

Bank of America

Fourth Quarter 2023 Earnings Announcement

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Participants

Presenters

Brian Moynihan – Bank of America, Chair and CEO

Alastair Borthwick – Bank of America, CFO

Lee McEntire – Bank of America, Investor Relations & Local Markets Organization Executive

Participants

Jim Mitchell – Seaport Global

Erika Najarian – UBS

John McDonald – Autonomous

Mike Mayo – Wells Fargo

Matt O'Connor – Deutsche Bank

Glenn Schorr – Evercore

Ken Usdin – Jefferies

Ryan Kenny – Morgan Stanley

Gerard Cassidy – RBC Capital Markets

Presentation

Operator

Good day, everyone, and welcome to Bank of America's Earnings Announcement. [Operator Instructions]

Please note, today's call will be recorded. [Operator Instructions]

It is now my pleasure to turn the conference over to Lee McEntire.

Lee McEntire

Good morning. Welcome, and thank you for joining the call to review our fourth quarter and full year results. We know it's a busy day for all of you. As usual, our earnings release documents are available on the Investor Relations section of the bankofamerica.com website, and they include the earnings presentation that we will be referring to during this call. I trust everybody's had a chance to review the documents. I'll first turn the call over to our CEO, Brian Moynihan, for some opening comments, before Alastair Borthwick, our CFO, discusses the details of the quarter.

Let me just remind you that we may make forward-looking statements and refer to non-GAAP financial measures during the call. Forward-looking statements are based on management's current expectations and assumptions that are subject to risks and uncertainties. Factors that may cause our actual results to materially differ from those expectations are detailed in our earnings materials and the SEC filings that are available on our website. Information about our non-GAAP financial measures, including reconciliations to U.S. GAAP, can also be found in our earnings materials and our website. So with that, I'll turn the call over to you, Brian. Thank you very much.

Brian Moynihan

Thank you, and happy New Year to everyone. Good morning. Thank you for joining us. I'm starting on Slide 2 of the earnings presentation. Here at Bank of America, our teammates finished 2023 with a solid fourth quarter. Reported EPS was \$0.35, but that included 2 notable items that Alastair will describe in more detail.

Adjusted for those 2 items, net income was \$5.9 billion, after tax, or \$0.70 per share. Before Alastair covers quarter 4 results, I want to take a moment and briefly review the 2023 full year results. Our team at Bank of America delivered strong profits for shareholders across a challenging year, navigating a slowing economy, geopolitical tensions, bank failures, and the impact of a rate hike of historic speed. We began the year with

a pretentious aura as the economists predicted a mild recession within the year. Instead, 2023 showcased economic resilience led by U.S. consumers, despite higher interest rates.

We ended 2023 with economists projecting the Fed has successfully steered the U.S. economy to a soft landing. In regards to the economy, during 2023, we consistently made a few points regarding what we were seeing in our customer data here at Bank of America. First, the year-over-year growth rate and spending from the beginning of '23 started declining. And it went from – in the early part of '23 over the early part of '22 – from a 9% to 10% growth rate to this quarter's 4% to 5% growth rate, and that's where it stands here early in 2024. You can see that on Page -- Slide 29 in the appendix. That growth rate, 4% to 5%, is more consistent with the 2% GDP environment in a lower inflation environment.

Second, the point we've made, is that our Consumer deposit balances at Bank of America remain 30% higher than pre-pandemic. We saw the deposit balance of consumer accounts move lower this quarter but are now seeing more differentiation in behavior. And the lower average-balance-size accounts – the balances in there – still remain of multiples of pre-pandemic levels, nearly 3 years past the last stimulus. They are modestly declining. The deposit outflows you've seen in Consumer have largely been driven by the higher-balance accounts, who moved their excess balances into the markets to seek higher yields. We capture those with our leading wealth platform. Third, the consumers of Bank of America have had access to credit and are borrowing responsibly. Their balance sheets are generally in good shape, and while impacted by higher rates, remember, many of them have fixed-rate mortgages and remain employed, so they've shown great resilience.

Let's move to discussion of full-year 2023 earnings. We reported net income of \$26.5 billion after tax, which includes \$2.8 billion after tax for notable quarter 4 items. Adjusted for those items, adjusted net income was \$29.3 billion after tax. Earnings per share were \$3.42, and that grew 7% over 2022. On that adjusted basis, we generated a 90-basis point return on assets and a 15% return on tangible common equity. The year 2023 was characterized by a record organic customer activity; record digital customer engagement levels and satisfaction scores; strong, but slowing, NII during the course of the year; strong sales and trading, up 7% year-over-year; operating leverage, reflecting a good expense discipline; solid asset quality; and a strong capital and liquidity position. All of this was helped by the years of Bank of America's assiduous dedication to responsible growth. This helped us bring our headcount and expense down every quarter during 2023, in line with what we told you to expect early this year -- early last year.

Adjusted full year revenue grew 5% on the back of 9% NII improvement and strong asset management fees and sales and trading results. We achieved 170 basis points of operating leverage in 2023, as heightened quarterly expense levels were driven lower throughout the year, even as the investments in growth continued. Net charge-offs moved higher through the year, off of the historic lows, but they still compare very favorably against historic averages.

One last point worth noting is the level of deposits. If you think back, as we ended 2022 and enter 2023, the great debate was how much the pandemic surge in deposits would dissipate. But looking today, we ended 2023 with \$1.924 trillion of deposits, only \$7 billion less than we had at year-end '22, and 4% higher than the trough in May of this year. The total average deposits in the fourth quarter remained 35% higher than they did in the quarter 4 2019. This has been tremendous work by our teams to drive our industry-leading market share, actually outperforming the industry of across the 4-year period, and again this year.

While the economy appears to continue to normalize and rates continue to have some volatility, one thing that remains important is driving that organic growth. This client activity sticks to the ribs and is what I want to spend a moment on as I wrap up. On slide 3, we highlight some of the successes in organic activity in our results for the year. Bank of America's team is a powerful engine that is fueling results across all our businesses. I would note a couple of examples to try and connect the important to our financials. It's easy to use the Consumer business as an example. In Consumer, we added 600,000 net new checking accounts during the year 2023. The fourth quarter of 2003 represents the 20th straight quarter of net addition of checking accounts. The quality is what drives the checking account balances. On average, 67% of the

deposit balances have been with us for customers who have been with us for more than 10 years. 92% of the Consumer checking accounts are primary, meaning they're the core client household account. 60% of our checking accounts use our debit card – they average 400 transactions per account each year, showing how engaged they are. They have traditionally open savings accounts 20% to 25% of the time within a few months of opening their checking accounts. Thinking about those new accounts, at opening, those new checking accounts opened last year, bringing about \$4,000 of balances, then they deepen over the next subsequent months to 2x that amount. New savings accounts come with those accounts, starting with about \$8,000 and doubling over time. From the total new checking accounts we opened just in 2023, those customers have opened nearly 0.5 million credit card accounts so far in 2023. Historically, we've seen, on average, these customers more than double those card balances within a year. Those card accounts on average have spent about \$7,000 per year, of which a portion will carry a balance. Now there's always additional opportunity to further serve our clients and to continue to meet them where they are. In addition to the industry-leading digital platforms that we have, we have opened 50 new financial centers in 2023; more than half of those were in our expansion markets. We've expanded our presence during 2023 to 10 markets, including our latest opening in Omaha.

In our Global Wealth Management team, we added more than 40,000 net new relationships across Merrill and The Private Bank. Our advisors opened 150,000 new banking accounts for wealth management clients showing the completeness of the relationship approach. The average Merrill account is over \$1 million at opening; the average Private Bank account is multiples of that. As you can see on this slide, we now manage \$5.4 trillion of client balances across loans, deposit, and investments of our consumer clients, both Consumer and GWIM. We saw \$84 billion of flows into those accounts in the past year.

As we switch to Global Banking on the lower left-hand side of the slide, we added clients and increased the number of products per relationship. Just like in Consumer, we've see some good growth in customers seeking the benefits of our physical and digital capabilities. But most importantly, our talented relationship managers, who provide financing solutions, treasury services, and strategic advice for clients with local and global needs. We added roughly 2,500 new Commercial and Business Banking clients this year. That is more than twice what we added in 2022. We look forward to continuing to drive those -- grow with those clients in '24 and add even more. This capitalizes on a multiyear build of our relationship management team in the Global Banking businesses, and product expansion also, especially Global Transaction Services area and middle-market investment banking.

As we think about Global Markets, we continued to see strong performance from our team with 7% year-over-year revenue growth, the strongest we've had in many years.

We see digital tools our customers have access to across the board helping us enable this activity at lower costs. Our normal digital banking slides are once again included for your reference on Pages 21, 24, and 26.

In summary, this was a good quarter. We delivered our third quarter of expense declines. We saw NII outperform what we expected when we talked to you on the last earnings call. We continued to manage well through the transition and the rate structure. We saw deposits grow this quarter, and we look forward with a strong capital base, strong liquidity, and growing loans in the past quarter to a great 2024. I want to thank my teammates for what they did for us in 2023, and we all know we're off to nice start for '24.

And with that, I'll turn it over to Alastair.

Alastair Borthwick

Thank you, Brian. And I'm going to start on Slide 4 of the earnings presentation to provide just a little more context on the summary income statement and the highlights. For the fourth quarter, as Brian noted, we reported \$3.1 billion in net income, or \$0.35 per diluted share. That GAAP net income number included 2 notable items. First, we recorded \$2.1 billion of pretax expense – that's \$0.20 after-tax earnings per share – for the special assessment by the FDIC to recover losses from the failures of Silicon Valley and Signature Bank. Second, on November 15, 2023, Bloomberg announced that they would discontinue publishing the Bloomberg short-term bank yield index rate after November 15, 2024. And many commercial loans in the

industry had BSBY as a reference rate prior to SOFR becoming industry standard. As noted in an 8-K we filed earlier this week, we came to a conclusion in early January, the BSBY cessation would not get the same accounting treatment allowed under LIBOR cessation, and therefore, cash flow hedges of BSBY-indexed products related to BSBY cash flows forecasted to occur after November 15, 2024, would need to be moved out of OCI and into earnings in the fourth quarter '23 financials. So as a result of the accounting interpretation, we recorded a negative pretax impact to our market making revenue of approximately \$1.6 billion. I just want to reinforce, that's an accounting impact. It's not an economic change to the contracts, and we'll see an offset to this over time through higher NII mostly occurring in 2025 and 2026 after BSBY ceases in November of 2024. The accounting lowered CET1 by 8 basis points during the quarter, and we will recapture that in the next 2 or 3 years. Adjusted for the FDIC assessment and the BSBY cessation-related impact, Q4 net income was \$5.9 billion, or \$0.70 per share.

On Slide 5, we show the highlights of the quarter, and we reported revenue of \$22.1 billion on an FTE basis. And excluding the BSBY cessation impact, adjusted revenue was \$23.7 billion and declined 4%, driven by net interest income. Fourth quarter revenue is a tough year-over-year comparison, as NII peaked in the fourth quarter of '22 at \$14.8 billion before slowly moving lower over 2023.

Outside of NII, we saw good growth in treasury service fees and wealth management fees. And those were offset by higher tax-advantaged investment deal activity, creating higher operating losses and the more tax credits associated with them and recognized across periods.

Expense for the quarter of \$17.7 billion included the \$2.1 billion FDIC charge. So excluding that charge, adjusted expense was \$15.6 billion and consistent with our prior guidance. That allowed us to invest for growth as well as use good expense discipline to eliminate work and reduce headcount. And on an adjusted basis, this then is the third quarter of sequential expense decline this year.

Provision expense for the quarter was \$1.1 billion. That consisted of \$1.2 billion in net charge-offs and a modest reserve release reflecting the improved macroeconomic outlook. Net charge-offs reflect the continued trend in consumer and commercial charge-offs towards more normalized levels as well higher commercial real estate office losses.

Lastly, our income tax expense this quarter was a modest benefit. As credits from tax-advantaged investment deals offset the tax expense on the lower earnings in Q4, driven by the notable charges.

So let's review the balance sheet on Slide 6, and you'll see we ended the quarter at \$3.2 trillion of total assets, up \$27 billion from the third quarter. I'd highlight here both the \$39 billion growth in deposits, and a decline in cash on balance sheet of \$19 billion. Overall, you'll note that debt securities increased \$92 billion, and that included a \$9 billion decline in hold-to-maturity securities, and a \$100 billion increase in available-for-sale securities, reflecting short-term investment of liquidity from all of these activities. We continue to put money into very short-term T-bills and hedged treasury notes this quarter, and those are essentially earning the same rate as cash. And you can see our absolute cash levels remain quite high.

As Brian noted, liquidity remains strong with \$897 billion of global excess liquidity sources. That was up \$38 billion from the third quarter of '23, and it remained \$321 billion above our pre-pandemic level in the fourth quarter of '19.

Shareholders' equity increased \$5 billion from the third quarter as earnings and AOCI improvement were only partially offset by capital distributed to shareholders. The AOCI improved \$4 billion, reflecting both the previously mentioned BSBY-related reclassification into fourth quarter earnings and other AOCI improvements. This included some improvements in other cash flow hedges, which don't impact regulatory capital, driven by a decline in long-end rates.

During the quarter, we paid out \$1.9 billion in common dividends, and we bought back \$800 million in shares, which more than offset our employee awards. Tangible book value per share is up 3% linked quarter and 12% year-over-year.

Turning to the regulatory capital. Our CET1 level improved to \$195 billion from September 30, while the CET1 ratio declined 9 basis points to 11.8% and remains well above our current 10% requirement as of January 1, '24. We also remain well positioned against the proposed capital rules as our current CET1 level matches our 10% minimum against anticipated RWA inflation from the proposed rules. Risk weighted assets increased \$19 billion on loan growth and growth in Global Markets RWA, and our supplemental leverage ratio was 6.1% versus the minimum requirement of 5%, which leaves plenty of capacity for balance sheet growth. And our TLAC ratio remains comfortably above requirements.

So let's focus on loans by looking at the average balances on Slide 7. And you can see loan growth improved this quarter as we saw improvement in both credit card and commercial borrowing, offset by declines in commercial real estate and securities-based lending. The commercial growth reflects good demand overall and was muted only at quarter end by companies paying down commercial balances as they finalized their year-end financial positions. Lastly, on a positive note, we've seen loan spreads continue to widen given some of the capital pressures from proposed rules on the banking industry. And this, combined with investment in relationship managers we've added over the past few years, has positioned us to take market share and improve spreads.

Moving to deposits, I'll focus on averages on Slide 8. The trends of ending balances saw growth in Global Banking and Wealth Management and declines Consumer. Relative to the pre-pandemic fourth quarter '19 period, average deposits are still up 35%. Every line of business remains well above their pre-pandemic levels. Consumer is up 33%, with checking up 40%, driven by the net new checking accounts added, that Brian noted earlier. On a more recent performance basis, deposits grew \$29 billion or 6% from Q3 on an annualized basis. The only business that saw a decline in deposits linked quarter was Consumer. And here, we saw a decline of \$21 billion. This linked-quarter decline slowed from the third-quarter change. And in total, we have \$959 billion in high-quality consumer deposits which remains \$239 billion above pre-pandemic levels. The total rate paid on Consumer deposits in the quarter was 47 basis points, and this remains very low, driven by the high mix of quality transactional accounts. Most of this quarter's rate increase remained concentrated in CDs and consumer investment deposits, which together only represent 15% of the Consumer deposits.

Turning to Wealth Management, balances on an end-of-period basis improved modestly, and we continue to experience a slowing in the trend of clients moving money from lower-yielding sweep accounts into higher-yielding preferred deposits and off-balance sheet. Our sweep balances were down \$4 billion and were replaced by new account generation and deepening. Global Banking deposits grew \$23 billion, moving nicely above the \$500 billion level that we've experienced over the course of the past 6 quarters. These deposits are generally transactional deposits of our commercial customers. They're the ones they used to manage their cash flows, and noninterest-bearing deposits were about 33% of deposits at the end of the quarter.

Now when we turn to excess deposit levels on Slide 9, you can see deposit growth exceeded loan growth this quarter, and that expanded our excess of deposits above loans from Q3 to about \$0.9 trillion, which is well above the \$0.5 trillion we had pre-pandemic. You can see that in the upper left of Slide 9, which is where we've used and shown you how we think about managing excess liquidity. We continue to have a balanced mix of cash, available-for-sale securities, and held-to-maturity securities. And this quarter, the combination of the cash and the AFS securities now represent 51% of the total \$1.2 trillion noted on this page. You'll also notice the change in mix of the shorter-term portfolio as we began to lower cash and increase available-for-sale securities, buying mostly short-dated T-bills with similar yields. You can note also the hold-to-maturity book continued to decline from paydowns and maturities pulling to par. In total, the hold-to-maturity book moved below \$600 billion this quarter. It's now down \$89 billion from its peak, and it consists of about \$122 billion in treasuries and about \$465 billion in mortgage-backed securities, along with a few billion others. Also note that the blended cash and securities yields continued to rise and remained about 170 basis points above the rate we pay for deposits.

The replacement of these lower-earning assets into higher-yielding assets continues to provide an ongoing benefit and support to NII. From a valuation perspective, given the reduced balance and the longer-term

interest rate reductions, we've seen in the fourth quarter, we experienced an improvement of more than \$30 billion in the valuation of the hold-to-maturity securities.

So let's turn our focus to NII performance using Slide 10. And a strong finish to the year helped us report \$57.5 billion in NII on a fully tax equivalent basis for the full year of 2023, and that's up 9% compared to 2022. On an FTE basis, we reported \$14.1 billion in NII, which was modestly better than we told you to expect last quarter, driven by modestly better deposit growth. The \$14.1 billion was a decline of \$400 million from the third quarter, driven by the unfavorable impacts of deposits and related pricing and lower Global Markets NII, partially offset by higher rates benefiting asset yields.

And as we look forward, given that we've got 1 less day of interest in the first quarter, and that's worth about \$125 million to \$150 million, and given the rate curve shift, we believe the first quarter will be somewhere between \$100 million to \$200 million lower than the fourth quarter. It could move a touch lower in Q2, and then we believe it should begin to grow sequentially in the second half of 2024. So very consistent with our prior guidance. With regard to the forward view I just provided, let me note a few other caveats. It would include an assumption that interest rates in the forward curve materialize. And the forward curve today has 6 cuts, compared to last quarter when we had 3 cuts in the forward curve. So it's bouncing around a little and shifted in the past quarter.

The forward view also includes our expectation of low- to mid-single-digit loan growth and some moderate growth in deposits as we move into the back half of 2024. Given our recent deposit and loan performance, we continue to feel good about these assumptions.

Before moving away, it's worth noting our net interest yield declined 14 basis points to 197 basis points, and that's driven by the decline in NII as well as higher average earning assets, reflecting prior period builds of cash and cash-like securities. Turning to asset sensitivity and focusing on a forward yield curve basis, the plus 100-basis point parallel shift at December 31 was \$3.5 billion of expected NII over the next 12 months, coming from our banking book, and that assumes no expected change in balance sheet levels or mix relative to our baseline forecast, and 93% of that sensitivity is driven by short rates. The 100-basis point down scenario is \$3.1 billion.

Let's turn to expense, and we'll use Slide 11 for the discussion. And we reported \$15.6 billion in adjusted expense this quarter, which excludes the FDIC assessment. This was in line with our projection from last quarter and down \$199 million from the third quarter, driven by reductions in headcount earlier in the year and seasonally lower revenue-related expense. These reductions outpaced the continued investments that we're making to drive growth. Our average headcount was down from third quarter to 213,000 people. And that's good work after peaking at 218,000 last January. We lowered our headcount through the year by 5,000 and did so without taking an outsized severance charge, as we used attrition to lower our headcount along the way. One more point to acknowledge the good work of our teams on expense. Q4 '23 adjusted expense of \$15.6 billion is only \$94 million higher than the fourth quarter of '22. And just remember, we began 2023 with a \$125 million lift in quarterly FDIC expense. So through some good operational excellence work and otherwise, we've managed through all of the additional cost of investments in new tech initiatives and merit and financial center openings, as well as some stronger revenue and higher marketing costs.

As we look forward to next quarter, we expect to see the more typical Q1 seasonal elevation in expense of \$700 million to \$800 million compared to Q4. So we believe expense will be around \$16.4 billion in the first quarter. That includes elevated payroll tax expense and expected cost of higher revenue in both Sales & Trading and Wealth Management, as well as merit cost increases. And as we move through 2024, we expect the quarterly expense to decline from Q1, reflecting a drop in the elevated payroll tax expense and revenue changes, as well as some additional operational excellence initiative work. Continued digital transformation and adoption is also going to help us as we go through the year.

Let's now turn to credit, and I'll use Slide 12 for that. Provision expense was \$1.1 billion in the fourth quarter, and it included an \$88 million reserve release due to a modestly improved macroeconomic environment. On a weighted basis, we're reserved for an unemployment rate of nearly 5% by the end of

2024 compared to the most recent 3.7% rate reported. Net charge-offs of \$1.2 billion increased \$261 million from the third quarter, and the net charge-off ratio was 45 basis points, a 10-basis point increase from the third quarter.

On Slide 13, we highlight the credit quality metrics for both our consumer and commercial portfolios. And the overall increase in net charge-offs was driven by 3 things: First, \$104 million of the increase was driven by credit card losses, which continued to normalize, as higher late-stage delinquencies flowed through to charge-offs. Second, \$65 million of the increase was driven by a broad range of smaller commercial and industrial losses, which were mostly previously reserved and monitored for the past couple of quarters. And lastly, \$76 million of the increase was driven by commercial real estate losses, primarily due to office, also mostly reserved. In the appendix, we've included a current view of our commercial real estate and office portfolio stats provided last quarter. And we've also included the historical perspective of our loan book de-risking and long-term trend of our consumer and commercial net charge-offs, and you can see those on Slides 30 to 33.

Let's move on to the various lines of business and their results, and I'll start on Slide 14 with Consumer Banking. For the quarter, Consumer earned \$2.8 billion on continued good organic growth. And despite their good client activity, it's difficult to outrun the earnings impact of higher rates on deposit costs, while the credit is also normalizing. So reported earnings declined 23% year-over-year, as top line revenue declined 4%, while expense rose 3%, and the credit costs rose. Customer activity showed another strong quarter of net new checking growth, another strong period of card opening, and investment balances for consumer clients, which climbed \$105 billion to a record \$424 billion. Full-year flows were \$49 billion as accounts grew 10% in the past 12 months. Loan growth was led by credit card, and that broke about \$100 billion this quarter. Deposit declines slowed in the quarter with continued strong discipline around pricing, and our expense reflects continued business investments for growth. And as you can also see in the appendix, Page 21, digital engagement continued to improve and showed good year-over-year improvement as customers enjoy the continuation of enhanced capabilities.

Moving to Wealth Management on Slide 15. We produced good results, earning a little more than \$1 billion after adding 40,000 net new relationships in Merrill and the Private Bank this year. These results were down from last year as the decline in NII from higher deposit costs, still catching up from the interest rate hikes, more than offset higher fees from asset management, driven by higher market levels and assets under management flows. As Brian noted earlier, both Merrill and the Private Bank continued to see strong organic growth and produced solid assets under management flows of \$52 billion since the fourth quarter of '22, which reflects a good mix of new client money, as well as existing clients putting their money to work. Expenses reflect continued investments in the business and revenue-related costs.

On Slide 16, you see the Global Banking results. The business produced strong results with earnings of \$2.5 billion, as a decline from peak levels of NII was offset by lower provision expense, leaving earnings down 3% year-over-year. Revenue declined 8%, driven by the NII. Our Global Treasury Services business remained robust with strong business from existing clients as well as good new client generation. In addition, we continue to see a steady volume of solar and wind investment projects this quarter, and our investment banking business continued to perform well in a sluggish environment. Year-over-year revenue growth also benefited from lower marks on leveraged loan positions. The company's overall investment banking fees were \$1.1 billion in Q4. That grew 7% over the prior year despite a fee pool that was down 8%. And for the year, we held on to the #3 position overall given that performance. In the component parts, we ended the year #1 in investment grade, #2 in leverage finance, #4 in equity capital markets, and #4 in mergers and acquisition. The diversification of the revenue across products and regions reflects the growing strength of our platform, and a good example of that is our focus on the equity capital markets blocks business, where we finished #1 in the United States for the first time since 1998. And in EMEA, we were also #1 for blocks. Provision expense reflected a reserve release of \$399 million, and that comes from an improved macroeconomic outlook as well as realized charge-offs that are as noted before. Expense decreased 2%

year-over-year, as continued investments in the business were more than offset by reductions in other operating costs.

Switching to Global Markets on Slide 17. The team had another strong quarter with earnings growing 13% year-over-year to \$736 million, driven by revenue growth of 4%, and we refer to results excluding DVA as we normally do. Good results in Sales & Trading and comparatively lower marks on leveraged loan positions drove the year-over-year performance. And focusing on the Sales & Trading ex DVA, revenue improved 1% year-over-year to \$3.8 billion which is a new fourth quarter record for the firm. FICC was down 6% from a record quarter, while equities increased 12% compared to the fourth quarter of '22. And the FICC revenues were down versus that record fourth-quarter level with higher revenues in mortgages and municipal trading. Equities was driven by improved trading performance in derivatives, and our expense was up 3% on continued investment in the business.

Finally, on Slide 18, All Other shows a loss of \$3.8 billion as the 2 notable items highlighted earlier, negatively impacted net income by \$2.8 billion in that segment. Revenue adjusted for the \$1.6 billion BSBY cessation was flat year-over-year, and expense adjusted for the \$2.1 billion FDIC assessment was down a couple hundred million driven by lower litigation and lower unemployment processing costs. I noted earlier, we reported a modest tax benefit this quarter. The tax credits from tax-advantaged investment deals throughout the year, including their benefits in the fourth quarter, exceeded taxes on reported earnings, because we had the 2 notable items that lowered results this quarter. For the full year, our tax rate was a little more than 6%, and excluding the impacts of BSBY and FDIC and the other discrete tax benefits, that rate was 10%. And further excluding our investment tax credits, our tax rate would have been 25%.

So thank you. And with that, we'll launch into the Q&A, please.

Q&A

Jim Mitchell

Alastair, maybe on the NII trajectory that you're talking about, sort of down a little bit in the first half and then start to stabilize in the second half, and you're building in 6 cuts, but a lot of those cuts are coming starting in sort of 2Q and beyond, and given your asset sensitivity, why would we expect NII to stabilize? Is that just sort of expected growth in deposits and loans? Just kind of help us think through your assumptions on the NII for '24.

Alastair Borthwick

Yes. Well, I think, Jim, going back to a quarter, I don't think our views have changed a great deal. So our guidance isn't changing much either in that regard. If anything, Q4 deposits were a little better than we expected. So you see in -- we sort of thought this quarter might be around \$14 billion. It was a little better than that. So that's obviously a good starting point.

Now when we look forward off of that slightly higher number, if you think about Q1, I'm thinking about it in terms of a day count that might be \$150 million, let's say, so from where we are, that's going to get us to somewhere between \$13.9 billion and \$14.0 billion. It's going to be in that kind of a range. Q2, we see going down just a little bit more. That's a little bit of deposit seasonality in Q1 and a little bit of just catch up on rate paid and some rotation. But at that point, we see growing in the back half of the year. And that's largely, yes, deposits growing. It's loans growing a little bit. It's some restriking of the securities that come off the balance sheet, and it's restriking some of the loans that come off the balance sheet. So it's all of those things. You're right, when we got together last quarter, we thought there might be 3 rate cuts. Now it's up to 6. So that's obviously -- that's a little harder, but the deposit picture has been a little better. So no particular change at this point.

Jim Mitchell

Okay. That's fair. And maybe just as a follow-up, just on loan growth, what do you think -- we all see the card growth, but outside of that, it's been pretty muted. We're looking at rate cuts, maybe that's a little bit better for demand. How do you think -- what are you seeing on the commercial side in terms of demand? And what changes the dynamic?

Alastair Borthwick

Well, I mean, you look back, if you look at our loan growth in the materials, it's been a pretty slow loan growth environment. And I think what's going on underneath it is, obviously, you've got the economic activity. Offsetting that a little bit is lower revolver utilization -- you can sort of see why, with rates being much higher, it's a little more expensive to order revolvers. So as corporate cash balances have come up and deposits have come up, that's just a natural headwind. That's beginning to fade. So we kind of feel like the loan growth ought to be low-single digits. Normally, we think about it as kind of GDP plus just a little bit of market share. So in a low-GDP environment, that's sort of what we're expecting for loans this year. And then we'll just need to see how the rate structure develops.

Operator

We'll take our next question from Erika Najarian of UBS.

Erika Najarian

Alastair, if you could -- thank you for giving us more detail about how your NII trajectory is going to be for the rest of the year. I'm wondering if you could just give us a little bit more color on what you're expecting for deposit rate pricing and, perhaps for BofA specifically, perhaps the liability mix in the second half of the year. If you expect deposit growth to come back, I think a big question that the market has is what is the re-pricing power to the downside that these banks have as the Fed cuts rate. So I think that would be really good color for the market to have.

Alastair Borthwick

Yes. Okay. So first of all, if I go back over the trajectory of deposits through the course of 2023, we troughed at \$1.845 trillion, and we ended at \$1.925 trillion. So underneath there is \$80 billion of growth in deposits since May. So that obviously informs our perspective around how we think about deposit gathering at this stage. That feels to us like it's a supportive environment of our NII forecast. Second, obviously, over the course of this year, there's been a move towards more interest-bearing. And that actually helps us in the event that we start seeing Fed cuts because that's obviously going to allow us to take those rates down.

So look, we're going to see a little bit of rotation, I think, here in Q1 and Q2. I think we'll likely see a little bit of deposit pricing lag. But the last Fed hike at this point was July. So there's been an awful lot of time at this point for deposit pricing to shake out. We won't be immune from anything. We have to compete for deposits along with everyone else, but combine all of those things, and that's where we get our confidence.

Erika Najarian

Got it. And just to clarify how we should think about the full year, the \$16.4 billion in 1Q '24 expenses and a quarterly decline from there. Does that pretty much square with what you've said in the past for expenses of up 1% to 2% year-over-year. And would that number include an assumption that investment banking activity returns in force in 2024?

Brian Moynihan

Yes. So we -- if you think about it, pre-pandemic, we reached the point where we've taken the expenses down to a place where we said we'd kind of grow sort of half the rate of inflation, et cetera. So you're right. What we're thinking now is we're up \$100 million in the fourth quarter over last year's fourth quarter. And if you think about that as -- and you look at the personnel side of it, it's up a little higher, then non-personnel is down a little bit lower. We got the rise in first quarter expenses, then we start going down each quarter again. So if you think about \$100 million to \$200 million of sort of inflationary growth over the quarters this

year, you get between \$64.0 and \$64.5 billion. And most of the firms out there that we look at are sort of in that range, and we feel comfortable with that. But that sort of allows us the room to use our good operational excellence to take out expenses and replace them with things like revenue-related expenses that we've seen, and we see that pattern reemerge now, as we've gotten stability and gotten past the pandemic, and past the great resignation and all the inflation that occurred in that -- in the '21, '22 time frame. We've now stabilized back to that ability to produce sequential declines in quarters during the year, year-over-year growth of inflationary 1% to 2% levels, and that gets you in that low 64s.

Operator

We'll take our next question from John McDonald of Autonomous Research.

John McDonald

Alastair, I wanted to go back on the NII, and maybe you could help us. It's so hard for us to square the NII outlook with the rate sensitivity disclosure that you have in the slide with a 100-basis point parallel shift down is \$3.1 billion. Maybe just -- is there some caveats about how in the real world, it doesn't play out like the disclosures. We've already seen rates come down on the long end, almost 100 basis points. So I guess it just -- where is that \$3.1 billion headwind in your number because it's very impressive, obviously, to be able to kind of keep it flat despite that using the forward curve?

Alastair Borthwick

Yes. Well, I mean I think the main thing is, number one, it obviously assumes a parallel shift instantly. So the rate cuts that are in the forward projections, the earliest one comes in March, for example. So you're not going to see a full year's worth of rate cuts all within the space of the first day or so -- it doesn't work out that way. So John, I think the way to start would be just use what we've disclosed, which is that \$3.1 billion. You can see what we see in terms of how much of that is the short end. And then I just take that number and use that as the beginning point. And just keep in mind, we still see some deposit growth, some loan growth, and some securities and loan repricing that offsets all that.

John McDonald

Okay. Okay. That's helpful. And then maybe just on top of that, trading NII or the Global Markets NII, is that likely to be a headwind or a tailwind in '24 versus '23? Is that -- do you have any visibility on that?

Alastair Borthwick

Yes. Well, look, if you look at Global Markets, in any given quarter, it moves around just based on the customer behavior. But over the long arc, if you look over the course of the past 2 or 3 years, it's liability sensitive. So I'd expect if you see rate cuts that will benefit Global Markets NII, just a little bit. And you can almost like, if you think about just retracing the steps of what they've conceded in NII, you'd sort of expect to get that back over time.

John McDonald

Okay. So maybe that could grow.

Brian Moynihan

John, this quarter it was a drop third quarter, fourth quarter, a pretty good amount. And so -- and that's partly due to the fourth quarter being lower activity, just lower inventory carry and things like that. That reverses itself, and we're off to a good start so far in the first quarter here, and the balance sheet moves back up. So there's a little bit of quarter-to-quarter linkage third to fourth quarter, typically.

Operator

We'll take our next question from Mike Mayo of Wells Fargo.

Mike Mayo

Just another follow-up on NII. I guess if you take the Fed dot plot, maybe there's just 3 rate cuts. If you take that instead of the 6, what -- how would your thinking about NII change?

Alastair Borthwick

Well, I think if we got the 3 rather than the 6, Mike, we do modestly better. I think – let me put it this way – if we hadn't seen the 3 more since last quarter, we might have a higher guide. But because we've come off of a base with better deposit gathering in Q4, so we're starting in a better place. So those 2 things have sort of evened themselves out. And obviously, if it pushes out later, that's a good thing for us.

Mike Mayo

Brian, Alastair, you always talk about the information advantage you have by just being in the flow of so much of the U.S. economy. What do you think? I mean, is this just not relying, and I know you like to rely on your research group, Brian, and what their economic forecast is. But what do you guys think as far as -- are we going to a recession in the second half of this year? Does the Fed to cut 6 times? Are you seeing that? Where are you seeing the most softness, I guess, is the question?

Brian Moynihan

So I think our research team has rate cuts in next year and has a soft landing, as you referenced, Mike. So that's it -- as you see the customers today, as I said earlier, the year-to-year spending growth in the fourth quarter versus last year's fourth quarter or in the first quarter so far versus the first part of last year is a 4% to 5% rate in movement of money, and that was across \$4 trillion plus out of the consumer accounts in Bank of America into the economy. That 4% to 5% is similar to what it was in '17, '18, '19, when the Fed rose -- took rates up, inflation was under control, and the economy was growing at 2%, 1.5%, 2%, 2.5%. And so the spending level should sustain an economy, albeit our core prediction is it's slowing down from a higher growth rate in the third quarter, 4.5% - 5%, whatever it was down to or something like that in the first couple of quarters next year, but we see the consumer activity indicating that they're still in the game, they're still spending money. Where they spend is a little different, more in services and going out in restaurants and experiences, and less on goods at retail. They're employed.

If you look at the estimates by any of you -- any of your economists, the unemployment rate projected is really a modest deterioration from here. Most of them in the core base case. Our reserve is actually set at almost a 5% unemployment rate by the end of this year to give you a sense. So that's good news. They're using their credit responsibly, much is made of higher credit card balances, but on the size of the economy and the people are forgetting that the economy is a lot bigger than it was in '19 because of the inflation, everything. And as a percentage, we don't see any stress there. We see a normalization of that credit. So they're working, they're getting paid. They have balances in their accounts. They have access to credit. They've locked in good rates on their mortgages, and they're employed. It's -- we feel it's good. So we think the soft landing is a core thesis, and our internal data supports what our research team sees so they get -- they see it all so through our institute.

Mike Mayo

And then just as far as controlling what you can control in terms of expenses and headcount, tech investments, and maybe throw an AI as part of that what sort of extra efficiencies can you achieve through AI, tech, and other initiatives? You've squeezed a lot out over the last decade plus; what's left to go?

Brian Moynihan

There's always more to go. So I think we've got lined up, if you take what we're doing this year and next year, meaning '24, '25 and roll it into '26, it's a couple of billion dollar plus, which helps us to -- Erika was talking about avoiding growth and expenses keeping below inflation, because you think of us as rolling that expense taken out back into good things. This year will be, I think, \$3.8 billion on technology initiatives. That's up from '21 to '22 by \$500 million or more and then sort of flattish '22 to '23, they're being applied in different ways.

We added relationship managers across the board. We keep opening the branches. We're largely through the rehab of the branches that we're keeping. And these are all spending to grow, and that's what you're seeing. So net new checking accounts: 600,000 for the year. That's 20 straight quarters, net checking account

growth, all good core accounts. Flows into the asset management business: \$80 billion or more. In our Merrill Edge program, the advertising has driven the business. We have 10% more customers, and those customers – which 300,000 or 400,000 customers added in the last 12 months – those customers bring an average opening balance of \$80,000 to \$100,000 to give you a sense. They're not small accounts.

That's good. So we're just investing, but there's 1,000 levers. None of them are simple. But even this year, when we said we got to get the headcount growth back in alliance after the great resignation in '22 when we had to hire fast, we went from 218,000 people in January down to 212,900 at the end of the year. In that, we're rolling over teammates from 1 business to another business where we need help and retraining people and reskilling people. And as AI comes in, and to the extent that we can deploy it, deploy it wisely, it will allow us to redeploy people. And even with our very low turnover rate, which is 7% for year '23 and actually down from 12% in the year '22, and I think 6% in the fourth quarter, we still can manage headcount down just by not hiring people, because that gives us an opportunity. We hired 15,000 people this year. So we are -- we can always hire a little less if we see the efficiencies coming through and redeploy the people we have.

Operator

Our next question is from Matt O'Connor of Deutsche Bank.

Matt O'Connor

Just thoughts on capital allocation from here. Brian, I think there was some -- and sorry if I missed it at the beginning, but I think there was some media coverage about you guys, or you, talking about leaning into markets with capital. I don't know if there's any way to kind of size that? And then just broadly speaking, like how you allocate capital from here or buyback levels and all that stuff.

Brian Moynihan

Yes. I'm not sure of the media report. But at the end of the day, Jim DeMare and team have done a great job deploying capital and growing market share in the sales and trading business, so they're up 7% year-over-year in revenue. FICC was up 11% for the year. Equity was down a little bit, down 1% or so. And that's -- they've done a great job, \$17.6 billion of revenue; highest by a lot over the last few years. And think about it in the '19 time frame, we were \$13 billion in revenues. They fundamentally moved up. That was deploying more balance sheet, a little bit more capital inherently, but not a lot. They're not taking a lot of risk. They made money every trading day in '23 again, I think. And so they do a great job of serving the clients. So don't think there's a big capital -- a massive amount of capital. They get the capital they need; they have the balance sheet and the risk appetite they need, but we're continuing to put money towards that business because they've proven to be successful. We gave them the balance sheet a few years ago, and they were able to deploy.

More broadly, we pay out the dividend. We then have a bunch of capital today. We meet the standards as best, as Alastair said, we could divine from the rule, and we'll see what the final rule looks like when it comes out. But right now, the \$194 billion of CET1 is the level of notional CET1 we'd have to meet the RWA inflation. I'm not saying it's a good rule. I'm just saying we make the math work. And so from now on, we can basically deploy capital to the dividend payment, a couple of billion dollars a quarter. And then everything above that will go to support business growth if we have it, build a little bit of cushion we need to build over some period of time to meet these new rules, if they come through. And then share buybacks, which we bought \$800 million or so last quarter, and you can expect that to keep ticking up.

Matt O'Connor

Okay. That's helpful. And then you did mention that trading or markets is off to a good start so far this year. Obviously, just a handful of days, but any color around that? And then kind of more broadly speaking, as we think about the overall wallet like obviously, banking is depressed, but how would you frame the market trading wallet? Do we use '23 as a jumping off point and grow it by some kind of long-term trend? Or any way to kind of frame that in terms of the base case.

Alastair Borthwick

Yes. It's too early for us to predict what the quarter will look like. We'll get a much better feel for that 4, 5, 6 weeks from now. But I think you can use the '23 numbers as a baseline starting point. And then in the first quarter, I just apply sort of a typical kind of seasonality. Q1 tends to be a very good quarter for us, Q4, less so, just with the client activity. And then just recognize that we're starting from a Q4 record. So that's the only thing I would consider.

Brian Moynihan

And then actually, you mentioned investment banking, Matthew and a team exceeded what we thought in the quarter and seemed to perform at better than the industry and actually were up a little bit year-over-year. But there's a full pipeline, and the question is sort of when is the clarity. And you're seeing some stuff get done, and with stability in rates you'd expect that to kick back up. We typically are running about \$1.5 billion before the added activity because of rates falling in pandemic a quarter. We're now up \$1 billion to \$1.2 billion, you'd expect it to move back in those levels, and we have actually been gaining share over the last few quarters. As the market has gone down around, we held our relative position, grew it. So I think Matthew and the team is in good shape. And this middle market execution has added a lot of throughput to the team and is building up over time.

Operator

We'll take our next question from Glenn Schorr of Evercore.

Glenn Schorr

First question is on the deposits. And I like the path that we've seen in terms of all the stimulus comes all the costs come in, you get some spending, you get some migration, you get some rich people buying treasuries... great. To see this stability in the fourth quarter and hear your comments about 2024 for deposits is a little encouraging. We'd always want more, but it's a little bit encouraging. But my question is, to be 35% higher than 4Q '19 is what I would call a lot more growth than a normal period of time would be with the up and down. So is that a good thing? Or is that a risk? And maybe the answer lies within how much of those excess deposits are sitting in all these new accounts that you've opened versus just cash from sitting around in existing clients that's maybe waiting to be deployed? I hope that question is clear.

Brian Moynihan

So Glen, you're making me have de ja vu, because basically, I think you would have asked this question in the first quarter of '23 too, on a theory that this was all going to run off. And so when we looked at it, we always said, we had grown sort of in a period of time of pandemic sort of 4% or 5% a year in terms of deposit growth. If you strung that line out, that we're still above that line, let's just say that. And now we're turning and growing. So as Alastair said, we troughed in the middle of the year. So we've outgrown what our sort of implied growth rate would have been against size, et cetera. So we feel good about that. It's all core.

Now if you look at the underlying dynamics, you think about the different clients we have, if you start with the wealth management clients, discretely in GWIM, those balances came down and are bouncing around \$300, \$290, \$300 billion on a given day. And they've been relatively stable now for, I don't know, 5, 6 months. I think if you look at the wholesale banking, what's happened is they came they shot up, came down after the pandemic, and then they've been growing back. And they're actually stronger because just the activity has picked up, and the stabilization of line usage shows that the environment around their borrowing and cash is more consistent. So that's been good. And if you look at Consumer, that's what we were saying earlier. If you think about Consumer, where you see, if you take the people accounts with us, the balances in all their deposit accounts pre-pandemic to now. If you look at people had in Consumer, not in Wealth Management, \$50,000, \$100,000, \$250,000, \$1 million in collected balances pre-pandemic, they are down 20%. They move the money they're going to move. And so for Wealth Management and Consumer, largely, if people are going to move money out to get rates, they've done that. And is there -- is it still bouncing around a little bit in Consumer? Yeah, they're \$950 billion more or less on a given day. But it's

stabilized and has been relatively consistent for the last 4, 6, 8 weeks. But that's got to settle in and then you grow out from there. But that -- what that's really telling you is they've kind of moved the money they're going to move. Mostly because they did it, and you don't get that money twice. So you move the chunk in these higher-end consumer balances, they moved 20% of their balances over in to get money market funds, which we capture into other things. And they don't have it to move again, because that was accumulated balances that they had in a zero interest-rate environment, pre-pandemic, plus whatever other things they got. So if you look at the Slide 8, you can see the deposit slides laid out by noninterest-bearing and interest-bearing. But the key is the consumer was 700 going into the pandemic, sits at 950 today. And if you look at the checking, it's still up \$140 billion, and that's kind of bouncing around. You can see it's moved down a little bit, but that's really the high -- the people with high-end checking balances that have moved it into the market.

Glenn Schorr

That's all good and more than I was looking for. I appreciate it. The quick follow-up on reserves now. As you mentioned...

Brian Moynihan

Look at the Consumer Banking page; it's 47 basis points all in. And it was 6 basis points 6 quarters ago. And so -- and that's all driven by the CDs -- you know we don't have a lot of CDs -- and some of the high-end money market pricing. But the point is if it was going to be moved, it's -- think about that. So the money that's moved is moved, and we pay higher rates for very high balances and stuff like that. So especially in the Merrill Edge platform. So a lot of that dynamic is through the system right now for lack of better term.

Glenn Schorr

That's great. Good comment. I appreciate that. Quickly on reserves with a pretty solid economy, resilient U.S. consumer, your NPLs are down. You have a lot of reserves. The question is, what are the signposts that you or we should be looking for to know when you've added enough when we are stable enough point in time, and you actually start funding charge-offs from reserves and not adding.

Alastair Borthwick

I think we're getting pretty close now because things are beginning to stabilize. They're beginning to normalize -- the whole. This is a period of transition for the economy, and it's a period of transition for our clients, too. A lot of them are dealing with higher interest rates, and they're just beginning to moderate and change their spending behaviors. So -- we've seen a trend over the course of the past few quarters. It's pretty predictable around the consumer side. You can see that in our disclosures. So I think it's Slide 12 and 13. But that's going to bounce around over the course of the next couple of quarters, now that we're back towards 2018, 2019 levels. It's going to settle in, we think, in the first half of this year.

And then on the commercial side, the asset quality remains, really, in a very good position. We happened to have a couple of names that popped up this quarter. But to your point, we were pretty fully reserved against them. That wasn't a surprise to us. We've been seeing those over the course of the past 6 months. So we think we're getting close there, Glenn. And obviously, the closer we get to a soft landing, the better we're going to feel about that.

Brian Moynihan

Glenn, as you think about it, when you said reserves, remember, because of CECL stuff, we've always got that sort of the lifetime reserve methodology, which we're all still getting clear now that we've operated under it for a few years. But this quarter, we actually had commercial reserves come down to pay for the charge-offs on a specifically prior period reserved properties or loans, and that happened. And so you saw some of that. Be careful on the consumer side because basically, the pay as you go side, the consumer side is still building up a nominal amount of charge-offs consistent with where it was in '18, '19. So if you look at card in '18, '19, the charge-off rate across the 8 quarters ranged from a low of 2.90% to a high of 3.26%. We're at 3.07% today. But we're \$6-8 billion higher in balances. So you got to be careful of the nominal

amount to get that right. If you go look at it more broadly, all the company, where we had 45 basis points this quarter in the range in those 8 quarters were 34 to 43 basis points. But what's different is the CRE piece of that and the charge-offs. So the reserve to loans and all the classic factors you look at are very strong. The reserve has set itself with basically: half the reserve is driven by the adverse case scenario. To give you a sense versus the base case and then some judgment on top of that. And so as it becomes clearer that we're in a soft landing, to Alastair's point, there's less allocation to those scenarios we always will make some. But when you put all that together and weight it, it has unemployment pushing up in the high 4s. And you look at unemployment today, it's nowhere close to that, and there's no prediction to get there in a base case. So that -- that's what we'll start to ease up on the general reserving. But remember, on card, it's a bit of pay as you go. And we were running around 6% reserves. We're up to 7% against card now. So there might be a little bit coming back, but not -- not that. I'd rather have the growth to sop that up down to 6% in cards than give them back to reserves.

Operator

We'll take our next question from Ken Usdin of Jefferies.

Ken Usdin

Just a technical clarification on that BSBY \$1.6 billion. So I presume that, that you start to get that back mid-quarter 4Q next year, given the November 15, 2024 termination. And then does it just run out ratably. Just wondering how -- over what exact period of time you get that \$1.6 billion?

Brian Moynihan

Ken, Happy New Year. It's -- this year is '24.

Alastair Borthwick

Correct. So Ken, yes, you got it right. We'll get some of it back at the back end of 2024. So we'll get a little bit in the fourth quarter. And then I'd say we get most of it back in '25, most of the remainder back in '26, that's the easiest way to think about it. So what you had was right.

Ken Usdin

So it's a little -- so was it straight line? Or is it a little bit front -- I just want to just a straight line divided by or it has a little bit of like a tail?

Alastair Borthwick

A little bit front loaded. No, it's got a little more in 2025 than 2026.

Ken Usdin

Okay. Okay. I got it. And then just one question. Can you remind us of brokerage fees this quarter felt the impact, I think you said it, of the soft averages from this quarter. And so I think should we expect to see just from the markets bounce that we saw in the fourth quarter, that to play well into the first quarter starting points from the management fees perspective.

Alastair Borthwick

Yes, I think you should expect our global markets performance to continue right now. I mean, obviously, there's a pretty constructive environment for the markets business at this point. I don't think anything has changed there. There's a lot of client repositioning going on. So yes, I think the fourth quarter is sort of the right number to start with. And then you just got to, I think, adjust for the fact that, obviously, you've got a step-up in their activity in Q1 if you're --

I don't know if I misinterpreted, if you're talking about the wealth management, then those fees are obviously just going to work on the monthly lag based on where the markets go over time. So obviously, the markets are elevated right now, and that should portend well for the future.

Ken Usdin

That's what I was getting at. Just confirming that we didn't see the benefit yet, that comes further based on the averages and how that will play forward presuming the market hangs in there.

Alastair Borthwick

Correct. That tends to be a lag by a month or so. So you'll see that in Q1.

Operator

We'll take our next question from Ryan Kenny of Morgan Stanley.

Ryan Kenny

Just following up on a few questions ago on the commercial credit side, so the commercial net charge-offs did roughly double sequentially. And you mentioned that there were a few customers that popped up. Should we interpret that to mean that the pace of deterioration decelerates, and it was just a one-off? Or is there anything else going on under the hood there?

Alastair Borthwick

Yes. So I don't think -- let me for this way. I think it's too early to conclude that it's anything other than just a momentary spike up. But if you look at that chart, essentially what's going on is 2 things. First, we've got a little bit of office, and that's going to bounce around over the course of time. It just takes a while to resolve that portfolio. It's pretty small for us, obviously. We feel like we're doing all the right things with it, but that was a little elevated this quarter relative to the prior 3. And then more broadly, in commercial, there were a couple of other things that took place this quarter. Again, we were pretty fully reserved against them. So we sort of saw those coming. Asset quality generally in commercial remains in a very, very good place outside of the office sector. And you can again see that in terms of -- look at our reservable criticized; that declined this quarter. So I don't think there's any change there. The issue is just that we're starting with such small numbers in commercial, that anything appears like a spike.

Ryan Kenny

And just one more clarifying question on NII. So in this scenario with the 6 rate cuts, can you just help us understand how you expect the deposit mix to migrate? And specifically, will the migration from NIB to IB deposits grind to a halt? Or is there any scenario where NIB deposits actually start growing again?

Alastair Borthwick

Well, I think what we're trying to describe is a sense that we're getting towards the tail end of this now. Partly because we're now 6 months away from the last time that the Fed raised rates. And then partly because if we do have rate cuts, it's going to start to disincite people moving out of noninterest-bearing. So that's what we're describing over the course of time. We've got to see how that develops through the course of the year.

Operator

We'll take our final question from Gerard Cassidy of RBC.

Gerard Cassidy

Brian, Alastair. You guys have obviously done a very good job in the Consumer Banking area with digital banking. And I frame that for you guys in this question, we hear a lot about AI and what it could do for the banking industry. And when you look out over the next 3 to 5 years, and you invest in AI to improve efficiencies. Could it have a similar impact to what digital banking did for Consumer Banking, pre-iPhone to where we are today in your business? Or is it going to be more like blockchain, where there's a lot of discussion about the future of blockchain, but we don't hear much about that anymore. Do you guys have a view on what AI could be for your business over the next 3 to 5 years?

Brian Moynihan

I'm not -- I agree. I'm not sure that there's a relevant comparison to blockchain. But let's just focus on AI. If you look at '21, you can see the digital movement. One of the things in the digital movement you see is Erica in the lower left-hand page, lower left-hand chart on Page 21, Gerard. And you can see that in the fourth quarter of the 170 million interactions with Erica, where people effectively answered their own question, another 2 million people from last year to this year using it on a base of 16, up to 18 million people using, unique users. And that's just an example. And that's AI in early stage. We built that starting 10 years ago, it operates on our data, it uses natural-language processing. You have to keep updating that for the way people use words, that process. But I think 170 million phone calls, walks into branches, e-mails, et cetera, where that inquiry would have to go through another place, and it's able to clients to do things and find them.

So we think that there's vast promise for AI, and we're deploying in places, a lot of internal stuff -- we help employees work better, work faster. We're doing it. We have it in our coding shop. There's coders using it to continue to improve their effectiveness and learning it. But it's still -- there's still the care that has to be taken on data and usage and models and accountability; it's, all that stuff is still high. So we're using for things that are a little easier. And we think it has great promise. It's just going to -- I'd say it's going to be more similar to digital what the pace will be to be a little bit of how far it can go before you start to run into difficulties, applying it effectively. But it plays off of the same thing that we've done in digital and Erica and other things.

We brought Erica over the commercial side. Now the CashPro uses Erica to answer questions, and we're seeing the use of that grow. And you can see the customers can interface and be comfortable with it, and that's good. So it will have tremendous help as it's applied in more and more ways. We are still trying to hear and seeing if it really works, how much benefit it generates, can it be controlled under the model outputs controlled and also the things. But we've had algorithm machine learning type models all over our company for years. And so the billions we've spent literally over the last 10 years on data cleanliness, data order, getting the data in the right place, making sure it's dependable and the models operated ever under that aren't these open autonomous natural language models, but are models that are machine learning models, we've seen great promise. That's partly how we operate the company now, basically on the same dollar amount of expenses we had in 2015 or 2016 to give you a sense. So yes, it's been digitization, but it's also been using more of that. So it's got -- we have high hopes for it. We just have to make sure it does a great job for the customer.

Gerard Cassidy

Very good. And then as a follow-up, we've been reading and seeing a lot of information about the private credit markets, making inroads -- and we know the shadow banking industry has been around for a long time, our entire careers. What are you guys seeing today? Is it more competitive against the Apollos and Blackstones in lending. And then second, they're also, I'm assuming customers of yours, how do you balance servicing them, but at the same time, they could be a direct competitor in the lending markets.

Brian Moynihan

Well, that's all the issues that we got to balance on a given day, but -- and we can originate loans into their platforms, and there are lots of things we can do. So we continue to work for that. I think to take it more broadly, my colleagues and I have made it clear that the strictures around our industry, the methodology operating and the openness and the ability to operate outside has led to the mortgage business, largely being done outside the industry. And most other asset classes, for lack a better term, outside the industry, and the private lending is just another case of that. And I think we're very competitive. We do a great job, and we have \$0.5 trillion of consumer -- excuse me, commercial loans outstanding. We have hundreds of billions of dollars of mid-sized companies, et cetera. So we think there's a way that we can do this with our clients and help them and help us. A lot of them are asking, can you help us originate loans? I think it still a question ahead of whether the policy of having more things going out of the bank industry is good policy.

We, of course, within the banking industry don't think it's a good policy because the reality, I think, an inherent part of your question was, when these companies bounce around because of economic stress or for them as an operator, the banking system has a workout methodology, not a liquidation methodology or trading methodology, and that's served American enterprise very well. And so I think we have to be careful and see how it affects the economy that way. And those are issues that were true pre-pandemic going to become more acute. So we feel we'll be competitive no matter what. Nothing scares us. We've got a great team, and they do a great job. But it's endemic of the issue that you keep pushing too much capital regulation. Stuff will find its way outside the system. And that doesn't mean the risk has changed. It just means it moves from purview of the regulators, and that's one of the points we make. But on the other hand, we are working with those enterprises to help us be a combined effective competitor.

Operator

This does conclude our question-and-answer session. I'd be happy to return the call to Mr. Brian Moynihan for closing comments.

Brian Moynihan

Happy New Year to everyone. Thank you for all the time today and on a very busy day with lots of us reporting. As we summarize, fourth quarter was a good quarter and another strong year for our company, driven by organic growth from all our customer segments. Our digital capabilities continue to grow. Our deposits and loans grew, and that's good news. Our NII continues to exceed what we tell you each quarter in terms of what we think is going to happen, which is good news. We gave you new guidance, which we plan to hit. Our capital markets activity remains good on both the investment banking side and the sales trading side. And importantly, to get the value of that revenue, we have to have good expense management. You saw us during the course of the year, take headcount down from 218,000 to 212,900. You saw us take the expense down sequentially, so that sets us up good for next year. And with all that, our capital and asset quality remains strong as does our liquidity. So thank you, and we look forward to talking to you next quarter.

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