers. Our obligation is satisfied at the time we provide the service which is generally at the time of the transaction.

INVESTMENT BANKING FEES are earned for underwriting debt and equity securities, arranging syndicated loan transactions and performing other advisory services. Our obligation for these services is generally satisfied at closing of the transaction.

CARD FEES include credit and debit card interchange and network revenue and various card-related fees. Credit and debit card interchange and network revenue is earned on credit and debit card transactions conducted through payment networks such as Visa, MasterCard, and American Express. Our obligation is satisfied concurrently with the delivery of services on a daily basis. Other card fees represent late fees, cash advance fees, balance transfer fees, and annual fees.

Expenses

OPERATING LOSSES We may incur expenses related to various loss contingencies, such as customer remediation activities. We establish an accrued liability when a loss event is probable and the amount of the loss can be reasonably estimated. Our operating losses of \$7.0 billion, \$1.6 billion, and \$3.5 billion in 2022, 2021 and 2020, respectively, included expenses primarily related to a variety of historical matters, including litigation, regulatory, and customer remediation matters. See Note 13 (Legal Actions) for additional information on accruals for legal actions.

RESTRUCTURING CHARGES The Company began pursuing various initiatives to reduce expenses and create a more efficient and streamlined organization in third quarter 2020. Actions from these initiatives included (i) reorganizing and simplifying business processes and structures to improve internal operations and the customer experience, (ii) reducing headcount, (iii) optimizing third-party spending, including for our technology infrastructure, and (iv) rationalizing our branch and administrative locations, which may include consolidations and closures. Substantially all of the restructuring charges were personnel expenses related to severance costs associated with headcount reductions with payments made over time in accordance with our severance plan as well as payments for other employee benefit costs such as incentive compensation.

Restructuring charges are recorded as a component of noninterest expense on our consolidated statement of income. Changes in estimates represent adjustments to noninterest expense based on refinements to previously estimated amounts, which may reflect trends such as higher voluntary employee attrition as well as changes in business activities.

Table 20.2 provides details on our restructuring charges.

Table 20.2: Accruals for Restructuring Charges

(in millions)	Year ended December 31,		
	2022	2021	2020
Balance, beginning of period	\$ 565	1,214	—
Restructuring charges	—	726	1,595
Changes in estimates	5	(650)	(96)
Payments and utilization	(404)	(725)	(285)
Balance, end of period	\$ 166	565	1,214

OTHER EXPENSES Regulatory Charges and Assessments expense, which is included in other noninterest expense, was \$860 million, \$842 million, and \$834 million in 2022, 2021 and 2020, respectively, and primarily consisted of Federal Deposit Insurance Corporation (FDIC) deposit assessment expense.

Note 21: Employee Benefits

Pension and Postretirement Plans

We sponsor a frozen noncontributory qualified defined benefit retirement plan, the Wells Fargo & Company Cash Balance Plan (Cash Balance Plan), which covers eligible employees of Wells Fargo. The Cash Balance Plan was frozen on July 1, 2009, and no new benefits accrue after that date.

Prior to July 1, 2009, eligible employees' Cash Balance Plan accounts were allocated a compensation credit based on a percentage of their certified compensation; the freeze discontinued the allocation of compensation credits after June 30, 2009. Investment credits continue to be allocated to participants' accounts based on their accumulated balances.

We did not make a contribution to our Cash Balance Plan in 2022. We do not expect that we will be required to make a contribution to the Cash Balance Plan in 2023. For the nonqualified pension plans and postretirement benefit plans, there is no minimum required contribution beyond the amount needed to fund benefit payments.

We recognize settlement losses for our Cash Balance Plan based on an assessment of whether lump sum benefit payments will, in aggregate for the year, exceed the sum of its annual service and interest cost (threshold). Settlement losses of \$221 million and \$133 million were recognized during 2022 and 2021, respectively, representing the pro rata portion of the net loss in accumulated other comprehensive income (AOCI) based on the percentage reduction in the Cash Balance Plan's projected

benefit obligation attributable to 2022 and 2021 lump sum payments (included in the "Benefits paid" line in Table 21.1).

Additionally, we sponsored the Wells Fargo Canada Corporation Pension Plan to employees in Canada (Canada Pension Plan), a defined benefit retirement plan. In June 2022, an annuity contract was entered into that effected a full settlement of this Canada Pension Plan, resulting in a plan settlement of \$29 million and a settlement loss of \$5 million.

Our nonqualified defined benefit plans are unfunded and provide supplemental defined benefit pension benefits to certain eligible employees. The benefits under these plans were frozen in prior years.

Other benefits include health care and life insurance benefits provided to certain retired employees. We reserve the right to amend, modify or terminate any of these benefits at any time.

The information set forth in the following tables is based on current actuarial reports using the measurement date of December 31 for our pension and postretirement benefit plans.

Table 21.1 presents the changes in the benefit obligation and the fair value of plan assets, the funded status, and the amounts recognized on our consolidated balance sheet. Changes in the benefit obligation for the qualified plans were driven by the amounts of benefits paid and changes in the actuarial loss (gain) amounts, which are driven by changes in the discount rates at December 31, 2022 and 2021, respectively.

Table 21.1: Changes in Benefit Obligation and Fair Value of Plan Assets

(in millions)	December 31, 2022			December 31, 2021		
	Pension benefits		Other benefits	Pension benefits		Other benefits
	Qualified	Non-qualified		Qualified	Non-qualified	
Change in benefit obligation:						
Benefit obligation at beginning of period	\$ 11,032	501	439	11,956	556	491
Service cost	19	—	—	17	—	—
Interest cost	348	12	9	296	12	11
Plan participants' contributions	—	—	39	—	—	40
Actuarial loss (gain)	(2,256)	(76)	(103)	(414)	(18)	(34)
Benefits paid	(966)	(46)	(75)	(818)	(49)	(69)
Settlements, Curtailments, and Amendments	(29)	—	—	(2)	—	—
Foreign exchange impact	(7)	—	—	(3)	—	—
Benefit obligation at end of period	8,141	391	309	11,032	501	439
Change in plan assets:						
Fair value of plan assets at beginning of period	11,581	—	550	12,061	—	549
Actual return on plan assets	(1,998)	—	(45)	324	—	25
Employer contribution	16	46	7	15	49	5
Plan participants' contributions	—	—	39	—	—	40
Benefits paid	(966)	(46)	(75)	(818)	(49)	(69)
Settlement	(29)	—	—	—	—	—
Foreign exchange impact	(4)	—	—	(1)	—	—
Fair value of plan assets at end of period	8,600	—	476	11,581	—	550
Funded status at end of period	\$ 459	(391)	167	549	(501)	111
Amounts recognized on the consolidated balance sheet at end of period:						
Assets	\$ 522	—	181	620	—	133
Liabilities	(63)	(391)	(14)	(71)	(501)	(22)

Table 21.2 provides information for pension and postretirement plans with benefit obligations in excess of plan assets.

Table 21.2: Plans with Benefit Obligations in Excess of Plan Assets

(in millions)	December 31, 2022		December 31, 2021	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Projected benefit obligation	\$ 539	N/A	664	N/A
Accumulated benefit obligation	509	14	631	22
Fair value of plan assets	86	—	91	—

Table 21.3 presents the components of net periodic benefit cost and OCI. Service cost is reported in personnel expense and all other components of net periodic benefit cost are reported in

other noninterest expense on our consolidated statement of income.

Table 21.3: Net Periodic Benefit Cost and Other Comprehensive Income

(in millions)	December 31, 2022			December 31, 2021			December 31, 2020		
	Pension benefits			Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Service cost	\$ 19	—	—	17	—	—	14	—	—
Interest cost	348	12	9	296	12	11	325	16	16
Expected return on plan assets	(511)	—	(22)	(598)	—	(19)	(603)	—	(21)
Amortization of net actuarial loss (gain)	136	11	(22)	140	15	(20)	157	14	(19)
Amortization of prior service cost (credit)	1	—	(10)	—	—	(10)	—	—	(10)
Settlement loss	226	1	—	134	2	—	121	3	—
Net periodic benefit cost	219	24	(45)	(11)	29	(38)	14	33	(34)
Other changes in plan assets and benefit obligations recognized in other comprehensive income:									
Net actuarial loss (gain)	253	(76)	(36)	(142)	(18)	(40)	517	25	(32)
Amortization of net actuarial gain (loss)	(136)	(11)	22	(140)	(15)	20	(157)	(14)	19
Amortization of prior service credit (cost)	(1)	—	10	—	—	10	—	—	10
Settlement (loss)	(226)	(1)	—	(134)	(2)	—	(121)	(3)	—
Total recognized in other comprehensive income	(110)	(88)	(4)	(416)	(35)	(10)	239	8	(3)
Total recognized in net periodic benefit cost and other comprehensive income	\$ 109	(64)	(49)	(427)	(6)	(48)	253	41	(37)

Table 21.4 provides the amounts recognized in AOCI (pre-tax).

Table 21.4: Benefits Recognized in Accumulated OCI

(in millions)	December 31, 2022			December 31, 2021		
	Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Net actuarial loss (gain)	\$ 2,940	71	(404)	3,049	159	(390)
Net prior service cost (credit)	—	—	(116)	1	—	(126)
Total	\$ 2,940	71	(520)	3,050	159	(516)

Note 21: Employee Benefits (continued)

Plan Assumptions

For additional information on our pension accounting assumptions, see Note 1 (Summary of Significant Accounting Policies). Table 21.5 presents the weighted-average assumptions used to estimate the projected benefit obligation.

Table 21.5: Weighted-Average Assumptions Used to Estimate Projected Benefit Obligation

	December 31, 2022			December 31, 2021		
	Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Discount rate	5.18 %	5.08	5.12	2.85	2.60	2.71
Interest crediting rate	4.10	3.58	N/A	2.69	1.25	N/A

Table 21.6 presents the weighted-average assumptions used to determine the net periodic benefit cost, including the impact of interim re-measurements as applicable.

Table 21.6: Weighted-Average Assumptions Used to Determine Net Periodic Benefit Cost

	December 31, 2022			December 31, 2021			December 31, 2020		
	Pension benefits			Pension benefits			Pension benefits		
	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits	Qualified	Non-qualified	Other benefits
Discount rate	3.93 %	2.34	2.11	2.63	2.32	2.31	2.95	3.12	3.10
Interest crediting rate	3.37	1.51	N/A	2.68	1.08	N/A	2.68	1.46	N/A
Expected return on plan assets	5.35	N/A	4.00	5.17	N/A	3.50	5.74	N/A	4.00

To account for postretirement health care plans, we used health care cost trend rates to recognize the effect of expected changes in future health care costs due to medical inflation, utilization changes, new technology, regulatory requirements and Medicare cost shifting. In determining the end of year benefit obligation, we assumed an average annual increase of approximately 13.90% for health care costs in 2023. This rate is assumed to trend down 0.60%-1.50% per year until the trend rate reaches an ultimate rate of 4.50% in 2032. The 2022 periodic benefit cost was determined using an initial annual trend rate of 7.50%. This rate was assumed to decrease 0.30%-0.40% per year until the trend rate reached an ultimate rate of 4.50% in 2030.

Investment Strategy and Asset Allocation

We seek to achieve the expected long-term rate of return with a prudent level of risk, given the benefit obligations of the pension plans and their funded status. Our overall investment strategy is designed to provide our Cash Balance Plan with a moderate amount of long-term growth opportunities while ensuring that risk is mitigated through diversification across numerous asset classes and various investment strategies, coupled with an investment strategy for the fixed income assets that is generally designed to approximate the interest rate sensitivity of the Cash Balance Plan's benefit obligations. The Cash Balance Plan currently has a target asset allocation mix comprised of the following ranges: 75%-85% fixed income, 10%-20% equities, and 0%-10% in real estate, private equity and other investments. The Employee Benefit Review Committee (EBRC), which includes several members of senior management, formally reviews the investment risk and performance of our Cash Balance Plan on a quarterly basis. Annual Plan liability analysis and periodic asset/liability evaluations are also conducted.

Other benefit plan assets include (1) assets held in a 401(h) trust, which are invested with a target mix of 50%-60% equities and 40%-50% fixed income, and (2) assets held in the Retiree Medical Plan Voluntary Employees' Beneficiary Association (VEBA) trust, which are predominantly invested in fixed income securities and cash. Members of the EBRC formally review the investment risk and performance of these assets on a quarterly basis.

Projected Benefit Payments

Future benefits that we expect to pay under the pension and other benefit plans are presented in Table 21.7.

Table 21.7: Projected Benefit Payments

(in millions)	Pension benefits		
	Qualified	Non-qualified	Other benefits
Period ended December 31,			
2023	\$ 690	43	31
2024	654	42	30
2025	646	40	30
2026	643	38	28
2027	640	37	27
2028-2032	3,052	155	119

Fair Value of Plan Assets

Table 21.8 presents the classification of the fair value of the pension plan and other benefit plan assets in the fair value hierarchy. See Note 15 (Fair Values of Assets and Liabilities) for a description of the fair value hierarchy.

Table 21.8: Pension and Other Benefit Plan Assets

(in millions)	Carrying value at year end							
	Pension plan assets				Other benefits plan assets			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
December 31, 2022								
Cash and cash equivalents	\$ 214	4	—	218	41	135	—	176
Long duration fixed income (1)	1,398	4,919	—	6,317	—	—	—	—
Intermediate (core) fixed income	—	227	—	227	—	154	—	154
High-yield fixed income	—	91	—	91	—	—	—	—
International fixed income	—	84	—	84	—	—	—	—
Domestic large-cap stocks	232	35	—	267	—	60	—	60
Domestic mid-cap stocks	74	40	—	114	—	16	—	16
Domestic small-cap stocks	64	4	—	68	—	9	—	9
Global stocks	—	152	—	152	—	—	—	—
International stocks	105	141	—	246	9	19	—	28
Emerging market stocks	29	57	—	86	—	—	—	—
Real estate	46	—	—	46	—	—	—	—
Hedge funds/absolute return	—	42	—	42	—	—	—	—
Other	90	23	10	123	6	—	24	30
Plan investments – excluding investments at NAV	\$ 2,252	5,819	10	8,081	56	393	24	473
Investments at NAV (2)				415				—
Net receivables				104				3
Total plan assets				\$ 8,600				476
December 31, 2021								
Cash and cash equivalents	\$ 2	242	—	244	40	143	—	183
Long duration fixed income (1)	1,562	6,827	1	8,390	—	—	—	—
Intermediate (core) fixed income	—	429	—	429	—	193	—	193
High-yield fixed income	—	134	—	134	—	—	—	—
International fixed income	—	83	—	83	—	—	—	—
Domestic large-cap stocks	378	57	—	435	11	67	—	78
Domestic mid-cap stocks	104	60	—	164	—	20	—	20
Domestic small-cap stocks	94	6	—	100	—	11	—	11
Global stocks	—	204	—	204	—	—	—	—
International stocks	139	216	—	355	11	24	—	35
Emerging market stocks	30	96	—	126	—	—	—	—
Real estate	87	28	1	116	—	—	—	—
Hedge funds/absolute return	—	54	—	54	—	—	—	—
Other	111	45	9	165	6	—	24	30
Plan investments – excluding investments at NAV	\$ 2,507	8,481	11	10,999	68	458	24	550
Investments at NAV (2)				533				—
Net receivables				49				—
Total plan assets				\$ 11,581				550

(1) This category includes a diversified mix of assets, which are being managed in accordance with a duration target of approximately 9 years and 11 years for December 31, 2022 and 2021, respectively, and an emphasis on corporate credit bonds combined with investments in U.S. Treasury securities and other U.S. agency and non-agency bonds.

(2) Consists of certain investments that are measured at fair value using NAV per share (or its equivalent) as a practical expedient and are excluded from the fair value hierarchy.

Note 21: Employee Benefits (continued)

Table 21.9 presents the changes in Level 3 pension plan and other benefit plan assets measured at fair value.

Table 21.9: Fair Value Level 3 Pension and Other Benefit Plan Assets

(in millions)	Balance beginning of year	Gains (losses) (1)	Purchases, sales and settlements (net)	Transfer into/ (out of) Level 3	Balance end of year
Period ended December 31, 2022					
Pension plan assets	\$ 11	—	—	(1)	10
Other benefits plan assets	24	—	—	—	24
Period ended December 31, 2021					
Pension plan assets	\$ 12	6	(8)	1	11
Other benefits plan assets	24	—	—	—	24

(1) Represents unrealized and realized gains (losses).

VALUATION METHODOLOGIES Following is a description of the valuation methodologies used for assets measured at fair value.

Cash and Cash Equivalents – includes investments in collective investment funds valued at fair value based upon the fund's NAV per share held at year-end. The NAV per share is quoted on a private market that is not active; however, the NAV per share is based on underlying investments traded on an active market. This group of assets also includes investments in registered investment companies valued at the NAV per share held at year-end and in interest-bearing bank accounts.

Long Duration, Intermediate (Core), High-Yield, and International Fixed Income – includes investments traded on the secondary markets; prices are measured by using quoted market prices for similar securities, pricing models, and discounted cash flow analyses using significant inputs observable in the market where available, or a combination of multiple valuation techniques. This group of assets also includes highly liquid government securities such as U.S. Treasuries, limited partnerships valued at the NAV, registered investment companies, and collective investment funds described above.

Domestic, Global, International and Emerging Market Stocks – investments in exchange-traded equity securities are valued at quoted market values. This group of assets also includes investments in registered investment companies and collective investment funds described above.

Real Estate – includes investments in exchange-traded equity securities, registered investment companies, and collective investment funds described above.

Hedge Funds / Absolute Return – includes investments in collective investment funds as described above.

Other – insurance contracts that are stated at cash surrender value. This group of assets also includes investments in registered investment companies and collective investment funds described above.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. While we believe our valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Defined Contribution Retirement Plans

We sponsor a qualified defined contribution retirement plan, the Wells Fargo & Company 401(k) Plan (401(k) Plan). Under the 401(k) Plan, after 1 month of service, eligible employees may contribute up to 50% of their certified compensation, subject to statutory limits.

Effective January 2021, we implemented the following changes to the 401(k) Plan employer contributions: (1) with some exceptions, employees with one year of service must be employed in a benefit-eligible position on December 15; (2) added a new non-discretionary base contribution of 1% of certified compensation for employees with annual compensation of less than \$75,000; (3) replaced the discretionary profit sharing contribution with a discretionary contribution for eligible employees with annual compensation of less than \$150,000; and (4) revised the matching contribution vesting and timing. Eligible employees are 100% vested in their base and discretionary contributions after three years of service. A three-year service vesting requirement for matching contributions applies to employees hired after December 31, 2020. Base and matching contributions are made annually at year-end, and the discretionary contribution, if awarded, is made no later than the due date for the Company's federal income tax return (including extensions) for the plan year. Additionally, we added installment payment options to the existing lump sum and partial lump sum distribution options and added optional advisory services.

Prior to January 2021, eligible employees who completed one year of service were eligible to receive the matching contributions quarterly, which are dollar for dollar up to 6% of certified compensation, and a discretionary profit sharing contribution up to 4% of certified compensation, if awarded, paid following the plan year. Matching contributions were 100% vested, and the discretionary profit sharing contributions required three years of vesting service (no change).

Total defined contribution retirement plan expenses were \$1.0 billion in 2022, and \$1.1 billion in both 2021 and 2020.

Note 22: Income Taxes

Table 22.1 presents the components of income tax expense (benefit).

Table 22.1: Income Tax Expense (Benefit)

(in millions)	Year ended December 31,		
	2022	2021	2020
Current:			
U.S. Federal	\$ 888	5,850	2,231
U.S. State and local	(45)	849	(310)
Non-U.S.	169	171	211
Total current	1,012	6,870	2,132
Deferred:			
U.S. Federal	636	(1,446)	(2,440)
U.S. State and local	448	200	(789)
Non-U.S.	(9)	(46)	(60)
Total deferred	1,075	(1,292)	(3,289)
Total	\$ 2,087	5,578	(1,157)

Table 22.2 reconciles the statutory federal income tax rate to the effective income tax rate. Our effective tax rate is calculated by dividing income tax expense (benefit) by income

before income tax expense (benefit) less the net income from noncontrolling interests.

Table 22.2: Effective Income Tax Expense (Benefit) and Rate

(in millions)	December 31,					
	2022		2021		2020	
	Amount	Rate	Amount	Rate	Amount	Rate
Statutory federal income tax expense and rate	\$ 3,206	21.0 %	\$ 5,697	21.0 %	\$ 466	21.0 %
Change in tax rate resulting from:						
State and local taxes on income, net of federal income tax benefit	556	3.7	1,046	3.9	65	2.8
Tax-exempt interest	(321)	(2.1)	(316)	(1.2)	(358)	(16.1)
Tax credits, net of amortization (1)	(1,264)	(8.3)	(1,001)	(3.7)	(626)	(28.2)
Nondeductible expenses (2)	560	3.7	368	1.4	199	9.0
Changes in prior year unrecognized tax benefits, inclusive of interest	(503)	(3.3)	(122)	(0.4)	(938)	(42.2)
Other	(147)	(1.0)	(94)	(0.4)	35	1.6
Effective income tax expense (benefit) and rate	\$ 2,087	13.7 %	\$ 5,578	20.6 %	\$ (1,157)	(52.1)%

(1) Includes LIHTC proportional amortization expense, net of tax of \$1.2 billion at both 2022 and 2021, and \$1.1 billion in 2020.

(2) Includes amounts related to nondeductible litigation and regulatory accruals in all years presented as well as a nondeductible goodwill impairment in 2021.

Note 22: Income Taxes (continued)

The tax effects of our temporary differences that gave rise to significant portions of our deferred tax assets and liabilities are presented in Table 22.3.

Table 22.3: Net Deferred Taxes

(in millions)	Dec 31, 2022	Dec 31, 2021
Deferred tax assets		
Net operating loss and tax credit carry forwards	\$ 5,513	382
Allowance for credit losses	3,393	3,415
Net unrealized losses on debt securities	3,193	—
Deferred compensation and employee benefits	2,799	3,124
Accrued expenses	1,843	1,300
Lease liabilities	1,132	1,142
Other	2,044	1,048
Total deferred tax assets	19,917	10,411
Deferred tax assets valuation allowance	(232)	(267)
Deferred tax liabilities		
Mark to market, net	(11,081)	(3,631)
Leasing and fixed assets	(2,792)	(3,523)
Mortgage servicing rights	(2,153)	(2,414)
Basis difference in investments	(1,095)	(496)
Right-of-use assets	(935)	(948)
Intangible assets	(753)	(559)
Net unrealized gains from debt securities	—	(278)
Other	(1,006)	(1,082)
Total deferred tax liabilities	(19,815)	(12,931)
Net deferred tax liability (1)	\$ (130)	(2,787)

(1) The net deferred tax liability is included in accrued expenses and other liabilities.

Deferred taxes related to net unrealized gains (losses) on debt securities, net unrealized gains (losses) on derivatives, foreign currency translation, and employee benefit plan adjustments are recorded in accumulated OCI. See Note 24 (Other Comprehensive Income) for additional information.

We have determined that a valuation allowance is required for 2022 in the amount of \$232 million, attributable to deferred tax assets in various state and non-U.S. jurisdictions where we believe it is more likely than not that these deferred tax assets will not be realized due to lack of sources of taxable income, limitations on carry back of losses or credits and the inability to implement tax planning to realize these deferred tax assets. We have concluded that it is more likely than not that the remaining deferred tax assets will be realized based on our history of earnings, sources of taxable income in carry back periods, and our ability to implement tax planning strategies.

Table 22.4 presents the components of the deferred tax assets related to net operating loss (NOL) and tax credit carry forwards at December 31, 2022.

Table 22.4: Deferred Tax Assets Related To Net Operating Loss and Tax Credit Carry Forwards (1)

(in millions)	Dec 31, 2022
U.S. Federal NOLs	\$ 3,244
U.S. Federal tax credits	1,221
U.S. State NOLs and credits	974
Non-U.S. NOLs and credits	74
Total net operating loss and tax credit carryforwards	\$ 5,513

(1) U.S. Federal NOLs have no expiration date. The remaining balances, if not utilized, mostly expire in varying amounts through December 31, 2042.

We do not intend to distribute earnings of certain non-U.S. subsidiaries in a taxable manner, and therefore intend to limit distributions to non-U.S. earnings previously taxed in the U.S., that would qualify for the 100% dividends received deduction, and that would not result in any significant state or non-U.S. taxes. All other undistributed non-U.S. earnings will continue to be permanently reinvested outside the U.S. and the related tax liability on these earnings is insignificant.

Table 22.5 presents the change in unrecognized tax benefits.

Table 22.5: Change in Unrecognized Tax Benefits

(in millions)	Year ended December 31,	
	2022	2021
Balance, beginning of period	\$ 5,218	4,826
Additions:		
For tax positions related to the current year	695	441
For tax positions related to prior years	358	259
Reductions:		
For tax positions related to prior years	(514)	(124)
Lapse of statute of limitations	(13)	(164)
Settlements with tax authorities	(307)	(20)
Balance, end of period	\$ 5,437	5,218

Of the \$5.4 billion of unrecognized tax benefits at December 31, 2022, approximately \$3.6 billion would, if recognized, affect the effective tax rate. The remaining \$1.8 billion of unrecognized tax benefits relates to income tax positions on temporary differences.

We account for interest and penalties related to income tax liabilities as a component of income tax expense. As of December 31, 2022 and 2021, we have accrued expenses of approximately \$436 million and \$914 million, respectively, for interest and penalties. In 2022 and 2021, we recognized income tax benefit, net of tax, of \$385 million and \$33 million, respectively, related to interest and penalties.

We are subject to U.S. federal income tax as well as income tax in numerous state and non-U.S. jurisdictions. We are routinely examined by tax authorities in these various jurisdictions. With few exceptions, Wells Fargo and its subsidiaries are not subject to federal, state, local and non-U.S. income tax examinations for taxable years prior to 2011. It is reasonably possible that one or more of the examinations or appeals may be resolved within the next twelve months resulting in a decrease of up to \$1.4 billion of our gross unrecognized tax benefits. Table 22.6 summarizes our major tax jurisdiction examination status as of December 31, 2022.

Table 22.6: Tax Examination Status

Jurisdiction	Tax Year(s)	Status
United States	2011-2014	Administrative appeals
United States	2015-2020	Field examination
California	2015-2016	Field examination
New York	2015-2019	Field examination

Note 23: Earnings and Dividends Per Common Share

Table 23.1 shows earnings per common share and diluted earnings per common share and reconciles the numerator and denominator of both earnings per common share calculations.

See the Consolidated Statement of Changes in Equity and Note 12 (Common Stock and Stock Plans) for information about stock and options activity.

Table 23.1: Earnings Per Common Share Calculations

(in millions, except per share amounts)	Year ended December 31,		
	2022	2021	2020
Wells Fargo net income	\$ 13,182	21,548	3,377
Less: Preferred stock dividends and other (1)	1,115	1,292	1,591
Wells Fargo net income applicable to common stock (numerator)	\$ 12,067	20,256	1,786
Earnings per common share			
Average common shares outstanding (denominator)	3,805.2	4,061.9	4,118.0
Per share	\$ 3.17	4.99	0.43
Diluted earnings per common share			
Average common shares outstanding	3,805.2	4,061.9	4,118.0
Add: Restricted share rights (2)	31.8	34.3	16.2
Diluted average common shares outstanding (denominator)	3,837.0	4,096.2	4,134.2
Per share	\$ 3.14	4.95	0.43

- (1) The balance for the years ended December 31, 2022, 2021 and 2020 includes \$0 million, \$87 million and \$301 million, respectively, from the elimination of discounts or issuance costs associated with redemptions of preferred stock.
- (2) Calculated using the treasury stock method.

Table 23.2 presents the outstanding securities that were anti-dilutive and therefore not included in the calculation of diluted earnings per common share.

Table 23.2: Outstanding Anti-Dilutive Securities

(in millions)	Weighted-average shares		
	Year ended December 31,		
	2022	2021	2020
Convertible Preferred Stock, Series L (1)	25.3	25.3	25.3
Restricted share rights (2)	0.2	0.2	1.1

- (1) Calculated using the if-converted method.
- (2) Calculated using the treasury stock method.

Table 23.3 presents dividends declared per common share.

Table 23.3: Dividends Declared Per Common Share

	Year ended December 31,		
	2022	2021	2020
Per common share	\$ 1.10	0.60	1.22

Note 24: Other Comprehensive Income

Table 24.1 provides the components of other comprehensive income (OCI), reclassifications to net income by income statement line item, and the related tax effects.

Table 24.1: Summary of Other Comprehensive Income

(in millions)	Twelve months ended December 31,								
	2022			2021			2020		
	Before tax	Tax effect	Net of tax	Before tax	Tax effect	Net of tax	Before tax	Tax effect	Net of tax
Debt securities:									
Net unrealized gains (losses) arising during the period	\$ (14,320)	3,526	(10,794)	(3,070)	759	(2,311)	2,317	(570)	1,747
Reclassification of net (gains) losses to net income	391	(97)	294	(82)	18	(64)	(341)	81	(260)
Net change	(13,929)	3,429	(10,500)	(3,152)	777	(2,375)	1,976	(489)	1,487
Derivatives and hedging activities:									
Fair Value Hedges:									
Change in fair value of excluded components on fair value hedges (1)	87	(21)	66	81	(20)	61	(31)	7	(24)
Cash Flow Hedges:									
Net unrealized gains (losses) arising during the period on cash flow hedges	(1,541)	381	(1,160)	(12)	3	(9)	10	(2)	8
Reclassification of net (gains) losses to net income	6	(2)	4	143	(36)	107	219	(54)	165
Net change	(1,448)	358	(1,090)	212	(53)	159	198	(49)	149
Defined benefit plans adjustments:									
Net actuarial and prior service gains (losses) arising during the period	(141)	35	(106)	200	(50)	150	(510)	126	(384)
Reclassification of amounts to noninterest expense (2)	343	(83)	260	261	(62)	199	266	(63)	203
Net change	202	(48)	154	461	(112)	349	(244)	63	(181)
Debit valuation adjustments (DVA):									
Net unrealized gains (losses) arising during the period	(8)	2	(6)	—	—	—	—	—	—
Reclassification of net (gains) losses to net income	—	—	—	—	—	—	—	—	—
Net change	(8)	2	(6)	—	—	—	—	—	—
Foreign currency translation adjustments:									
Net unrealized gains (losses) arising during the period	(232)	(3)	(235)	(30)	1	(29)	52	(2)	50
Reclassification of net (gains) losses to net income	—	—	—	(1)	—	(1)	—	—	—
Net change	(232)	(3)	(235)	(31)	1	(30)	52	(2)	50
Other comprehensive income (loss)	\$ (15,415)	3,738	(11,677)	(2,510)	613	(1,897)	1,982	(477)	1,505
Less: Other comprehensive income (loss) from noncontrolling interests, net of tax			2			(1)			—
Wells Fargo other comprehensive income (loss), net of tax			\$ (11,679)			(1,896)			1,505

(1) Represents changes in fair value of cross-currency swaps attributable to changes in cross-currency basis spreads, which are excluded from the assessment of hedge effectiveness and recorded in other comprehensive income.

(2) These items are included in the computation of net periodic benefit cost (see Note 21 (Employee Benefits) for additional information).

Table 24.2 provides the accumulated OCI (AOCI) balance activity on an after-tax basis.

Table 24.2: Accumulated OCI Balances

(in millions)	Debt securities	Fair value hedges (1)	Cash flow hedges (2)	Defined benefit plans adjustments	Debit valuation adjustments (DVA)	Foreign currency translation adjustments	Accumulated other comprehensive income (loss)
Balance, December 31, 2019	\$ 1,552	(180)	(298)	(2,223)	—	(162)	(1,311)
Net unrealized gains (losses) arising during the period	1,747	(24)	8	(384)	—	50	1,397
Amounts reclassified from accumulated other comprehensive income	(260)	—	165	203	—	—	108
Net change	1,487	(24)	173	(181)	—	50	1,505
Less: Other comprehensive income from noncontrolling interests	—	—	—	—	—	—	—
Balance, December 31, 2020	3,039	(204)	(125)	(2,404)	—	(112)	194
Net unrealized gains (losses) arising during the period	(2,311)	61	(9)	150	—	(29)	(2,138)
Amounts reclassified from accumulated other comprehensive income	(64)	—	107	199	—	(1)	241
Net change	(2,375)	61	98	349	—	(30)	(1,897)
Less: Other comprehensive loss from noncontrolling interests	(1)	—	—	—	—	—	(1)
Balance, December 31, 2021 (3)	665	(143)	(27)	(2,055)	—	(142)	(1,702)
Net unrealized gains (losses) arising during the period	(10,794)	66	(1,160)	(106)	(6)	(235)	(12,235)
Amounts reclassified from accumulated other comprehensive income	294	—	4	260	—	—	558
Net change	(10,500)	66	(1,156)	154	(6)	(235)	(11,677)
Less: Other comprehensive income from noncontrolling interests	—	—	—	—	—	2	2
Balance, December 31, 2022 (3)	\$ (9,835)	(77)	(1,183)	(1,901)	(6)	(379)	(13,381)

(1) Substantially all of the amounts for fair value hedges are foreign exchange contracts.

(2) Substantially all of the amounts for cash flow hedges are interest rate contracts.

(3) AOCI related to debt securities includes after-tax unrealized gains or losses associated with the transfer of securities from AFS to HTM of \$3.7 billion and \$680 million at December 31, 2022 and 2021, respectively. These amounts are subsequently amortized from AOCI into earnings over the same period as the related unamortized premiums and discounts.

Loan and Dividend Restrictions

Federal law restricts the amount and the terms of both credit and non-credit transactions between a bank and its nonbank affiliates. These covered transactions may not exceed 10% of the bank's capital and surplus (which for this purpose represents Tier 1 and Tier 2 capital, as calculated under the risk-based capital rules, plus the balance of the ACL excluded from Tier 2 capital) with any single nonbank affiliate and 20% of the bank's capital and surplus with all its nonbank affiliates.

Covered transactions that are extensions of credit may require collateral to be pledged to provide added security to the bank.

Additionally, federal laws and regulations limit the dividends that a national bank may pay. Dividends that may be paid by a national bank without the express approval of the OCC are generally limited to that bank's retained net income for the preceding two calendar years plus net income up to the date of any dividend declaration in the current calendar year. Retained net income, as defined by the OCC, consists of net income less dividends declared during the period. Our national bank subsidiaries could have declared additional dividends of \$6.4 billion at December 31, 2022, without obtaining prior regulatory approval. We have elected to retain higher capital at our national bank subsidiaries to meet internal capital targets, which are set above regulatory requirements.

Our nonbank subsidiaries are also limited by certain federal and state statutory provisions and regulations covering the amount of dividends that may be paid in any given year. In addition, under a Support Agreement dated June 28, 2017, as amended and restated on June 26, 2019, among Wells Fargo & Company, the parent holding company (Parent), WFC Holdings, LLC, an intermediate holding company and subsidiary of the Parent (IHC), the Bank, Wells Fargo Securities, LLC, Wells Fargo Clearing Services, LLC, and certain other subsidiaries of the Parent designated from time to time as material entities for resolution planning purposes or identified from time to time as related support entities in our resolution plan, the IHC may be restricted from making dividend payments to the Parent if certain liquidity and/or capital metrics fall below defined triggers or if the Parent's board of directors authorizes it to file a case under the U.S. Bankruptcy Code. Based on retained earnings at December 31, 2022, our nonbank subsidiaries could have declared additional dividends of \$26.9 billion at December 31, 2022, without obtaining prior regulatory approval.

Cash Restrictions

Cash and cash equivalents may be restricted as to usage or withdrawal. Table 25.2 provides a summary of restrictions on cash and cash equivalents.

Table 25.2: Nature of Restrictions on Cash and Cash Equivalents

(in millions)	Dec 31, 2022	Dec 31, 2021
Reserve balance for non-U.S. central banks	\$ 238	382
Segregated for benefit of brokerage customers under federal and other brokerage regulations	898	830

Note 26: Parent-Only Financial Statements

The following tables present Parent-only condensed financial statements.

Table 26.1: Parent-Only Statement of Income

(in millions)	Year ended December 31,		
	2022	2021	2020
Income			
Dividends from subsidiaries (1)	\$ 14,590	17,895	42,578
Interest income from subsidiaries	4,759	3,934	1,295
Other interest income	2	1	3
Other income	(53)	(418)	(231)
Total income	19,298	21,412	43,645
Expense			
Interest expense:			
Indebtedness to nonbank subsidiaries	1,124	89	155
Long-term debt	4,994	2,823	3,591
Noninterest expense	2,043	309	794
Total expense	8,161	3,221	4,540
Income before income tax benefit and equity in undistributed income of subsidiaries	11,137	18,191	39,105
Income tax benefit	(1,503)	(819)	(1,694)
Equity in undistributed income of subsidiaries	542	2,538	(37,422)
Net income	\$ 13,182	21,548	3,377

(1) Includes dividends paid from indirect bank subsidiaries of \$14.5 billion, \$15.2 billion and \$1.8 billion in 2022, 2021 and 2020, respectively.

Table 26.2: Parent-Only Statement of Comprehensive Income

(in millions)	Year ended December 31,		
	2022	2021	2020
Net income	\$ 13,182	21,548	3,377
Other comprehensive income (loss), after tax:			
Debt securities	34	5	(10)
Derivatives and hedging activities	57	49	(2)
Defined benefit plans adjustments	145	347	(178)
Debit valuation adjustments (DVA)	(6)	—	—
Equity in other comprehensive income (loss) of subsidiaries	(11,909)	(2,297)	1,695
Other comprehensive income (loss), after tax:	(11,679)	(1,896)	1,505
Total comprehensive income	\$ 1,503	19,652	4,882

Table 26.3: Parent-Only Balance Sheet

(in millions)	Dec 31, 2022	Dec 31, 2021
Assets		
Cash, cash equivalents, and restricted cash due from subsidiary banks	\$ 16,171	15,134
Loans to nonbank subsidiaries	182,656	185,050
Investments in subsidiaries (1)	161,627	172,926
Equity securities	143	140
Other assets	9,408	7,341
Total assets	\$ 370,005	380,591
Liabilities and equity		
Accrued expenses and other liabilities	\$ 8,258	7,333
Long-term debt	134,159	146,082
Indebtedness to nonbank subsidiaries	47,699	39,570
Total liabilities	190,116	192,985
Stockholders' equity	179,889	187,606
Total liabilities and equity	\$ 370,005	380,591

(1) The years ended December 31, 2022 and 2021, include indirect ownership of bank subsidiaries with equity of \$163.9 billion and \$173.7 billion, respectively.

Table 26.4: Parent-Only Statement of Cash Flows

(in millions)	Year ended December 31,		
	2022	2021	2020
Cash flows from operating activities:			
Net cash provided (used) by operating activities	\$ (4,575)	11,938	50,193
Cash flows from investing activities:			
Equity securities, not held for trading:			
Proceeds from sales and capital returns	3	11	2,333
Purchases	(8)	(18)	(1,479)
Loans:			
Net repayments from subsidiaries	—	—	10
Capital notes and term loans made to subsidiaries	(3,567)	(3,500)	(38,547)
Principal collected on notes/loans made to subsidiaries	4,062	2,618	558
Net decrease in investment in subsidiaries	—	—	425
Other, net	(263)	14	16
Net cash provided (used) by investing activities	227	(875)	(36,684)
Cash flows from financing activities:			
Net increase (decrease) in short-term borrowings and indebtedness to subsidiaries	8,153	35,958	(22,613)
Long-term debt:			
Proceeds from issuance	26,520	1,001	34,918
Repayment	(17,618)	(28,331)	(15,803)
Preferred stock:			
Proceeds from issuance	—	5,756	3,116
Redeemed	—	(6,675)	(3,602)
Cash dividends paid	(1,115)	(1,205)	(1,290)
Common stock:			
Repurchased	(6,033)	(14,464)	(3,415)
Cash dividends paid	(4,178)	(2,422)	(4,852)
Other, net	(344)	(364)	(100)
Net cash provided (used) by financing activities	5,385	(10,746)	(13,641)
Net change in cash, cash equivalents, and restricted cash	1,037	317	(132)
Cash, cash equivalents, and restricted cash at beginning of period	15,134	14,817	14,949
Cash, cash equivalents, and restricted cash at end of period	\$ 16,171	15,134	14,817

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Wells Fargo & Company:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of Wells Fargo & Company and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statement of income, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year 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 Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 21, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matters

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

Assessment of the allowance for credit losses for loans (ACL)

As discussed in Notes 1 and 5 to the consolidated financial statements, the Company's ACL as of December 31, 2022 was \$13.6 billion. The ACL includes the measurement of expected credit losses on a collective basis for those loans that share similar risk characteristics utilizing multiple credit loss models. The Company estimated the ACL for commercial loans by applying probability of default and severity of loss estimates to an expected exposure at default. The probability of default and severity of loss estimates are statistically derived through historical observations of default and losses after default for each credit risk rating. The Company estimated the ACL for consumer loans utilizing credit loss models which estimate expected credit losses in the portfolio based on individual risk characteristics of the loans and historical experience of probability of default and severity of loss estimates. The Company's credit loss models utilize economic variables, including economic assumptions forecast over a reasonable and supportable forecast period. The Company forecasts multiple economic scenarios and applies weighting to the scenarios that are used to estimate expected credit losses. After the reasonable and supportable forecast period, the Company reverts over the reversion period to the long-term average for the forecasted economic variables based on historical observations over multiple economic cycles. A portion of the ACL is comprised of adjustments for qualitative factors which may not be adequately captured in the loss models.

We identified the assessment of the ACL as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the ACL. Specifically, the assessment encompassed the evaluation of the ACL methodology for collectively evaluated loans, including the methods and models used to estimate (1) probability of default and severity of loss estimates, significant economic assumptions, the reasonable and supportable forecast period, the historical observation period, and credit risk ratings for commercial loans, and (2) the adjustments for qualitative factors that may not be adequately captured in the loss models. The assessment also included an evaluation of the conceptual soundness and performance of certain credit loss models. In addition, auditor judgment was required to evaluate the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address this critical audit matter.

We evaluated the design and tested the operating effectiveness of certain internal controls related to the measurement of the ACL estimate, including controls over the:

- development of certain credit loss and economic forecasting models
- continued use and appropriateness of changes made to certain credit loss and economic forecasting models
- performance monitoring of certain credit loss and economic forecasting models
- identification and determination of the significant assumptions used in certain credit loss and economic forecasting models
- development of the qualitative factors, including significant assumptions used in the measurement of certain qualitative factors
- analysis of the ACL results, trends, and ratios.

We evaluated the Company's process to develop the estimate by testing certain sources of data and assumptions that the Company used and considered the relevance and reliability of such data and assumptions. In addition, we involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's ACL methodology for compliance with U.S. generally accepted accounting principles
- evaluating judgments made by the Company relative to the development, assessment and performance testing of certain credit loss models by comparing them to relevant Company-specific metrics and trends and the applicable industry and regulatory practices
- assessing the conceptual soundness of the credit loss models, including the selection of certain assumptions, by inspecting the model documentation to determine whether the models are suitable for their intended use
- evaluating the methodology used to develop the forecasted economic scenarios, the selection of underlying assumptions and the weighting of scenarios by comparing it to the Company's business environment
- assessing the forecasted economic scenarios through comparison to publicly available forecasts
- testing the historical observation period and reasonable and supportable forecast periods to evaluate the length of each period
- testing individual credit risk ratings for a selection of commercial loans by evaluating the financial performance of the borrower, sources of repayment, and any relevant guarantees or underlying collateral
- evaluating the methods and assumptions used to develop certain qualitative factors and the effect of those factors on the ACL compared with relevant credit risk factors and consistency with credit trends and identified limitations of the underlying quantitative models.

We also assessed the sufficiency of the audit evidence obtained related to the ACL estimates by evaluating the:

- cumulative results of the audit procedures
- qualitative aspects of the Company's accounting practices
- potential bias in the accounting estimates.

Assessment of the residential mortgage servicing rights (MSRs)

As discussed in Notes 1, 6, 15, and 16 to the consolidated financial statements, the Company's residential MSR asset as of December 31, 2022 was \$9.3 billion on an underlying loan servicing portfolio of \$681 billion. The Company recognizes MSRs when it retains servicing rights in connection with the sale or securitization of loans it originated or purchases servicing rights from third parties and has elected to carry its residential MSRs at fair value with periodic changes reflected in earnings. The Company uses a valuation model for determining fair value that calculates the present value of estimated future net servicing income cash flows, which incorporates assumptions that market participants use in estimating future net servicing income cash flows. These assumptions include estimates of prepayment rates (including estimated borrower defaults), discount rates, cost to service (including delinquency and foreclosure costs), escrow account earnings, contractual servicing fee income, ancillary income and late fees. The estimated fair value of MSRs is periodically benchmarked to independent appraisals.

We identified the assessment of the valuation of residential MSRs as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the MSRs. Specifically, there was a high degree of subjectivity used to evaluate the following assumptions because they are unobservable and the sensitivity of changes to those assumptions had a significant effect on the valuation (1) prepayment rates, (2) discount rates, and (3) cost to service. There was also a high degree of subjectivity and potential for management bias related to updates made to significant assumptions due to changes in market conditions, mortgage interest rates, or servicing standards.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the assessment of residential MSRs, including controls over the:

- assessment of the valuation model
- evaluation of the significant assumptions (prepayment rates, discount rates, and cost to service) used in determining the MSR fair value
- comparison of the MSR fair value to independent appraisals.

We evaluated the Company's process to develop the MSR fair value by testing certain sources of data and assumptions that the Company used and considered the relevance and reliability of such data and assumptions. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- evaluating the design of the valuation model used to estimate the MSR fair value in accordance with relevant U.S. generally accepted accounting principles
- evaluating significant assumptions based on an analysis of backtesting results and a comparison of significant assumptions to available data for comparable entities and independent appraisals
- assessing significant assumption updates made during the year by considering backtesting results, external market events, independent appraisals, and other circumstances that a market participant would have expected to be incorporated in the valuation that were not incorporated.

Assessment of goodwill impairment

As discussed in Notes 1 and 7 to the consolidated financial statements, the Company's goodwill balance as of December 31, 2022 was \$25.2 billion. The Company tests goodwill for impairment annually in the fourth quarter, or more frequently if events or circumstances indicate that the carrying value of goodwill may be impaired, by comparing the fair value of the reporting unit with its carrying amount, including goodwill. Management estimates the fair value of its reporting units using an income approach and a market approach. The income approach is a discounted cash flow (DCF) analysis that incorporates assumptions including financial forecasts, a terminal value based on an assumed long-term growth rate, and a discount rate. The financial forecasts include future expectations of economic conditions and balance sheet changes, and considerations related to future business activities. The forecasted cash flows are discounted using a rate derived from a capital asset pricing model which produces an estimated cost of equity to the reporting unit. The market approach utilizes observable market data from comparable publicly traded companies and incorporates assumptions including the selection of comparable companies and a control premium representative of management's expectation of a hypothetical acquisition of the reporting unit.

We identified the assessment of the goodwill impairment for the Consumer Lending reporting unit, which had \$7.1 billion of allocated goodwill as of December 31, 2022, as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment. Specifically, the assessment encompassed the evaluation of certain assumptions used in the DCF analysis to estimate the fair value of the reporting unit, including (1) the future expectations of balance sheet changes and business activities used in the financial forecast and (2) the discount rate.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's determination of the estimated fair value of the Consumer Lending reporting unit, including controls related to the:

- evaluation of the future expectations of balance sheet changes and business activities used in the financial forecast assumption and
- evaluation of the discount rate assumption.

We evaluated the reasonableness of the financial forecast assumption for the reporting unit by evaluating historical performance and economic trends. We also evaluated the consistency of the financial forecast assumption by comparing the forecast to other analyses used by the Company and inquiries performed of senior management regarding the strategic plans for the reporting unit, including future expectations of balance sheet changes and business activities. We compared historical financial forecasts to actual results to assess the Company's ability to accurately forecast. In addition, we involved a valuation professional with specialized skills and knowledge, who assisted in:

- evaluating the reasonableness of the financial forecast assumption for the reporting unit by comparing certain growth trends for the reporting unit to publicly available data for comparable entities
- evaluating the discount rate assumption used in the fair value determination by comparing the inputs to the discount rate to publicly available data for comparable entities and assessing the resulting discount rate and
- evaluating the reasonableness of the total fair value through comparison to the Company's market capitalization and analysis of the resulting premium to applicable market transactions.

KPMG LLP

We have served as the Company's auditor since 1931.

Charlotte, North Carolina

February 21, 2023

Quarterly Financial Data

Condensed Consolidated Statement of Income – Quarterly (Unaudited)

(in millions, except per share amounts)	2022				2021			
	Quarter ended				Quarter ended			
	Dec 31,	Sep 30,	Jun 30,	Mar 31,	Dec 31,	Sep 30,	Jun 30,	Mar 31,
Interest income	\$ 17,793	14,494	11,556	10,181	10,121	9,834	9,693	10,046
Interest expense	4,360	2,396	1,358	960	859	925	893	1,238
Net interest income	13,433	12,098	10,198	9,221	9,262	8,909	8,800	8,808
Noninterest income								
Deposit and lending-related fees	1,522	1,647	1,729	1,815	1,819	1,781	1,704	1,616
Investment advisory and other asset-based fees	2,049	2,111	2,346	2,498	2,579	2,882	2,794	2,756
Commissions and brokerage services fees	601	562	542	537	558	525	580	636
Investment banking fees	331	375	286	447	669	547	570	568
Card fees	1,095	1,119	1,112	1,029	1,071	1,078	1,077	949
Mortgage banking	79	324	287	693	1,035	1,259	1,336	1,326
Net gains (losses) from trading and securities	(181)	872	(26)	796	2,412	1,244	2,717	891
Other	731	397	554	556	1,451	609	692	982
Total noninterest income	6,227	7,407	6,830	8,371	11,594	9,925	11,470	9,724
Total revenue	19,660	19,505	17,028	17,592	20,856	18,834	20,270	18,532
Provision for credit losses	957	784	580	(787)	(452)	(1,395)	(1,260)	(1,048)
Noninterest expense								
Personnel	8,415	8,212	8,442	9,271	8,475	8,690	8,818	9,558
Technology, telecommunications and equipment	902	798	799	876	827	741	815	844
Occupancy	722	732	705	722	725	738	735	770
Operating losses	3,517	2,218	576	673	512	540	303	213
Professional and outside services	1,357	1,235	1,310	1,286	1,468	1,417	1,450	1,388
Advertising and promotion	178	126	102	99	225	153	132	90
Restructuring charges	—	—	—	5	66	1	(4)	13
Other	1,111	1,006	949	938	900	1,023	1,092	1,113
Total noninterest expense	16,202	14,327	12,883	13,870	13,198	13,303	13,341	13,989
Income before income tax expense (benefit)	2,501	4,394	3,565	4,509	8,110	6,926	8,189	5,591
Income tax expense (benefit)	(127)	894	613	707	1,711	1,521	1,445	901
Net income before noncontrolling interests	2,628	3,500	2,952	3,802	6,399	5,405	6,744	4,690
Less: Net income (loss) from noncontrolling interests	(236)	(28)	(167)	131	649	283	704	54
Wells Fargo net income	\$ 2,864	3,528	3,119	3,671	5,750	5,122	6,040	4,636
Less: Preferred stock dividends and other	279	278	280	278	280	335	297	380
Wells Fargo net income applicable to common stock	\$ 2,585	3,250	2,839	3,393	5,470	4,787	5,743	4,256
Per share information								
Earnings per common share	\$ 0.68	0.86	0.75	0.89	1.39	1.18	1.39	1.03
Diluted earnings per common share	0.67	0.85	0.74	0.88	1.38	1.17	1.38	1.02
Average common shares outstanding	3,799.9	3,796.5	3,793.8	3,831.1	3,927.6	4,056.3	4,124.6	4,141.3
Diluted average common shares outstanding	3,832.7	3,825.1	3,819.6	3,868.9	3,964.7	4,090.4	4,156.1	4,171.0

Glossary of Acronyms

ACL	Allowance for credit losses	HTM	Held-to-maturity
AFS	Available-for-sale	LCR	Liquidity coverage ratio
AOCI	Accumulated other comprehensive income	LHFS	Loans held for sale
ARM	Adjustable-rate mortgage	LIBOR	London Interbank Offered Rate
ASC	Accounting Standards Codification	LIHTC	Low-income housing tax credit
ASU	Accounting Standards Update	LOCOM	Lower of cost or fair value
AVM	Automated valuation model	LTV	Loan-to-value
BCBS	Basel Committee on Banking Supervision	MBS	Mortgage-backed securities
BHC	Bank holding company	MSR	Mortgage servicing right
CCAR	Comprehensive Capital Analysis and Review	NAV	Net asset value
CD	Certificate of deposit	NPA	Nonperforming asset
CECL	Current expected credit loss	NSFR	Net stable funding ratio
CET1	Common Equity Tier 1	OCC	Office of the Comptroller of the Currency
CFPB	Consumer Financial Protection Bureau	OCI	Other comprehensive income
CLO	Collateralized loan obligation	OTC	Over-the-counter
CLTV	Combined loan-to-value	PCD	Purchased credit-deteriorated
CPI	Collateral protection insurance	PTPP	Pre-tax pre-provision profit
CRE	Commercial real estate	RMBS	Residential mortgage-backed securities
DPD	Days past due	ROA	Return on average assets
ESOP	Employee Stock Ownership Plan	ROE	Return on average equity
FASB	Financial Accounting Standards Board	ROTCE	Return on average tangible common equity
FDIC	Federal Deposit Insurance Corporation	RWAs	Risk-weighted assets
FHA	Federal Housing Administration	SEC	Securities and Exchange Commission
FHLB	Federal Home Loan Bank	S&P	Standard & Poor's Global Ratings
FHLMC	Federal Home Loan Mortgage Corporation	SLR	Supplementary leverage ratio
FICO	Fair Isaac Corporation (credit rating)	SOFR	Secured Overnight Financing Rate
FNMA	Federal National Mortgage Association	SPE	Special purpose entity
FRB	Board of Governors of the Federal Reserve System	TDR	Troubled debt restructuring
GAAP	Generally accepted accounting principles	TLAC	Total Loss Absorbing Capacity
GNMA	Government National Mortgage Association	VA	Department of Veterans Affairs
GSE	Government-sponsored entity	VaR	Value-at-Risk
G-SIB	Global systemically important bank	VIE	Variable interest entity
HQLA	High-quality liquid assets	WIM	Wealth and Investment Management

Operating Committee

William M. Daley

Vice Chair of Public Affairs

Kristy Fercho

Senior EVP

Head of Diverse Segments,
Representation and Inclusion

Derek A. Flowers

Senior EVP

Chief Risk Officer

Kyle G. Hranicky

Senior EVP

CEO of Commercial Banking

Bei Ling

Senior EVP

Head of Human Resources

Mary T. Mack

Senior EVP

CEO of Consumer & Small
Business Banking

Lester J. Owens

Senior EVP

Head of Operations

Ellen R. Patterson

Senior EVP

General Counsel

Scott E. Powell

Senior EVP

Chief Operating Officer

Paul Ricci

Senior EVP

Chief Auditor

Michael P. Santomassimo

Senior EVP

Chief Financial Officer

Kleber R. Santos

Senior EVP

CEO of Consumer Lending

Charles W. Scharf

Chief Executive Officer
and President

Barry Sommers

Senior EVP

CEO of Wealth &
Investment Management

Saul Van Beurden

Senior EVP

Head of Technology

Jonathan G. Weiss

Senior EVP

CEO of Corporate &
Investment Banking

Ather Williams III

Senior EVP

Head of Strategy, Digital,
and Innovation

As of February 24, 2023

Except for Paul Ricci, all members of the Operating Committee are executive officers according to Securities and Exchange Commission rules. Muneera S. Carr, EVP, Chief Accounting Officer and Controller, also is an executive officer.

Board of Directors

Steven D. Black (Chair)

Former Co-CEO

Bregal Investments, Inc., an international
private equity firm

Mark A. Chancy

Former Vice Chair and Co-COO

SunTrust Banks, Inc., a bank holding
company

Celeste A. Clark

Principal, Abraham Clark

Consulting, LLC,

a health and regulatory policy
consulting firm

Theodore F. Craver, Jr.

Former Chair,

President and CEO

Edison International, an electric utility
holding company

Richard K. Davis

Former President and CEO

Make-A-Wish America, a non-profit
organization

Wayne M. Hewett

Senior Advisor

Permira, a global private equity firm

CeCelia “CeCe” G. Morken

Former CEO

Headspace, an online wellness company

Maria R. Morris

Former EVP and Head,

Global Employee Benefits business

MetLife, a global financial services
company

Felicia F. Norwood

EVP and President,

Government Business Division

Elevance Health, Inc.,

a health company

Richard B. Payne, Jr.

Former Vice Chair

Wholesale Banking

U.S. Bancorp, a U.S. bank holding
company

Juan A. Pujadas*

Former Vice Chair

Global Advisory Services,

PwC, a global professional
services firm

Ronald L. Sargent

Former CEO and Chair

Staples, Inc., a workplace products

retailer

Charles W. Scharf

Chief Executive Officer and

President

Wells Fargo & Company

Suzanne M. Vautrinot

President

Kilovolt Consulting, Inc.,

a cybersecurity strategy and

technology consulting firm

As of February 24, 2023

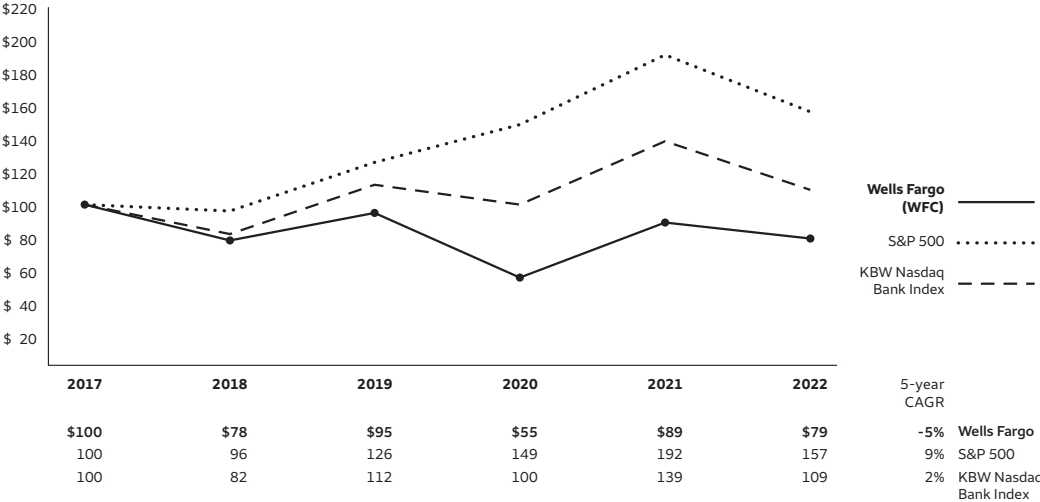
* Juan A. Pujadas is not standing for re-election and will retire as a director at the 2023 annual meeting.

Stock Performance

This graph compares the cumulative total stockholder return and total compound annual growth rate (CAGR) for our common stock (NYSE: WFC) for the five-year period ended December 31, 2022, with the cumulative total stockholder return for the same period for the Keefe, Bruyette and Woods (KBW) Total Return Bank Index (KBW Nasdaq Bank Index (BKX)) and the S&P 500 Index.

The cumulative total stockholder returns (including reinvested dividends) in the graph assume the investment of \$100 in Wells Fargo's common stock, the KBW Nasdaq Bank Index, and the S&P 500 Index.

FIVE YEAR PERFORMANCE GRAPH



General Information

Common Stock

Wells Fargo & Company is listed and trades on the New York Stock Exchange: WFC. At February 10, 2023, there were 231,886 holders of record of the Company's common stock and the closing price reported on the New York Stock Exchange for the common stock was \$47.51 per share.

3,833,804,452 common shares outstanding (12/31/22)

Stock Purchase and Dividend Reinvestment

You can buy Wells Fargo stock directly from Wells Fargo, even if you're not a Wells Fargo shareholder, through optional cash payments or automatic monthly deductions from a bank account. You can also have your dividends reinvested automatically. It's a convenient, economical way to increase your Wells Fargo investment.

Call 1-877-840-0492 for an enrollment kit, which includes a plan prospectus.

Form 10-K

We will send Wells Fargo's 2022 Annual Report on Form 10-K (including the financial statements filed with the U.S. Securities and Exchange Commission) free to any shareholder who asks for a copy in writing.

Shareholders also can ask for copies of any exhibit to the Form 10-K. We will charge a fee to cover expenses to prepare and send any exhibits.

Please send requests to: Corporate Secretary, Wells Fargo & Company, MAC J0193-610, 30 Hudson Yards, New York, NY 10001-2170

SEC Filings

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports are available free of charge on our website (www.wellsfargo.com) as soon as practical after they are electronically filed with or furnished to the SEC. Those reports and amendments are also available free of charge on the SEC's website at www.sec.gov¹.

Forward-Looking Statements

This Annual Report contains forward-looking statements about our future financial performance and business. Because forward-looking statements are based on our current expectations and assumptions regarding the future, they are subject to inherent risks and uncertainties. Do not unduly rely on forward-looking statements, as actual results could differ materially from expectations. Forward-looking statements speak only as of the date made, and we do not undertake to update them to reflect changes or events that occur after that date. For information about factors that could cause actual results to differ materially from our expectations, refer to the discussion under "Forward-Looking Statements" and "Risk Factors" in the Financial Review portion of this Annual Report.

Investor Relations

1-415-371-2921
investorrelations@wellsfargo.com

Shareowner Services and Transfer Agent

EQ Shareowner Services
P.O. Box 64874
St. Paul, Minnesota
55164-0874
1-877-840-0492
www.shareowneronline.com¹

Annual Shareholders' Meeting

10:00 a.m. Eastern Daylight Time
Tuesday, April 25, 2023

See Wells Fargo's 2023 Proxy Statement for more information about the annual shareholders' meeting.

¹ We do not control this website. Wells Fargo has provided this link for your convenience, but does not endorse and is not responsible for the content, links, privacy policy, or security policy of this website.

The Wells Fargo logo consists of a red square with the words "WELLS" and "FARGO" stacked vertically in white, uppercase, sans-serif font.

Wells Fargo & Company
420 Montgomery Street
San Francisco, CA 94104
wellsfargo.com



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