

Bank of America Corporation (NYSE:[BAC](#)) Q2 2023 Earnings Conference Call July 18, 2023 8:30 AM ET

Company Participants

Lee McEntire - IR

Brian Moynihan - CEO

Alastair Borthwick - CFO

Conference Call Participants

Gerard Cassidy - RBC

Glenn Schorr - Evercore

Mike Mayo - Wells Fargo

Jim Mitchell - Seaport Global

Christopher Kotowski - Oppenheimer

Betsy Graseck - Morgan Stanley

Kenneth Usdin - Jefferies

Charles Peabody - Portales

Erika Najarian - UBS

Operator

Good day, everyone, and welcome to the Bank of America Earnings Announcement. It is now my pleasure to turn the program over to Lee McEntire. Please go ahead, sir.

Lee McEntire

Thank you, Catherine. Good morning, welcome and thank you for joining the call to review our second quarter results. I trust everyone has had a chance to review our earnings release documents. They are available on the Investor Relations section of the [bankofamerica.com](#) website, and includes the earnings presentation that will be referring to during the call.

I'm going to 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.

Before I do that, let me remind you that we may make forward-looking statements and refer to non-GAAP financial measures during the call. The forward-looking statements are based on management's current expectations and assumptions that are subject to risks and uncertainties. Factors that may cause the actual results to materially differ from expectations are detailed in our earnings materials and SEC filings that are available on the website. Information about our non-GAAP financial measures, including reconciliations to U.S. GAAP, can also be found in our earnings materials that are available on the website.

So, with that, it's my pleasure to turn the call over to you, Brian. Thanks.

Brian Moynihan

Thanks, Lee, and good morning to all of you, and thank you for joining us.

I'm starting on Slide 2 of the earnings presentation. This morning, Bank of America reported one of the best quarters and one of the best first halves net income in the company's history. Our results this quarter once again include solid performance on things we can control by delivering organic growth and operating leverage. We did that in economy that remains healthy that had a slowing rate of growth. It was also a quarter that included volatility from the debate about the debt ceiling, continuation of central bank monetary tightening actions and a slowing in consumer spending and the slowing inflation.

As you look at it now, our customer spending patterns now are more consistent with the pre-pandemic, lower growth, lower inflation economy. Before Alastair takes to the details, let me summarize Bank of America's quarter two performance.

On Slide 2, you can see the highlights. We earned \$7.4 billion after tax, and grew earnings per share of 21% over the second quarter of 2022. All business segments performed well, and I want to thank all my teammates for doing so. We grew clients and accounts organically and at a strong pace. We delivered 8th straight quarter of operating leverage, led by 11% year-over-year revenue growth.

We further strengthened our balance sheet, improving our common equity Tier 1 ratio more than 110 basis points year-over-year to 11.6%, and we have \$867 billion in Global Liquidity Sources. We also produced strong returns for our shareholders with a return on tangible common equity of 15.5%, continuing a streak of many quarters at that level or above.

While our business has performed well this quarter, I would particularly highlight our global markets and sales and trading team, and our investment banking teams. Both have appeared to outperform the industry peers, investments made over the past couple of years and global markets capabilities under Jim DeMare's leadership, as well as Matthew Koder's leadership in the global corporate investment banking area allowed us to improve our market shares for both of these people. I'd also note the strong contribution by our middle-market clients and our teammates there led by Wendy Stewart.

I'd also like to touch a few additional points before turning the call over to Alastair. These points will help illustrate continued investment in the franchise and work we do to drive growth. Let's start with the organic growth slide on Page 3.

On that page, we highlight some of the important elements of organic growth. You can see evidence in every business segment as you look at the page. In consumer, in quarter two, we opened 157,000 net new checking accounts. Consumers now had 18 straight quarters of positive net new checking account growth. Now these are core primary checking accounts across the board, allowing our tremendous deposit franchise to continue to prosper and take market share.

While the progress may appear inchmeal, over the last three years, we've grown our core customers and consumer checking account customers from 33 million to 36 million. We opened another 1 million-plus credit card accounts this quarter, and have 10% more investment accounts this year than we did last year in the consumer business.

Consumer investment business balances reached a new high of \$387 billion aided by a 30% increase in new funded consumer investment accounts year-over-year, and frankly, moving our money from our depositors into the market as they have done so.

In Global Wealth, we added 12,000 net new relationships in Merrill and the Private Bank, and our advisors open more than 36,000 new banking relationships in the quarter, showing a strong differentiation of our model of fulfilling both investment in banking these for clients.

In the past 90 days, we added 190 experienced advisors to our salesforce in addition to digital capabilities to help us deliver at scale. In Global Banking, we added clients and increased number of solutions per relationship. Over the past three years, we've added net new relationship managers and increased our client facing headcount by nearly 10%. We've also improved our tools for prospect colleagues through investments in technology, and it's benefiting our ability to add customers and improve our solutions per existing clients.

Year-to-date, we've added over 1,000 new commercial and business banking clients across the United States, which is the same number we added in the full year of last year. Again, operationalizing that ability to do this at scale increases our speed of onboarding these clients.

In our global markets area, we saw one of the highest second quarter for sales and trading in our history, so another quarter of good organic growth. To achieve that growth, we are managing our expense trajectory, which Alastair is going to cover, requires inherent efficiency progress from digital and other applied technology across all our units.

Digital superiority is key to our operating dynamics. First, it produces a great customer experience resulting strong customer retention and strong customer scores. Second, it ensures our position as a lead transactional bank for our customers, whether they are consumers, companies or investors. Third, it preserves a strong deposit balance as a good

price and do the core nature of transactional deposits. And last, but importantly not least, efficiency.

So, how we're doing on digital progress? You can see that on Slide 4, first with the consumer. In consumer, we now have 46 million active users that are digitally engaged with our digital platform and are logging over 1 billion times a month. And even with this scale, the stage of maturity logins is up double digits from last year.

Customer uses of Erica continues to be the expectations. This was an early application of natural language processing and artificial intelligence that we built in our company, and it continues to learn about it with additional use. Interactions with Erica rose 35% in just the past year, and now it's crossed over 1.5 billion client interactions in the first five years of introduction.

There's a lot of questions about our artificial intelligence out there, but one can't clue together a series of systems. We have to build a system and it's highly regulated, high customer-focused business, and Erica is one such application you can see its impact.

Likewise, Zelle hasn't slowed down either. The number of people using Zelle grew 19% this past year. Remember, these aren't new functionalities at this point, they've been around for years, but they continue to grow very strong growth rates, showing customer desire and acceptance of the activities.

You can see the digital sales continue to growth. We continue to have both great high-tech and high-touch options. As part of that, we've added 310 new financial centers since 2019, and by the end of this year, we have refurbished every one of our existing centers in our company. We plan on opening 50 more centers a year for the next few years, which included an expansion in nine new markets we announced a few years ago - a few weeks ago, excuse me

Our entrance into these markets is enhanced by digital and leads to strong early success. Just to give you a point of reference, for all the expansion markets over the last several years for branches opened a year or more in those expansion markets, our average deposit balances per those branch are \$160 million in each branch.

You go to the wealth management digital on Slide 5, you can see that they continue to be the most digitally engaged clients in our company. Our advisors have led the way in driving a personal-driven advice model, supplemented by our digital tools. You can see the client adoption rate of 82% in Merrill and 92% in the private bank, 78% have embraced digital delivery as a tool service providing more convenience for them and our advisors.

Erica and Zelle also continue expanding these client sets. A new program we announced just a few quarters ago has generated 20,000 digital leads to 7,000 advisors, it's called Advisor Match, matching our clients with advisors of their choice.

On Slide 6, you can see the digital engagement of global banking area. Corporate treasury teams and our clients appreciate the ease of doing business with us digitally. CashPro App sign-ins are up nearly 60% from last year, where the value of payments through CashPro App are up 20%. As you can see, every line of business is delivering strong organic growth.

Investments made in technology have enabled us to grow industry-leading positions in digital tools, while enabling our clients to do great things and making us more efficient. This provides for a very satisfied, stable customer and client base with Bank of America's primary provider. And by doing with a digital application, that also produces operating leverage.

On Slide 7, you can see our streak of operating leverage continued in the second quarter of 2023. We're now back in eight quarters in a row. The chart on Slide 7 covers the 8.5 years at 34 quarters, and all but eight of those quarters and you can see those identified. Six of which were in the heart of the pandemic, we've achieved operating leverage. Operating leverage is that simple task of growing revenue at a better growth rate and expense.

As I said, Alastair's is going to discuss with you our good and declining expansion trajectory which sets us up to continue to provide operating leverage, even with the shift in economy. In sum, in the quarter, we delivered earnings that are 19% higher and a 15% return on tangible common equity that was driven by continued strong organic growth and operating leverage in a volatile economic environment.

Alastair is going to talk to you about a bit more strength we see ahead in our net interest income for the balance of the year and that provides a better start as we think about 2024. You're going hear our expectations for the quarterly decline expenses in the following quarters for the rest of '23, even as we keep investing, and you hear about the resilience of credit and strong trajectory in capital, this all positions us well to continue both our streaks of organic growth and operating leverage.

With that, let me turn it over to Alastair.

Alastair Borthwick

Thank you, Brian.

And on Slide 8, we list the more detailed highlights of the quarter, and then Slide 9 presents a summary income statement, so I'm going to refer to both of those. For the quarter, we generated \$7.4 billion in net income, and that resulted in \$0.88 per diluted share. A year-over-year revenue growth of 11% was led by a 14% improvement in net interest income, coupled with a strong 10% increase in sales and trading results ex-DVA.

Revenue was strong, and it included a few headwinds, and I thought I'd go through those headwinds first. We had lower service charges from both higher earnings credit rates on deposits for commercial clients, and the policy changes we announced in late 2021 to lower our insufficient funds and overdraft fees for our consumer customers. The good news on

the consumer piece is year-over-year comparisons get a bit easier starting next quarter, as the third quarter of '22 reflects the full first quarter of these changes.

Second, we had lower asset management and brokerage fees as a result of the lower equity and fixed income market levels, and market uncertainty that impacted transactional volumes compared to a year ago quarter.

Third, we have a net DVA loss of \$102 million this quarter compared to a gain in DVA of \$158 million in the second quarter a year ago. We also recorded roughly \$200 million in securities losses as we closed out some available for sale security positions and their related hedges, and we put the proceeds and cash.

Lastly, and just as a reminder, our tax-rate benefits from ESG investments, and those are somewhat offset by operating losses on the ESG investments which show up in other income. So, this quarter, our tax-rate is a little bit lower and the operating losses are a little bit higher from volume of these deals. So you have to be careful in analyzing the lower tax-rate without considering the operating losses, and that in-turn often offsets what would have been higher revenue elsewhere. Our tax-rate for the full year is expected to benefit by 15% as a result of the ESG investment tax credit deals, and absent of these credits, our effective tax-rate would still be roughly 25%, and we continue to expect a tax-rate of 10% to 11% for the rest of 2023.

Expense for the quarter of \$16 billion included roughly \$276 million in litigation expense which was pushed higher this quarter by the agreements announced last week with the OCC and the CFPB on consumer matters. Asset quality remains solid and provision expense for the quarter was \$1.1 billion consisting of \$869 million in net charge-offs and \$256 million in reserve built. The provision expense reflects the continued trend in charge-offs towards pre-pandemic levels, and it is still below historical levels.

The charge-off rate was 33 basis points, and that's only 1 basis point higher than the first quarter and still remains well below the 39 basis points we last saw in Q4 of 2019, when remember, 2019 was a multi-decade low.

I'd also use Slide 9 just to highlight returns, and you can see we generated 15.5% return on tangible common equity and 94 basis points return on assets.

Let's turn to the balance sheet starting with Slide 10, and you can see our balance sheet ended the quarter at \$3.1 trillion, declining \$72 billion from the first quarter. A \$33 billion or 1.7% reduction in deposits closely matched a \$41 billion decline in securities balances through paydowns from the hold to maturity and sales of available for sale securities. Securities are now down \$177 billion from a quarter to '22. Cash levels remained high at \$374 billion and loans grew \$5 billion.

As Brian noted, our liquidity remains strong with \$867 billion of liquidity, up modestly from the first quarter of '23, and still remains nearly \$300 billion above our pre-pandemic fourth quarter '19 level. Shareholders' equity increased \$3 billion from the first quarter as earnings were only partially offset by capital distributed to shareholders. AOCI decreased

by \$2 billion, driven by derivatives valuation and AFS securities values were little changed. So, there is little change in the AOCI component that impacts regulatory capital. Tangible book-value is up 10% per share year-over-year.

During the quarter, we also paid out \$1.8 billion in common dividends, and we bought back \$550 million in shares to offset our employee awards. And last week, we announced the intent to increase our dividend by 9%, beginning in the third quarter.

Turning to regulatory capital, our CET1 level improved to \$190 billion from March 31st, and the ratio of CET1 improved more than 20 basis points to 11.6%, once again, adding to the buffer over our 10.4% current requirement. While our risk-weighted assets increased modestly in the quarter.

Also noteworthy, on July 3rd, we initiated dialog with the Fed to better understand our CCAR exam results, and we remain in discussions today with no news to update as of now. In the past 12 months, we've improved our CET1 ratio by more than 110 basis points, and we've done that while supporting claims for loan demand and returned \$11.3 billion in dividends and share repurchases to shareholders. A supplemental leverage ratio was 6% versus our minimum requirement of 5%, and that leaves us plenty of capacity for balance sheet growth. Finally, the TLAC ratio remains comfortably above our requirements.

So, let's now focus on loans by looking at average balances, you can see those on Slide 11, and there you can see, average loans grew 3% year-over-year. The drivers of loan growth are much the same. Consumer credit card growth is strong, and then commercial loans grew 4%. The credit card growth reflects increased marketing, enhanced offers and higher levels of account openings over time.

And in commercial, we saw a little bit of a slowdown this quarter, driven by higher paydowns from borrowers and weaker customer demand as opposed to any credit availability from us. We are still open for business for loans.

While loan growth has slowed, it's generally remained still ahead of GDP and commercial client conversations remain solid as our clients seem to be waiting for some of the economic uncertainty to lift before borrowing further.

Slide 12 shows the breakout of deposit trends that's on a weekly ending basis across the last two quarters, and it's the same chart that we provided last quarter. In the upper left, you see the trend of total deposits. We ended the second quarter at \$1.88 trillion, down 1.7% with several elements of our deposits seeming to find stability. Given the normal tax seasonality impacts on deposit balances in Q2 and the monetary policy actions, we believe this is a good result.

I want to use the other three charts on the page to illustrate the different trends across the last quarter, and more specifically in each line-of-business. In consumer, looking at the top right chart, you see the difference in the movement through the quarter between the balances of low to no interest checking accounts and the higher-yielding non-checking accounts. Here you can also see the low levels of our more rate-sensitive balances in

consumer investments and CD balances. And they're both broken out here. In total, we've got still more than \$1 trillion in high quality consumer deposits, which remains \$274 billion, above pre-pandemic levels.

In the second quarter that decline in consumer deposits was driven by higher debt payments, higher spend and seasonal tax activity. And some non-checking balances that rotated from deposits into brokerage accounts. We did see some competitive pressure this quarter within about roughly \$40 billion of CD's, as some of the financial institutions pushed prices higher. And at this point with deposits, far exceeding our loans we've not yet felt the need to chase deposits with rate.

Broadly speaking, average deposit balances of our consumers remain at multiples of their pre-pandemic level, especially in the lower end of our customer base. Total rate paid on consumer deposits in the quarter rose to 22 basis points, and remains low relative to Fed funds driven by the high mix of quality transactional accounts. Most of this quarter's 10 basis point rate increase remains concentrated in those CD's and consumer investment deposits and together, those represent only 11% of our consumer deposits.

Turning to Wealth Management. This business is also impacted by tax payments and normally shows the most relative rate movement because these clients tend to have the most excess cash. The previous quarters trend of clients moving money from lower-yielding sweep accounts into higher-yielding preferred deposits. And moving off-balance sheet on to other parts of the platform seem to stabilize this quarter, and our sweep balances were more modestly down \$72 billion.

At the bottom right, note the global banking deposits stability. We ended the second quarter at \$493 billion down \$3 billion from the first quarter. We've now been in this \$490 billion to \$500 billion range for the past several quarters. And these are generally the transactional deposits of our commercial customers that they use to manage their cash flows. And while the overall balances have been stable, we've continued to see shift towards interest-bearing as the Fed raised rates one more time during the quarter before pausing in June.

Non-interest-bearing deposits were 40% of their deposits at the end of the quarter. Focusing for a moment, on average deposits using Slide 13, I really only have one additional point to make. While you've seen the modest downtick in deposits for the past several quarters, as the Fed has removed some accommodation, we just want to note that deposits remain 33% above the fourth quarter 2019 pre-pandemic period. And as you look at the page every segment relative to pre-pandemic is up at least 15%, consumer is up 40%, consumer checking is up more than 50%, and as noted global banking has been right around \$500 billion for the past five quarters, and it remains 31%, above pre-pandemic.

So let's move to Slide 14. And we'll continue the conversation that we began last quarter around management of excess deposits above loans. In the top left, note the balances in the second-quarter of each year since the pandemic began. The excess of deposits needed to fund loans increased from \$500 billion pre-pandemic to a peak of \$1.1 trillion in the fall of 2021. And as you can see it remains high at the end of June at \$826 billion.

In the top right, note that the amount of cash and securities held has increased across time, in-line with the excess deposit trend. And you will also note the mix shift over time. This excess of deposits over loans has been held in a balanced manner across the period shown with roughly 50% fixed longer dated held-to-maturity securities and the rest has been held in shorter dated available-for-sale securities and cash. Cash and the shorter day-to-day FS securities combined was \$516 billion at the end of the quarter. And cash of \$375 billion is more than twice what we held pre-pandemic and you should expect to see that come down over time.

We made these investments, given the mix and transactional nature of our customers deposits, particularly given the excess deposits built. Note also in the bottom left chart, the combined cash and securities yields continue to expand this quarter and remain meaningfully wider than the overall deposit rate paid that's a result of two things.

Securities book has seen a steady decline since the fall of 2021, when we stopped adding to it. With less loan funding needs, proceeds from security pay-downs have been deployed into higher-yielding cash and through this action, and the increased cash rates, the combined cash and securities yield has risen further and faster than deposit rates. Deposits at the end of the quarter were paying 124 basis points while our blend of cash and securities has increased to 319 basis points.

So, over the past year the deposit cost has risen by 118 basis points, and the cash and securities yield has improved by 164 basis points. And as a reminder, this slide focuses on the banking book because our global markets balance sheet has remained largely market funded.

Finally, one very last - one last very important point that I want to make is on the improved NII of our banking book. The NII excluding global markets which we disclose each quarter troughed in the third quarter of 2020 at \$9.1 billion, and that compares to \$14 billion in the second quarter of 2023, so almost \$5 billion higher on a quarter basis, \$20 billion per year. That's led to a stronger capital position even as we returned capital to shareholders and supplied capital to our customers in the form of loans and other financing capital.

And then more specifically on the hold-to-maturity book, the balance of that portfolio declined again \$10 billion from the first quarter, it's down \$69 billion since we stopped adding to the book in the third quarter of '21. The market valuation on our hold-to-maturity book, which is in a negative position, worsened \$7 billion since March 31, 2023, driven by a 54 basis point increase in mortgage rates. The OCI impact from the valuation of our hedged AFS book modestly improved this quarter.

Let's turn to Slide 15, and we can focus on net interest income. On a GAAP or non-FTE basis, NII in the second quarter was \$14.2 billion, and the fully tax equivalent NII number was \$14.3 billion. So, I'm going to focus on that fully tax equivalent.

Here NII increased \$1.7 billion from the second quarter of '22 or 14%, while our net interest yield improved 20 basis points to 2.06%. This improvement has been driven by rates which includes securities premium amortization, partially offset by global markets

activity, and \$137 billion of lower average deposit balances. Average loan growth during the period of \$32 billion also aided the year-over-year NII improvement.

Turning to a linked quarter discussion, NII of \$14.3 billion is down \$289 million or 2% from the first quarter, and that's driven primarily by the continued impact of lower deposit balances and mix shift into interest bearing, partially offset by one additional day of interest in the period. Global markets NII increased during the quarter.

The net interest yield fell 14 basis points in the quarter, driven by a larger average balance sheet due to the cash positioning we chose and some higher funding costs. This quarter's compression, we believe, was just a little anomalous, driven by our decision late first quarter to position the balance sheet around higher cash levels.

Turning to asset sensitivity and focusing on a forward yield curve basis, the plus 100 basis point parallel shift at June 30 was unchanged from March 31, '23, at \$3.3 billion of expected NII over the next 12 months in our banking book, and that assumes no expected change in balance sheet levels or mix relative to our baseline forecast, and 95% of the sensitivity remains driven by short rates. A 100 basis point down-rate scenario was unchanged at negative \$3.6 billion.

Let me give you a few thoughts on NII as we look forward. We still believe NII for the full year will be a little above \$57 billion, which would be up more than 8% from full year 2022, and this could include third quarter at approximately the same level as second quarter, so think \$14.2 billion, \$14.3 billion.

And then fourth quarter, somewhere around \$14 billion. That's a slightly better viewpoint than we had last quarter for the third and fourth quarter, with a little more stability closer to the second quarter level, and therefore provides a better start point for 2024.

So, let's talk through the caveats around our NII comments. First, it assumes that interest rates in the forward curve materialized, and an expectation of modest loan growth driven by credit card. On deposits, we are expecting modestly lower balances led by consumer, and we expect continued modest deposit mix shifts from global banking deposits into interest bearing. The past few months have provided us a little more positive outlook around NII, given the apparent stabilization of some elements of deposits as well as better pricing, and now we'll see how the rest of the year plays out.

Okay, let's turn to expense, and we'll use Slide 16 for that discussion. Second quarter expenses were \$16 billion, that was down \$200 million from the first quarter. And as I mentioned, the second quarter included \$276 million of litigation expense. In addition, we also saw a little higher revenue related expense driven by our sales and trading results. Those higher costs were more than offset by the absence of the first quarter seasonal elevation of payroll taxes and savings from a reduction in overall full-time headcount.

Now, excluding the 2,500 or so summer interns that we welcomed into our offices over the summer months, our full-time head count was down roughly 4,000 from the first quarter start point to 213,000. That's some good work after peaking at 218,000 in January. Our

summer interns will leave us in the third quarter, and hopefully many will return as full-time associates next summer. And at the same time in Q3, we welcomed back about 2,600 new full-time hires as college grads, many of whom interned with us last summer. And that's a very diverse class of associates who are excited to join the company.

As we look forward to next quarter, we would expect the third quarter expense to more fully benefit from the second quarter head count reduction, even as we remain in a mode of modest hiring for client-facing positions. Additionally, the proposed notice of special assessment from the FDIC to recover losses from the failures of Silicon Valley and signature banks could add \$1.9 billion expense for us, \$1.5 billion after tax, and we just remain unsure at this point of timing to record that expense.

Let's now move to credit, and we'll turn to Slide 17. Net charge-offs of \$869 million increased \$62 million from the first quarter, and the increase was driven by credit card losses as higher late-stage delinquencies flowed through to charge-offs. For context, the credit card net charge-off rate was 2.6% in Q2, and remains well below the 3.03% pre-pandemic rate in the fourth quarter of '19.

Provision expense was \$1.1 billion in Q2, and that included a \$256 million further reserve build, that's driven by loan growth, particularly in credit card, and it reflects a macroeconomic outlook that on a weighted basis continues to include an unemployment rate that rises to north of 5% in 2024.

On Slide 18, we highlight the credit quality metrics for both our consumer and commercial portfolios. On consumer, we note we continue to see asset quality metrics come off the bottom, and they remain below historical averages. Overall commercial net charge-offs were flat from first quarter. And within commercial we saw a decrease in C&I losses that was offset by an increase in charge-offs related to commercial real estate office exposures.

As a reminder, commercial real estate office credit exposure represents less than 2% of our total loans, and this is an area where we've been quite intentional around our client selection, portfolio concentration, and deal structure over many years, and as a result, we've seen NPLs and realized losses that are quite low for this portfolio.

In the second quarter we experienced \$70 million in charge-offs on office exposure, to write down a handful of properties where the LTV has deteriorated. Our charge-offs on office exposures were \$15 million in the first quarter. We pulled forward some of the office portfolio stats provided last quarter in a slide in our appendix for you. Now, we continue to believe that the portfolio is well positioned and adequately reserved against the current conditions.

Moving to the various lines of business and their results, starting on Slide 19 with consumer banking, for the quarter, consumer earned \$2.9 billion on good organic revenue growth and delivered its 9th consecutive quarter of strong operating leverage, while we continue to invest in our future. Note that top-line revenue grew 15% while expense rose 10%. These segment results include the bulk of the impact of the costs of the regulator agreements from last week.

While reported earnings were strong in both periods at \$2.9 billion, it understates the success of the business because the prior year included reserve leases while we built reserves this quarter for card growth.

EPNR grew 21% year-over-year even with the added cost of the agreements. And the revenue growth overcame a decline in service charges that I noted earlier. Much of this success is driven by the pace of organic growth of checking and card accounts as well as investment accounts and balances, as Brian noted earlier

In addition to the litigation noted, expense reflects the continued business investments for growth, and as you think about this business, remember much of the company's minimum wage hikes and the mid-year increased salary in wage moves in 2022 impact consumer banking the most, and that, therefore, impacts the year-over-year comparisons.

Moving to wealth management on Slide 20, we produced good results earning a little less than \$1 billion. These results were down from last year as asset management and brokerage fees felt the negative impact of lower equity, lower fixed income markets, and some market uncertainty, impacting transactional volume. Those fees were complemented by the revenue from a sizeable banking business, and that remains an advantage for us. As Brian noted earlier, both Merrill and the private bank continued to see strong organic growth and produce solid client flows of \$83 billion since the third - since the second quarter '22.

Our assets under management flows of \$14 billion reflect a good mix of new client money as well as existing clients putting money to work. Expenses reflect lower revenue-related incentives and also reflect continued investments in the business as we add financial advisers.

On Slide 21, you see the global banking results, and this business produced very strong results with earnings of \$2.7 billion, driven by 29% growth in revenue to \$6.5 billion. Coupled with good expense management, this business produced strong operating leverage. Our global transaction services business has been robust. We've also seen a higher volume of solar and wind investment projects this quarter, and our investment banking business is performing well in a sluggish environment. Year-over-year revenue growth also benefited from the absence of marks taken on leveraged loans in the prior-year period.

We saw modest loan growth on average year-over-year and link quarter, the utilization rates declined, and more generally, we saw lower levels of demand. As we noted earlier, the deposit flows have stabilized in the \$490 billion to \$500 billion range over the past several quarters, reflecting the benefits of our strong client relationships. The company's overall investment banking fees were \$1.2 billion in the second quarter, growing 7% over the prior year and 4% linked quarter, a good performance in a sluggish environment that saw fee pools down 20% year-over-year.

Provision expense declined year-over-year as we built more reserve in the prior year. Expense was held relatively flat year-over-year even as we drove strategic investments in the business, including a relationship management hiring and technology costs, and

additionally comparisons benefit from the absence of elevated expense for some regulatory matters in the second quarter of '22.

Switching to global markets on Slide 22, we had another strong quarter with earnings growing to \$1.2 billion driven by revenue growth of 14% and I'm referring to results excluding DVA as we normally do. The continued themes of inflation, geopolitical tensions and central banks changing monetary policies around the globe. Along with this quarter's debt ceiling concerns, continued to impact both the bond and equity markets.

As a result, it was a quarter where we saw a strong performance in both our macro and micro trading businesses. The investments made in the business over the past two years continued to produce favorable results. Year-over-year revenue growth benefited from strong sales and trading results and the absence of marks on leverage finance positions last year. Focusing on-sales and trading ex-DVA revenue improved 10% year-over-year to \$4.4 billion.

FICC improved 18% while equities was down 2% compared to the second quarter of '22. Year-over-year expense increased 8%, primarily driven by investments in the business and revenue-related costs, partially offset by the absence of regulatory matters in the second quarter of '22.

Finally on Slide 23, all other shows a loss of \$182 million. Revenue included a \$197 million of losses on securities sales and increased volume of solar and wind investment operating losses that create the tax credits for the company.

As a result of the increased solar and wind tax deal volume, and their associated related operating losses our effective tax-rate in the quarter was lower at 8%, but excluding ESG and any other discrete tax benefits our tax-rate would have been 26%.

So with that, let's stop there and we'll open it up for Q&A.

Question-and-Answer Session

Operator

[Operator Instructions] We'll take our first question today from Gerard Cassidy with RBC. Your line is open.

Gerard Cassidy

Thank you. Good morning, Brian. Good morning, Alastair. Brian, can you give us a view from your standpoint of the - and the new proposal I should say new but the speech by Vice-Chair Barr about the likelihood of capital ratios going up for large banks, like your own? And then second, there was a report today, Bloomberg that the capital requirements for holding residential mortgages may go up meaningfully. Any thoughts on that as well?

Brian Moynihan

So I think broadly stated, I think as was said by many people that have held the position of the year, the capital on the industry is sufficient. And I think there has been a desire to finish up the Basel 3, those rules will come out we think in a few weeks, and like anything else, we'll deal with and we have 11.6% CET1 ratio. Our requirements currently at 10.4% and so we got plenty of capital, and it's built up.

So I think from a global competitive standpoint, we've got to be careful here, because the U.S. industry is the best industry in the world and actually does a lot of good for all the countries, including the U.S. and, and frankly, the rules applied tend to be more favorable to those outside our country.

And so we got to be careful to maintain a competitive parity, but in the end of the day, Gerard, you need to finish this and get this behind us and the industry will adopt and move forward and, but they've got to think through the downside of some of these rules and that they could push up outside the industry to non-banks that have the asset classes across the board and non-banks, including mortgage-lending which you referenced, half of it goes through non-banks. And those the resilience those institutions is interesting to watch through recycles.

And then the second thing have to worry about is competitiveness overall. But and then also just slowing down economy, 10% increase in our capital levels, would this enable us for making about \$150 billion of loans at the margin, and you want our banks to support the economy like we do. So I think all this has to be balanced out as they go to adopt these rules.

Gerard Cassidy

Very good. And then as a follow-up, Alastair, you talked about the balance sheet. I think you said 100 basis point increase, it wouldn't lead to over \$3 billion in net interest revenue growth over the next 12 months. And 100 basis point decrease would lead to a decline of just over \$3 billion in revenue. Can you share with us, when do you think you might change or what would make you change that position to be liability sensitive, would you rely on the forward curve? Or what's the outlook for the balance sheet management that you're looking at now.

Alastair Borthwick

Well, Gerard, I don't think much has changed for us. We've talked about the fact that for us, it's this idea of balance, that's key. And if you look at our disclosures around interest-rate risk over the course of the past couple of years, you'll see it's more balanced both upside and downside and it's a narrower corridor over time. So we're trying to sustain NII at a higher level for longer, that's what we're trying to engineer.

So, I think going-forward, there won't be a lot of change to our philosophy in that regard. We feel like we're in a pretty good position in terms of balance, will be tweaking at the margin. But what will largely drive things from here is just normalization of deposits and good old fashioned loan growth.

Gerard Cassidy

Very good. Thank you.

Operator

We'll go next to Glenn Schorr with Evercore. Your line is open.

Brian Moynihan

Good morning, Glenn.

Glenn Schorr

Good morning. So, no one to take issue with 600 basis points of operating leverage. But I just always like doing a little gut check. Expenses are up 5%. I heard all the reasons why a lot of investment, FDIC charges coming, but I just wanted to make sure did anything change over the last like decade or so, you've been basically flat for life? Is expenses more of a relative game throughout the revenues? Or do you think you can keep expenses in and around the same area as we continue to invest? Thanks.

Brian Moynihan

Yes. So, Glenn, I think Alastair gave you a trajectory which if you look at it from fourth quarter last year to the fourth quarter of this year, it gets you relatively flat year-over-year. And as your revenues flatten out because interest-rate movements flatten out, you'll see that as we decline in the quarters, that'll be strong.

So, as we think about it - as we think about the forward, we think about the ability to control headcount and have expenses continue to come down, but they're going to stay at a level that's relatively consistent where we are now over time, and the goal is then to grow revenue faster than expense. We've been doing it for many decades, you can see that in our data. And - but the way we do it differs from five years ago to 10 years ago to last year, and that the ability to move the branch configuration around when we had 6,000 branches down to 4,000, or 3,900, 3,800, now it is different from 3,800 to where it might end up.

And so, you should expect us to continue to engineer by applying massive amounts of technology. Erica saves a lot of transactional activity, Zelle saves a lot of transactional activity deposits by mobile phone saves a lot of activity. All that goes on, and then what we're offsetting with that is from the decade you talk about we probably went from \$2.5 billion of technology initiatives a year to \$3.8 billion, and we went - we have a lot more

revenue that is compensated for, thinking about in the wealth management business, and those are things we fight all the time.

So, we expect to manage expenses in-line with revenue. As we got to '19, we told you that we're going to have to start growing expenses at a modest growth rate relative to the revenue growth rate will outgrow the economy on revenue expense and grow a couple of 100 basis points lower, it kind of going to be back in that mode frankly, it just with inflation they kicked up and now we have flattened them back out, and then we'll get back in sync as we move to '24 and beyond.

Alastair Borthwick

Glenn, look, the only thing I would just add to what Brian just said. We put up 16.2 in the first quarter, we were 16-ish this quarter obviously. We kind of feel like next quarter just with all the work that we've done around headcount and getting the firm in the place that we want now, we feel like we are well positioned to deliver 15.8 this quarter. If and when we keep going, we think we're going to be somewhere around 15.6 or so in Q4.

So, to Brian's point, number one, we like the trajectory now. We've shaped the headcount over time to get to the place where we want to be. And that would compare, I think, Q4 last year was 15.5. So, when you talk about that sort of flattish idea in an inflationary environment, we feel like that's a pretty good way to end this year and a pretty good way to set up for next year.

Glenn Schorr

Totally agree. Thanks for all that. I appreciate it.

Operator

We'll take our next question from Mike Mayo with Wells Fargo. Your line is open.

Brian Moynihan

Good morning, Mike.

Mike Mayo

Hey, good morning. So, I don't think consensus has you the positive op leverage over the third and fourth quarter, and I just want to make sure I heard you correctly, Brian, in your opening remark, is you expect that eight quarter of consecutive positive operating leverage to continue, so you expect nine quarters or ten quarters or as long as you can, and on the, the one reason is you'll see NII headwinds, you said it should be kind of flattish in the third quarter and then down some in the fourth quarter, and you said the commercial loan demand is a little bit less and utilization is less.

On the other hand, you did just give some specific expense numbers and maybe I guess, so the specific question is how long do you expect those eight quarters to last? Are we done with that? Do you expect that to go? And then, to what degree to your digital efforts your first three slides, Slide 4, 5 and 6 play a part in sustaining this positive operating leverage, say, through 2024 and 2025. Is that a goal or is that an expectation?

Brian Moynihan

So our goal is always to maintain it. And Mike, you point out that the toughest times when you have sort of a twist in the interest-rate environment and you can see that at the end of '19 and we got right back into it right after the environment stabilize, but just thinking about the question you asked me a few years ago Mike was - when NII is coming in are going to let it fall the bottom-line, you going to spend it at about 80% plus of it is falling to the bottom-line, which shows you how we position the franchise from the second quarter of '21 until now as we went through the interest-rate - the fast interest-rate raising.

So we gave you the specific as you said, the specific expense guidance by quarter. We'd expect that should produce operating leverage that will be it gets tougher and then it will get easier as we start to see the stabilization of deposits and loans and loan growth, you sort of routinely come through in the economy frankly, shaking through whether we're going to have a recession or not. And so we feel good about what we've done, that's why I tried to give that longer period of time that people have the context, it's very different environments how you've achieved at sometimes revenue fell and expense fell faster, sometimes revenue grew and expense grew, but slower and all the different ways.

So we'll keep working at it in a key leading indicator we like as we've been able to manage the headcount down as Alastair said earlier and frankly that is in the face of a turnover rate year-over-year which has dropped in half, which is good because we're not training and hiring as many people, and that then sets us up for the second half of the year because that headcount benefit us not really come through the P&L and will offset some of the other inflation.

Mike Mayo

And then as it relates to NII, specifically. You said that the last few months, you're a little bit more confident given stabilization in pricing. I guess we're not seeing that every banks, right. Some banks getting worse, some banks getting better. So what does that gives you more confidence on the NII front, and the deposit stabilization front.

Brian Moynihan

Well, I can't look, I can't speak to other banks Mike. But obviously we know we are in a privileged in advantage position relative to our client base. I just think it's interesting, you look at our global banking set of results over the course of the past year and a half in particular that's extraordinary resilience. And look, Q2 is tax season, so if you look at the wealth management business for example, deposits were down \$9 billion, but we know that paid tax payments of \$14 billion, \$15 billion, \$16 billion last quarter. So there is beginning

to be a little more stability and obviously, our focus has always been on transactional primary operating, and we may be seeing the benefit of that in some degree, but will continue -- we show you on slide, I think it was Page 12 of the earnings deck, that's where it is. We showed that last quarter we showed again next quarter. But it's just the Fed's engineering this across-the-board, and we're just reacting to what we see from our customer-base.

Mike Mayo

Okay, thank you.

Operator

We'll take our next question from Jim Mitchell with Seaport Global. Your line is open.

Jim Mitchell

Hi, good morning. Maybe just a follow-up on deposit behavior. I appreciate the comment that you have very low loan-to-deposit ratio have to chase rate. So it feels like datas can stay low, but how do you think about how are you thinking about the mix going forward. We are seeing NIB's has come down, CD demand is picking-up. How are you thinking of - what are you seeing in your deposit base with respect to mix.

Brian Moynihan

I think Jim, one of the things that as we think about deposits, we think about across each of the customer bases and that's what Page 12 shows you. We think about what do they have cashless for that, cash transact and to have cash-in-excess of that. And what happens is, depending on the customer segment that cash moves to the market that excess cash moves the market. But the transactional cash is all with us, that transactional cash far exceeds for us our loan balances.

So we have excess transactional cash, in a lot of it is low-interest checking, no interest checking, even if it's a money markets that sort of cushion that you have consumers as a wealthy people, while the consumers and an average consumers maintain to pay their bills and unexpected expenses. So that's what you've seen in that producers, the cost to deposits of \$1.24, which is far different than we see other people have and that that's just happens.

In other questions how much moves and as Alastair said earlier, we're after tax time now where we have a big wealth management pay-out to the - to tap into the taxes. We also passed the point where people have way passed the point last payments where people will have to that money has been and accounts and still is in their accounts to a large degree as we look at them and they're paying that down slowly. So the average balance in our checking accounts has gone from a high of 11,000, the peak the 10,600 and 10,500 something like that.

So all that dynamic, but you got to go back and say, it's the mix of interest-bearing and non-interest bearing is actually a little bit of a misnomer because it's really what the customer uses it the cash for, and they use it to transact and run their household. That's a very stable base and that's what this data shows across time and it's fundamentally a lot higher than pre-pandemic, so consumer \$700 billion pre-pandemic \$1 trillion now.

Checking that if you look on the pages in the deposit descriptions, you'll see those numbers are Page 13, I think it is, those numbers will show you how much is stayed in checking, that's because we have more customers, but more importantly, the average consumer through inflation stuff has more money around. And that provides great crisp for the mill.

Jim Mitchell

Right. So do you feel like that mix-shift is starting to slow and stabilize.

Brian Moynihan

Well, that's what the data on Page 12 shows you. That's why we show you this level of detail in our customer bases, our lines of business that many don't show you did demonstrate that differences there for us. And other people maybe there too, I just can't find it in their data. But if you look at that's why we show you page, while we see actually see during the second quarter, you the week-by-week average balance movement and it's as Alastair said earlier that it's very stable in GWIM, it's very stable global banking even in non-interest-bearing piece half of that is excess balance, half of it is earnings credit rates through the GTS process and then you got to be careful that.

And you look at the consumer and it's bouncing around the high \$980 trillion, depending on the thing and ended at a trillion. And that happens when payroll has happened all stuff. But that's hugely, hugely advantaged pricing, 20 odd basis points in total for the consumer goods. And you asked about CD's, we only have \$40 billion of CD's. So we are what our customers are asking for CD rates, we give them to it's just not the core business and then we have the investment side, we push those wealth management flows and the consumer investment flows are part of our deposits moving over to the market when this excess cash.

Jim Mitchell

All right, very helpful. Thanks a lot.

Operator

We'll go next to Chris Kotowski with Oppenheimer. Your line is open.

Christopher Kotowski

Yes, good morning and thanks for taking the question. In the press release from last week settlement with BofA, CFPB Director, Chopra alleged that you among other things opened

customer accounts without consent. And I'm just wondering how is such a thing possible and the post Wells Fargo era. And can you compare and contrast, what happened at your firm with what happened at Wells?

Brian Moynihan

Frankly, Chris, it's - when we went all through the horizontal review by the OCC and all the practices and everything were changed then. And these - the small number of accounts that are part of this are from that time period. It's just - not the other agencies did anything, and then the consumer bureau had to - sitting around, we kind of cleaned it up this quarter. So that was that one.

Christopher Kotowski

The time period that reflects which time period?

Brian Moynihan

It reflects up to the current time, but the accounts were from '16 and before '17. Back when -- remember, the Comptroller Curry did the 3-phase review of all the other firms that they didn't find - you can go look at the data and then hopefully, the next Comptroller will testify in Congress and started in the Obama administration after Wells and then led in the early part of the Trump administration with [indiscernible]. And you can go look at that, that was cleared up, but we've made the changes in those processes at that time.

Christopher Kotowski

Okay. Thank you. That's it from me.

Operator

We'll go next to Erika Najarian with UBS. Your line is open.

Brian Moynihan

Hi Erica, you might be on mute. Catherine, maybe we can come back to Erica.

Operator

Absolutely. We'll go next to Betsy Graseck with Morgan Stanley. Your line is open.

Betsy Graseck

Hi, good morning.

Brian Moynihan

Good morning, Betsy.

Betsy Graseck

A couple of questions. One on the operating leverage that I know you discussed earlier. I mean, in the past, when you had the record number of consecutive quarters of positive operating leverage, it seemed like it was being driven primarily [technical difficulty] a lot of inputs, but 1 of the big drivers was consolidation of branches. And now it's an investment spend environment in branches. So I'm just wondering if there is - if you would agree with that. And if there's a different way that you're going to be delivering this positive operating leverage as you're increasing investment spend in one of the core platforms of the company.

Brian Moynihan

Betsy, that's kind of what I said earlier. It's been gotten by different ways in different periods of time. But even in the last year, the numbers of branches, I think dropped about from 3,900 to 3,800 and change. And so even as we deployed new ones. And so you're consolidating branches in markets you've been in a long time with lots of branches. The ATM count continues to drift down. But importantly, if you go to the digital pages and look at the activity levels by customers - and you're speaking mostly the consumer business, but affects all customer bases. And you see things like Zelle transactions far exceeding checks. Remember that - what that means is that we don't have to process a check on the back end of that.

And so, and then your process it, push it through. So all that continues to grow very quickly and continues to change the overall operating costs in our consumer business. Our cost of operating plus the cost of pays and deposits is still 130-odd basis points or whatever, it's very strong. If you go where the big moves are coming as what we're doing in the markets business, for example, in terms of deeper, deeper digitization, it was always - equity trading was already digitized, but the operational process behind that the throughput of the amount of stuff that's going straight through.

And then what's behind that also on the wealth management to customers getting their statements and statements not being delivered to customers' home, but delivered that kind is of \$0.5 billion annual benefit that's accumulated over time. And so if there were some magic thing you could pull, you'd pull it, but these are a whole bunch of operational excellence ideas, it seems [indiscernible] to the general public, but it just is a constant improvement of the platform, allows us to constantly manage people down as a percentage of work done by people always comes down.

And then now with artificial intelligence and all enthusiasm, we decided that's in the future, the way we've applied it so far has enabled us to do things like our business bankers are more efficient at culling because we use artificial intelligence and programs to tell them which prospects they go to, not to tell - they know their clients and they run it, but which prospects they should approach first so they're more efficient or the adviser match, which

has an intelligence base built into it to match a client to an adviser that's - you saw the statistics about the number of leads, 20,000 leads.

All this is adding efficiency. So yes, the brand system has got - it's come down a slope and that slope is starting to flatten out. But in that slope is a massive reinvestment in rehabs and a massive opening. And then more and more deposits over top of that, which keeps that efficiency going.

Betsy Graseck

So your point on enthusiasm for AI but in your comments, it sounds like there's more legs to that that you're anticipating going forward as well? Is that fair?

Brian Moynihan

Yes. Erica, we started working on probably eight years ago now. They do a natural language processing capability that could answer questions that we can make sure the answer was what we wanted to be and every - and on our proprietary systems. And so it's an algorithm that anticipates the answer to a question, but it comes from our data and it looks in your account. But those 165 million interactions in the last quarter, all of them would have been an e-mail, a text, a phone call, and they were all done through the customer entering it into Erica and getting an answer, and then going on and it started.

But that will just keep expanding to become a higher and higher functionality. It is a - start at a methodology, which these new programs are far in excess of that, but they're not tested on data, they hallucinate and all these wonderful things that you hear the experts talk about that have to be carefully controlled before you apply. But Erica is using some of the same principles but applied in a very controlled environment.

And by the way, when we do it with our drafting the [indiscernible] credit offer memoranda or we do it with a business - targeting that we talked about. All those are ways that we apply, but it's a very controlled setting. So it still has a lot more out there, frankly, as it gets understood better and how it works better and how it can be - attribution, accountability, those types of things have to build in. But Erica, that was built in from the start.

Betsy Graseck

Okay. Thanks. And then just one follow-up on the capital question. I know that you are reviewing the SCB with the Fed, but I'm just trying to understand what kind of expectations you have for buybacks as we look forward here, realizing that there's some puts and takes with Basel 3, but there's some benefits here with the SCB. Thanks.

Alastair Borthwick

Yes. So we got the final stress capital buffer along with the rest of the industry in August. So we'll wait for that, obviously. And then, Betsy, I think we'll likely have to wait for Basel

3 final clarity. That's still moving, and so we don't have the proposed rule yet. Then we have to wait for the comment period, then we got to wait for the final rule.

So there's a lot that needs to go on before we get full perspective. But I think Brian said it well. I mean we've got plenty of capital. We've been buying back enough shares to offset the share dilution. And we've got flexibility to do a little bit more.

So the other thing that you see over the course of the past year is obviously stress capital buffer last year, we had to add 90 basis points. Well, we've added 110 over the course of the past year, and capped return on tangible common equity around 15% while buying back shares. So we've got the flexibility to do a little bit of everything. But I think we want to see what the final rules look like before we make too many decisions.

Betsy Graseck

Yes. All right. Thank you.

Operator

We'll go next to Ken Usdin with Jefferies. Your line is open.

Kenneth Usdin

Hi, good morning. Just one question on credit to follow up your comments. So it looks like the card normalization is progressing very gradually, 90-day past dues, but only kind of marginally. Just give your points about the consumer having still plenty of cash, the economy holding up well. Just your view on just ongoing normalization of card losses specifically, and just anything else that we should be mindful of when we think about credit normalization. Thank you.

Alastair Borthwick

Dan, I think you nailed it. That's sort of been - you just - you watch our - if you look at our charge-offs, for example, that's mainly about loan growth and a little bit about the rate picking up just a little bit, but it's still well below pandemic. You can see that. And fourth quarter '19 was a great quarter for asset quality and cards. So it gets back to this idea that the consumer is still in a pretty healthy place.

You can see that in the unemployment statistics, and you can see it in the way that they're just continuing to spend a little bit more money year-over-year. So I feel like the - we've been pretty consistent. The consumer is pretty resilient. That remains the case, and we're benefiting it from right now in the card experience.

Kenneth Usdin

Thanks. And sorry, just one more follow-up on the fee side. Can you help us understand - the card, the deposit service charges, asset management kind of all been stable to slightly lower. Have the effects that you put through in terms of all the service charges - changes and new rewards card benefits and all that, are we close to getting that run rate? Any signals of stability in some of those areas?

Brian Moynihan

So as Alastair mentioned earlier, there's been a 10-year change in how we work in the overdraft area. And the biggest - and another set of changes were made and fully implemented in the third quarter of last year. So they're in the current run rate. It's just the year-over-year comparisons, this quarter picks up a little bit of pre - final changes to post. So if you look at the FDIC data, I think we're down to \$30-odd million a quarter or something like that. And overdraft fees compared to others that are multiples of that. But we've -- it's all through the system. It's all done and all the changes required under the recent announcements and stuff that have been made for a couple of years. So it's in the run rate, so to speak.

Kenneth Usdin

All right. Thanks a lot. Got it.

Operator

[Operator Instructions] We'll go next to Charles Peabody with Portales. Your line is open.

Charles Peabody

Good morning. Just a question about your interest-bearing deposits with the Fed, and I'm looking at Page 8, your average balance sheet. And those balances were up quite considerably quarter-over-quarter. And yet your deposit base was relatively flat. So I was just curious, what the thinking behind that was. Was it a desire to build liquidity? Was there an arbitrage opportunity for NII? What was - why build the balances so aggressively?

Alastair Borthwick

Yes. So if you go back to - we talked about this at the end of last quarter, Charles. At the end of last quarter, it was an interesting time for the industry. And we felt like it was prudent to just build cash during a period like that. And so that's what we did. And it's - it was obviously, an extraordinary period.

Since then as the environment is normalizing, I'd anticipate and I talked about that earlier, you'll see our cash levels just continue to come back down. And so that's all that's happening. It's a choice on our part to position with cash, and you'll begin to see that drift lower now.

Charles Peabody

Okay. And as a follow-up then, would that imply that the average balance sheet or more importantly, RWAs will start to shrink and that would help your capital? I'm just trying to understand the capital...

Alastair Borthwick

No, it shouldn't really impact RWAs because most of that is sort of low or zero RWA. What it should impact is, if you look at our net interest yield, that's always a question of numerator and denominator. And when we increased the cash balances, that inflates the denominator for a period of time. So that doesn't hurt NII, but it does inflate your balance sheet just a little bit. So I think as you look forward, what you should expect is we just get back to work on both parts of that numerator and denominator will grind away at the NII side. And then on the denominator side, we'll have a smaller, more efficient balance sheet as the environment normalizes. And in the meantime, it hasn't hurt NII in any way.

Charles Peabody

Thank you.

Operator

We'll go to Erika Najarian with UBS. Your line is open.

Erika Najarian

Hi, good morning. I'm sorry I missed the earlier call. On the net interest income trajectory, Alastair, clearly a big focus for your shareholders. You mentioned when you were responding to Gerard's first question that you narrowed the volatility of net interest income. And I think that investors I'm sure are going to start asking you guys and us about the starting point of \$14 billion for NII next year. I guess we're wondering, if the Fed stays higher for longer, doesn't move, how does that impact that \$14 billion run rate? Does that \$14 billion capture a cumulative deposit beta that would sort of fully reflect what you would expect to experience through the cycle? And then I have a follow-up question from there.

Alastair Borthwick

So all of our asset disclosures reflect the betas that we believe at the time. So that part is always in the disclosures. It's too early for me to say on 2024. We're giving guidance for the rest of the year, so you have a pretty good sense of what we're pretty confident around. But last time I looked at the forward curve, we had one, possibly two hikes this year and then as many as five declines next year. So there's a lot between here and there. And I think we'll just assume to take the next three to six months to figure out, Erika, exactly how we feel about '24.

Erika Najarian

Totally understand. So going back to the down 100 basis point disclosure that would yield to down \$3 billion for full year basis. How much of that - given that you have exposure to the shape of the curve, not just the short end of the curve because of your securities book, how much of that is short rates versus long rates in terms of that drop? I guess what I'm trying to figure out is, if I simply divide \$3 billion by 4, right, that would get me a run rate of \$13.25 billion on a quarterly basis. And you mentioned that there are about five cuts in next year. But if it's not on the short end, right? And if it's half-half, then it could get to a run rate of \$13.75 billion. So just - I know there's a lot in there. So I would just love your thoughts on everything I just said.

Alastair Borthwick

Well, you lost me a little. But I'll say this. We've got - it's actually done \$3.6 billion. It's not done \$3 billion. So that's number one. Number two, you should think about the short term being the vast majority of that. And number three, part of the reason that I think we feel like we've narrowed this corridor, and we've got a little more stability around it is, A, the securities book. And B, just as importantly, there's been a large rotation into interest-bearing. And so as rates in a disclosure like this, as rates come down, one would expect that we'll be somewhat insulated from that in a different way than we might have two years ago when we didn't have as much interest-bearing.

Erika Najarian

Understand. Thank you.

Operator

We'll take a follow-up from Mike Mayo with Wells Fargo. Please go ahead. Your line is open.

Mike Mayo

Hi, I just keep staring at Slides 4, 5 and 6 for the digital progress that you're making and trying to connect that to your expenses and operating leverage. And I guess where I get to is certainly, you're signaling that trend should be good for revenue versus expense or at least you're trying to have that. But I still look at the efficiency ratio of expenses to revenues of 64% or 62%, and then you compare that to the levels from 2018 and 2019 when it was 57% and 58%. So I guess the question is, you've got all these digital initiatives and progress - and again, I appreciate the disclosure on these slides but it would be great to have more of your peers disclose that, all that progress. Why can't you get back to levels from '18 to '19 or at least below 60%? And if so, how long would it take?

Brian Moynihan

Mike, the linkage of the digital activity to produce the many quarters of operating leverage at the last 8.5 years, et cetera, is an absolute tie in, and Betsy asked about the branch count and all the things that we've done. The efficiency ratio for us is as a plain element, which is the wealth management business is a big part of our revenue base and has a different operating dynamic because of how it's reported. As you well know, that the revenue has the cost of compensation as a percent of revenue is high. And we basically make 50 cents on the dollar for every dollar past the revenue takeout, which - the adviser compensation level. And we're continuing to try to improve that and make the adviser more efficient and things like that, but that's a major change.

We improved year-over-year. And frankly, we're still cleaning out some pandemic-related costs and things like that. So we'll continue to drive that down. And as net interest income has come up and more important part of the business that helps push that efficiency ratio back down. And that's the goal. I mean, you're describing what we go to work and do every day.

And the way we do it is - the application of technology across the board. And then removing work in the system and bringing that out and bringing it to the bottom line and then making the investments we did to make it happen again. So we'll continue to do that. But the efficiency ratio, remember, for us, if you go lines of business is best-in-class. It's just we have a bigger mix towards the wealth management business than most other people.

Mike Mayo

And let me just try one more time. On Erica, if it could be Bank of America AI, maybe you spin out your Erica business, but you guys highlight a number of hours in takes in manual labor. And do you have a connection of that to what that saves in expenses or what that could save or should save over the next few years?

Brian Moynihan

Yes. It will continue to allow us to do more with the same amount. So if you think about from '19 to now, Mike, remember, the number of customers who do their core checking list is up 10%. So it's not a - and that is a lot of people. It's 3 million more customers doing 20, 30 transactions a month, and all that's going through on a relatively flat expense base. And we've been - we've had - with inflation and wages and things, we've absorbed all that as part of the thing, and that's why the costs have changed.

But the reality is we flatten that back out, and then we'll keep driving it back down. And that - if you look at the cost of deposits, which is the cost of running all that as a percentage of deposits, you can see that on the consumer page, it still maintains a nice break against the rate they would receive for the deposit balances. So we're working at it.

Simply put, we had 100,000 people in the consumer business a decade-plus ago. We now have 16 going - and it comes down a little bit every quarter. Even though we're putting new branches with an average of 5 to 10 people and depending on the location and things like that going on. And so that just keeps going in the right direction.

Now if you take that across other things, in our operations group, the team there continues to have flat headcount, down headcount, and we invest that back in the technology side for more developers, 20-odd thousand on our payroll plus another 10,000 or 15,000 of third parties that go through, frankly, the top lines. And so we keep trying to drive it in to make us more efficient. So all the principles you're saying is right, and we expect it to continue to have a benefit.

Mike Mayo

All right. Thank you.

Operator

There are no further questions in queue at this time. I'd like to turn the program back over to Brian Moynihan for any additional or closing remarks.

Brian Moynihan

Thank you for joining us all. As you think about the quarter, strong profitability, strong 15% return on tangible common equity or better. Continued to drive organic growth, continued to drive our operating leverage. And if we gave you clarity on the future path of expenses and NII, but above all else in the quarter where we've had a strong capital markets performance and a strong investment banking performance, I think, along with our other usual great performance of business, and we feel good about the company and its position going forward. Thank you.

Operator

This does conclude today's program. Thank you for your participation. You may disconnect at any time.