Operator

Good morning everyone and welcome to today's Bank of America earnings announcement. At this time, all participants are in a listen-only mode. Later, you'll have the opportunity to ask questions during the question and answer session. You may register to ask a question at any time by pressing star and one on your touchtone phone, and withdraw yourself from the queue by pressing the pound key. Please note this call is being recorded.

It's now my pleasure to turn the conference over to Mr. Lee McIntyre. Please go ahead.

Lee McIntyre

Good morning. Thanks for joining this morning's call to review our second quarter 2018 results. By now, I hope everybody has had a chance to review the earnings release documents on the IR website of the bankofamerica.com site.

Before I turn the call over to our CEO, Brian Moynihan, let me remind you we may make forward-looking statements during the call. After Brian's comments, our CFO, Paul Donofrio will review the details of the second quarter results, then we'll open it up for questions. Please limit your questions and then you can have a follow-up afterwards, but limit it to one question if you can. For further information on forward-looking comments, please refer to either our earnings release documents, our website or the SEC filings that we post.

With that, I'll turn it over to Brian.

Brian Moynihan

Thank you, Lee, and thank all of you for joining us to review our second quarter results.

Continued solid client activity in a growing economy coupled with strong cost and risk management discipline resulted in a strong quarter of results. Combined with quarter one, the earnings this quarter brings us to \$13.7 billion in net income for the first six months. This is the best start to a year in the company's history, more than 20% higher than the previous record.

Driving responsible growth has resulted in consistent results for shareholders. It has enabled us to increase returns and support customer growth in a real economy, and to continue to invest through our operational excellence. Net income for the quarter was \$6.8 billion after tax and it grew 33% from last year. Our return on tangible common equity was more than

15%. We delivered positive operating leverage for the 14th consecutive quarter. We drove the efficiency ratio below 59%, an improvement of 249 basis points in just 12 months. While it's of course true the tax reform is benefiting our bottom line as well as corporations around America, income before taxes also grew. In second quarter, reported pre-tax income improved 5% year-over-year, but after adjusting for some select items which Paul is going to cover later, a better way to look at it is pre-tax income is up 11%.

Our balance sheet from both a capital and liquidity standpoint remains extremely strong. We announced following the June CCAR results in 2018, we plan on returning roughly \$26 billion to you, our shareholders, over the next 12 months through a combination of share repurchase and dividends. This is a strong improvement from last year's initial CCAR approval in June of 2017, where we were approved to return \$17 billion in capital. Our immediate priority remains to use capital to buy back shares that we don't need for business growth, but importantly we increased our dividend by 25%.

Our responsible growth strategy continues to work, growing earnings returns and capital returns and doing so the right way. This quarter, we demonstrated growth within our defined customer and risk framework, and we did it organically. When you think about it year-over-year, we grew average loans by more than 5% in the aggregate across the businesses. We grew average deposits by more than 3%. This quarter marks the 11th straight quarter where Bank of America has grown its average deposits more than \$40 billion on a year-over-year quarter comparison basis.

We added more credit cards, we added more checking accounts on the consumer side, and we added more accounts and households in our Merrill Edge online brokerage. We also had a strong quarter in our wealth management business as we formed more households than we had in any quarter in the past. Importantly, we see our small business clients borrowing more. We originated during the second quarter of 2018 alone \$2.3 billion of loans to small businesses. This helps facilitate the core economy and its growth. We also see more in our business banking and commercial banking customers and continue to deepen relationships with them.

The other aspect is to make sure we stay within our risk framework. As you can see on Slide 2, credit continues to perform well with a 43 basis point net charge-off ratio this quarter. Since coming out of the crisis and stabilizing, we've now seen consistency over the last few years. In fact, the charge-off ratio has been below 50 basis points for 14 of the last 17 quarters.

In global markets, we continue to see a strong return on our lower value at risk metric than many of our peers all while continuing to generate growth and improved profitability. We have earned a 15% return on capital in the global markets business year-to-date from Tom and the team.

The other part of being sustainable is to invest while remaining efficient. We have to make investments in the communities we serve, investments in our talent and our company, and investment in our capabilities. By doing this, we believe we had a leading capability that will sustain us well into the future.

How do we afford all that? We afford it through operational excellence. We've been able to continue to invest and even have our costs continue to come down. Investments in our teammates have resulted in a strong, stable talent pool of tremendously effective teammates and attrition levels are at all-time historic lows. We continue to receive third party accolades as one of the best companies for people to work.

If you move to Slide 3, when you put all that together, what happens? You get operating leverage. This slide shows you the 14th quarter in a row where we've had positive operating leverage in our company. On a linked quarter basis, every business segment drove expenses lower from first quarter to second quarter, even as they continued to invest.

When people ask for examples of how all this works, how can you invest in developing capabilities while continuing to take down costs and continuing to have higher customer satisfaction, I think the easier way for people to visualize that is in our consumer digital banking capabilities. Many of you use them, and all of you should. By investing in client capabilities, we make our clients' lives easier, more efficient for them, more effective for them, and their satisfaction goes up. Our costs then in turn go down because our processes become more automated.

So how does that play out? Let's look at Slides 4 and 5. Here we display the results, and typically Paul will cover these [indiscernible], but I think it's important to understand how responsible growth in driving sustainable operating leverage works. As you can see on this slide, you can see some of the results of the investments we've been making across decades to drive the business. The important thing is the size of our consumer base allows those investments to be leveraged. As you can see in the upper left hand corner, we crossed over 25 million active mobile users this quarter. Another 10 million use other digital channels, so that brings us to 35 million customers using digital devices this quarter on an active basis, and it continues to grow, as you can see, due to the innovation we had.

Those mobile users, as you can see below, logged into their mobile apps nearly 1.4 billion times this quarter. What are they doing with us? You can see that in some of the other boxes. While they do transactions, they also use them for communication. They're using their digital services to set appointments in our financial services for their convenience, rather than just drop in. This assures we have the right teammates to serve the customers well. We had a half million digital appointments this quarter, but that's still a lot of room to grow when you think of the 50 million customers we have that walk into our great stores every day, so it's critical to have just both the digital and physical.

As you can see in the roll-out of Erica, our digital assistant, you can do some tasks hands free or text, and that increases your flexibility. You can see Erica has grown nicely to over 2 million Erica users from only starting a few months ago.

Customers are doing more of their regular deposit transactions on their digital devices. This quarter, we saw more deposit transactions by a person taking a picture of the deposit and sending over mobile phone than we did by a person handing their check to the teller. In fact, 76% of all our deposit transactions are now through ATMs and mobile deposit. This allows for more meaningful relationship management activities to take place in our centers as we invest more and add more teammates to do that.

Customers just aren't transacting and researching with these capabilities, they're using them for sales. Digital sales now make up 24% of all our sales in our consumer business. This compares favorably with all sectors, including general retail in terms of digital sales.

As we move to Slide 5, you can also see that the adoption rate is moving faster for these newer products. New capabilities are taken up much faster by the customer base who is completely digital enabled. On payments, you can see the early adoption of Zelle has grown. In the recent quarter, we processed 35 million Zelle transactions or more than \$10 billion in principal amount - that's twice the pace of a year ago. We believe we account for about 25% of Zelle and this activity will continue to grow as the industry continues to drive this as our standard for P2P payments. Overall, consumer digital payments have now overtaken non-digital payments, more than \$368 billion in digital payments at the bottom of Slide 5 you can see.

Over 52% of total payments have come in this quarter. This is growing 12% on average for the past four years. As you can see on sales, 24% of sales are executed digitally and we continue to expand that through other products and services. Digital auto was launched a year ago and now more than half our retail auto volume. Digital mortgage, which is a true end-to-

end digital experience just brought out recently, you can see is growing fast; and on investments in the lower right hand side, you can see the Merrill Edge platform growing assets 20% in the past year to \$191 billion and 2.5 million accounts. We have parlayed that and our capabilities for our automated Merrill Edge guided investment platform, that you can see the statistics.

These examples are just a set of examples about how the sustained investment coupled with the change in customer behavior coupled with the process improvement coupled with the operating excellence allows us to drive positive operating leverage while driving up customer delight. There are many other examples across our company, including Cash Pro in our commercial set of businesses, which has 475,000 commercial users. We'll continue to make these investments and continue to drive the operating leverage of the company, and that will provide good utility for you, our shareholders.

Now let me turn it over to Paul to handle the financial results. Paul?

Paul Donofrio

Thanks Brian. I will start on Slide 6.

Bank of America reported net income of \$6.8 billion or \$0.63 per diluted share. Net income was up 33% from 2Q17, EPS grew 43%. Once again, our earnings growth was driven by strong operating leverage and continued strong asset quality in addition to the benefits of tax reform.

Before I review comparative period performance, let me remind you of a few select items which I think are helpful in understanding our operating performance. In 2Q17, we had a net after-tax gain from the sale of our U.K. card consumer business of roughly \$100 million, which included a revenue benefit of nearly \$800 million in other income mostly offset by a tax cost of nearly \$700 million, so revenue was \$22.6 billion on a reported basis, down 1% versus 2Q17, however excluding the impact of the U.K. card gain, revenue was up 3% year-over-year driven by NII improvement and better sales and trading results.

Another notable item in 2Q17 was in expenses. We had a \$300 million impairment charge associated with the sales in data centers, so expense of \$13.3 billion on a reported basis was down 5% from 2Q17, but excluding that charge, expenses declined 3% or nearly \$400 million. After excluding both of the 2Q17 revenue and expense items, operating leverage was 6% and pre-tax income improved 11%, as Brian noted.

I would also note two items in our 2Q18 results which had a combined negative pre-tax impact of roughly \$160 million in other income; however, these items are not part of the select items adjusted for on this page and in our release. The first item was a charge of \$729 million from the redemption of some trust-preferred securities. The second item was a gain of \$572 million from the sale of some non-core mortgage loans. Net DBA negatively impacted the quarter by \$179 million. Provision expense was \$827 million, \$101 million higher than 2Q17 driven primarily by the seasoning of our credit card portfolio, loan growth, and a modestly lower reserve release. Brian already covered the significant improvement in returns seen on this slide. The effective tax rate for the quarter was a little more than 20%, which includes the ongoing benefit from the Tax Act. We would expect the tax rate to be roughly 21% in the second half of 2018, absent unusual items.

Turning to the balance sheet on Slide 7, overall compared to the end of Q1, end of period assets of \$2.3 trillion decreased \$37 billion, driven by lower global markets assets as well lower deposit levels, primarily due to seasonal customer tax payments. Liquidity remains strong with average global liquidity sources of \$512 billion and a liquidity coverage ratio of 122%.

Total shareholders equity decreased \$2 billion from Q1. Preferred equity was down \$1.5 billion in the quarter. If you look at the first half of the year, we issued \$3.5 billion of lower yielding preferred stock ahead of redemptions of \$2.8 billion of higher yielding preferred stock, and note we have called another \$900 million that will settle in the third quarter. Given a billion dollar decline in the value of AFS securities, which impacts OCI, common equity decreased by half a billion dollars as we returned 90% of net income earned in the quarter to our shareholder via dividends and repurchases. In Q2, we repurchased 166 million shares for \$5 billion and paid \$1.2 billion in common dividends.

Turning to regulatory metrics, this is the first quarter in which our RWA under standardized exceeds RWA under advanced. Standardized RWA increased \$8 billion from Q1 due to lower trading exposure on global markets and continued runoff of legacy mortgages. CET1 capital was flat from Q1 as net income and lower DTA disallowance was offset by share repurchases, dividends and OCI. Our CET1 standardized ratio improved to 11.4% and remained well above our 9.5% requirement. The supplementary leverage ratio remains well above U.S. regulatory minimums.

Turning to Slide 8, on an average basis total loans increased to \$935 billion. Note that the 2Q17 sale of U.K. card impacted the year-over-year comparisons by nearly \$6.5 billion. Adjusting for the U.K. card balances, which we recorded in all other, average loans were up \$26.6 billion or 3%

year-over-year. Total loan growth continued to be impacted by the runoff of non-core consumer real estate loans. On the other hand, loans in our business segments were up \$45 billion or 5% year-over-year. Our consumer loans grew 6% year-over-year as clients grew card balances 5% and mortgage originations across both consumer banking and wealth management were equally strong. While we are seeing good growth in originations of home equity loans, they continue to be outpaced by paydowns of older loans.

Commercial loans grew 5% year-over-year. Consumer optimism carried over into small business as we originated \$2.3 billion in loans and grew balances 6%. Strong year-over-year growth in structured lending with wealth management clients also contributed to commercial loan growth. Competition for commercial loans remains intense. We are seeing aggressive terms and structure; however, we remained disciplined. From a consistency standpoint, as you can see on the bottom right chart, loan growth in our business segment has been mid single digit consistently for several years now. This chart compares year-over-year growth over the past five quarters. Our growth has been led by consumer, which is consistent with what we're seeing in the economy. The recent moderation in the consumer growth rate is driven mostly by auto loans given our decision to focus on organic growth and rely less on third party flow. On the other hand, growth in consumer credit card has ticked up recently, and also note the modest increase in the growth rate in commercial. This has been driven by improvements in both small business and structured lending.

Before turning the page, I just want to mention deposits as we think about funding this growth. Average deposits grew \$44 billion or 3.5% year-over-year. Consumer banking once again led with growth of \$35 billion or 5%. Deposits in wealth management declined in Q1, reflecting seasonal income tax payments and shifts to investments. Global banking deposits were strong, growing 8% and included movement from non-interest bearing to interest bearing.

Turning to asset quality on Slide 9, total net charge-offs were \$996 million or 43 basis points of average loans, and increased as expected. We saw seasonally higher losses in credit card. Note that we are now more than 180 days past the storms which impacted many U.S. areas. The small storm-related card losses which came through in this quarter were previously reserved for. Provision expense of \$827 million in Q2 included a \$169 million net reserve release. This reflects continued improvement in our consumer real estate and energy portfolios. The increase in net charge-offs versus 2Q17 was due primarily to credit card seasoning, loan growth and the storm-related losses. Compared to 1Q18, the increase was driven by commercial bouncing around the bottom. Our reserve coverage remains

strong with an allowance to loan ratio of 1.08% and a coverage level 2.6 times our annual net charge-offs for the quarter.

On Slide 10 we break out credit quality metrics for both our consumer and commercial portfolios. With respect to consumer, net charge-offs of \$830 million were flat compared to 1Q18 and up \$79 million from 2Q17. As mentioned, the driver of the year-over-year increase was credit card, which increased to 3.17% due to seasoning and growth, as well as storm-related losses. Excluding the storm-related losses, the credit card loss rate increased 22 basis points from 2Q17. Consumer NPLs of \$4.6 billion declined 5% from Q1 and 47% of our consumer NPLs remain current on their payments.

The commercial loss rate, excluding small business, remains strong at 9 basis points. While up from a low level in 1Q18, commercial losses continued to remain low. Other commercial asset quality metrics continued to improve as reservable critical exposure was down \$1 billion from Q1 and NPLs declined 5%.

Turning to Slide 11, net interest income on a GAAP non-FTE basis was \$11.65 billion, \$11 billion on an FTE basis. Compared to 2Q17, GAAP NII is up \$654 million or 6%, reflecting the benefits of higher interest rates as well as loan and deposit growth. This growth is even more impressive given 2Q17 included \$140 million of NII from the U.K. card business which we sold in June of last year. Note we have presented the interest yield excluding the impact of net interest income and related assets associated with our global markets segment. These assets resulting from client financing and trading activity generally are shorter term and have a lower net interest yield than core banking assets. The net interest yield excluding global markets increased 12 basis points year-over-year to 2.95% driven by broad improvement in asset yields relative to funding costs.

Moving back to total NII, Q2 GAAP NII increased modestly versus Q1 as the benefits of higher interest rates and one extra day was offset by seasonal client activity in global markets and seasonal pay downs of credit card loans. An increase in three-month LIBOR rates from 1Q18, which impacts the cost of our long-term debt, also negatively impacted the comparison.

With respect to deposit pricing, rate paid on total interest-bearing deposits rose 7 basis points from Q1 and is up 32 basis points versus 4Q15, which was the beginning of this Fed rate hike cycle. That compares to an average Fed funds rate which is up 27 basis points and 151 basis points respectively from 1Q18 and 4Q15, so to date in this cycle we have passed through on interest-bearing deposits roughly 21% of the increase in Fed funds.

Turning to asset sensitivity, as of 6/30, an instantaneous 100 basis point parallel increase in rates is estimated to increase NII by \$2.8 billion over the subsequent 12 months. This is modestly lower than our sensitivity on 3/31 driven by cash deployed to securities, which increases future NII. Note that the short end represents about 70% of this sensitivity.

Turning to Slide 12, we had another solid quarter of expense management, extending our record of year-over-year quarterly decreases in expense to 14 out of the last 15 quarters. Non-interest expense of \$3.3 billion was down \$698 million or 5% year-over-year. As I mentioned earlier, 2Q17 included roughly \$300 million in impairment associated with data centers that we sold, so excluding that charge, expense still declined nearly \$400 million or 3% with broad improvements across most categories. I would emphasize that we achieved this reduction while continuing to invest in new technology, new financial centers, and sales staff.

With respect to sales professionals, we continue to add relationship bankers in consumer, business banking and commercial, as well as financial advisors in wealth management. Notably, despite adding sales professionals, our headcount is down roughly 3,000 from last year as we reduce non-client facing roles by streamlining how we work and deliver for customers. During the quarter, we also on-boarded more than 2,500 summer interns. These interns were selected from nearly 50,000 applicants. This year's class is our most diverse group ever; for example, women make up 45% of these interns and 55% are ethnically or racially diverse.

Turning to the business segments and starting with consumer banking on Slide 13, another great quarter for this business as client balances grew, revenues increases, and expenses were down. Key metrics suggest a healthy consumer and a strong U.S. economic growth. Jobs and wages are improving, tax reform put more money in consumers' pockets, and equity markets are healthy and creating wealth. These types of improvements are fueling higher spending and more borrowing, and we believe we are gaining share and deepening relationships in this growing economy.

Earnings in consumer banking increased to \$2.9 billion, returning 31% on allocated capital. This is the 12th consecutive quarter that earnings in consumer banking have increased year-over-year. Consumer banking created over 850 basis points of operating leverage this quarter as revenue grew 8% while expenses were down. The efficiency ratio has improved more than 400 basis points in the past 12 months and is now below 48%. Year-over-year, average loans grew 7%, average deposits grew 5%, and Merrill Edge brokerage assets grew 20%. As rates rose and given our solid growth in client balances, the value of our deposits drove an 8% improvement in revenue year-over-year. Cost of deposits, which reflects non-interest

expense as a percent of average deposits, improved to 155 basis points. Rate paid remained at 5 basis points.

Net charge-offs increased \$105 million from 2Q17 as our credit card portfolio grows and continues to season. Net charge-off ratio remained low at 128 basis points, up only 7 basis points from 2Q17. Provision expense increased \$110 million from 2Q17, in line with the increase in net charge-offs.

Turning to Slide 14 and key trends, looking first at revenue, we believe relationship deepening is driving improvement in revenue, predominantly NII. This quarter, our revenue growth of 8% year-over-year included 11% growth in NII as well as higher revenue in card income and service charges. Spending levels on debt and credit cards were up 8% year-over-year, driving the increase in card income. Service charges grew modestly. Customer satisfaction in consumer banking reached a new high with roughly 81% of our clients rating us 9 or 10 on a 10-point scale.

Focusing on client balances on the bottom of the page, we continued to grow deposits, loans, and brokerage assets. With respect to loans, in addition to growth in residential mortgage, card balances grew 5% year-over-year and Merrill Edge assets grew 20%. Edge offers customers a lot of value and is a great way for us to deepen relationships. Whether it is access to one of our 4,000 licensed advisors and a world-leading research platform or how integrated Edge is with other banking needs, we think customers are noticing and giving us more of their investment dollars. Expenses were down slightly compared to 2Q17 as productivity improvements more than offset the continued investment in financial center renovations and technology initiatives. We continue to modernize financial centers and add new ones. This quarter, we opened 13 new financial centers and renovated another 65.

Turning to global wealth and investment management on Slide 15, GUM produced another quarter of solid results, nearing the record \$1 billion of net income earned in Q1 and producing the second highest pre-tax margin ever at 28%. Strong client activity and a healthy equity market coupled with solid expense management all benefited results. Growth in households and deepening of relationships is helping offset industry dynamics driven by consumer behaviors. Strong AUM flows and market appreciation increased AUM balances, driving a 10% increase in asset management fees. This was offset by lower brokerage revenue and modestly lower NII. The NII reduction from 2Q17 reflects lower deposit levels as well as higher rates paid on deposits. Additionally, brokerage revenue decreased as volumes declined and mix shifted toward fee-based products. As a result of this shift, the percentage of GUM revenue derived from annuitized revenue streams has increased over the last year to more than 85%. The business managed costs well, creating operating leverage.

Moving to Slide 16, we continue to see strong overall client engagement in Merrill Lynch and U.S. Trust. Our local market strategy led by 93 market presidents is helping to better integrate our lines of business and deepen relationships, especially in wealth management. Merrill Lynch advisors reacted constructively to our 2018 compensation program, which incentivizes household and other types of responsible organic growth. Merrill Lynch's organic household acquisition has not been this high for at least five years. Competitive advisor attrition remains near historic lows. Year-over-year, client balances rose to record levels of nearly \$2.8 trillion, driven by higher market values, solid AUM flows, and continued low growth. AUM balances, which have climbed to over \$1.1 trillion, are up \$110 billion versus 2Q17 with flows contributing \$74 billion of that increase. Average loans of \$161 billion grew 7% year-over-year with continued strength in consumer real estate and structured lending.

Turning to Slide 17, global banking earned just over \$2 billion, growing 16% from 2Q17 and generating a 20% return on allocated capital. Revenue was down 2% from 2Q17 as an increase in NII from traditional corporate banking activities and higher rates was more than offset by lower investment banking fees and the impact of tax reform with respect to tax advantaged investments. Absent the impact of tax reform, the business would have created modest revenue growth and operating leverage.

IB fees of \$1.4 billion for the overall firm declined 7% year-over-year driven by lower advisory fees from a record quarter a year ago. Expenses were relatively flat versus 2Q17 despite our continued investment in additional client-facing professionals to enhance local market coverage. Global banking average loans grew 3% and deposits 8% year-over-year.

Looking at trends on Slide 18 and comparing to Q2 last year, with respect to average loans, 3% growth was led by corporate banking lending in international regions. Core loan portfolio spreads were down 5 basis points year-over-year and 1 basis point versus Q1. Loan growth was solid and reflects the current economic environment but remains very competitive. Average deposits rose \$23 billion or 8% compared to 2Q17 as we maintain a targeted pricing approach to acquire and retain high quality deposits.

Switching to global markets on Slide 19 and 20, I will talk about results excluding DBA. Global markets generated revenue of \$4.4 billion and earned \$1.3 billion, producing a return on allocated capital of 14%. Earnings were up 35% as revenue growth outpaced expense increases from higher revenue-led costs and continued technology investments. Sales and trading grew 7% versus 2Q17 to \$3.6 billion. Our equity business led the improvement with revenue of \$1.3 billion, up 17% year-over-year. The equities business benefited from increases in client financing activity,

reflecting investments made in the business over the past 18 months. Equity derivatives also benefited from increased client activity driven by volatility in financial markets. Fixed sales and trading of \$2.3 billion increased 2%. In general, improved performance across macro-related products was partially offset by weakness in credit products.

On Slide 21, we show all other, which reported a net loss of \$247 million. This is an improvement from 2Q17 of \$98 million. All of the selected items reviewed at the start of this presentation except DBA and global markets were recorded in all other, and therefore impacted both revenue and expense comparisons. If you remember the two items in 2Q18, the TRUPS and the gain from the sale of non-core mortgages netted to a negative \$160 million, while the sale of U.K. card increased revenue in 2Q17 by nearly \$800 million. This nearly \$1 billion year-over-year swing drove the \$1.2 billion change in revenue.

Non-interest expense improved \$760 million year-over-year and includes the 2Q18 data center impairment charge as well as broad improvements across other expenses. Remember, when comparing income tax expense between periods, the tax expense in 2Q17 included the nearly \$700 million tax impact of the U.K. card sale, which offset the revenue benefit.

Let me turn it back to Brian for a couple of closing comments before we open it up for Q&A.

Brian Moynihan

Thanks Paul. Just a couple thoughts to close and then we'll take your questions. We continue to operate in a strong business environment led by consumer health, corporate profits, and a view of growth in the future. We've performed well in this environment and feel we are getting our fair share of the business. We continue to drive strong operating leverage for the 14th quarter in a row and we grew, but we did it in a responsible manner, keeping our risk in check. Customer balances, earnings, they all grew as we cited earlier. We report earnings which have been stronger and more consistent for many years now, and with that consistency and stability, we continue to produce that operating leverage, which plays to your benefit as shareholders.

With that, let me turn it over for questions and answers.

Question-and-Answer Session

Operator

[Operator instructions]

We'll take our first question from John McDonald with Bernstein. Please go ahead, your line is open.

John McDonald

Hey guys. Wanted to ask about expenses, which came in a little better than expected this quarter. Brian, how should we think about the \$500 million technology investment that you mentioned in the press release over the next few quarters, and what's it mean for the target of approximately \$53 billion in expenses this year and also your ability to keep expenses flattish into '19 and '20, which you've previously talked about?

Brian Moynihan

Thanks John. We, along with a lot of other companies, announced \$1,000 bonuses, we announced a share for success plan, and then on top of that we've stepped up investment in opportunities that we have. It's basically \$75 million a quarter from now until the end of next year. We expect to manage a lot of that through self-funding, for lack of a better term, by continuing to improve of our expenses what we've seen, so you should think in the \$53 billion, low \$53 billion range this quarter and keeping it relatively flat, and we're going to work this self-funded. But in any event, it will be \$75 million a quarter in expenses, but when you add it all up, it's a major step in investing in our company due to the benefits from tax reform.

John McDonald

Got it, and then beyond this year, kind of staying, like you said, flattish in that same ballpark is the goal for next year and possibly beyond as well?

Brian Moynihan

Yes, the idea is for '19 and '20, we've told you on many occasions that we expect to maintain flattish over the next couple years beyond '18.

John McDonald

Okay. Paul, wanted to ask about the card losses. What kind of pace of seasoning do you see in the credit card book over the next couple quarters as that continues to grow?

Paul Donofrio

Pace of seasoning? Look - I guess a couple of thoughts. One, I think you have to remember that 2Q is sort of the highest quarter seasonally for card losses, right? We're sort of at 3.17, and if you back out the hurricane, we're at kind of 3.09. So yes, I would expect that kind of a range as your look out

the next couple of quarters, and that would reflect seasoning and loan growth in the card portfolio in that number.

John McDonald

Okay, that's helpful. Then just more broadly, credit at the top of the house in terms of the run rate around charge-offs and provisions, you also expect stability in the near term?

Paul Donofrio

Yes. In Q3, we expect credit to continue to perform well. I mean, we would expect provision to be roughly in line with net charge-offs with reserve releases moderating over time as we continue to build allowance in support of loan growth, particularly in card. As we just talked about, our card portfolio is seasoning and I would expect sort of an upward bias in NCOs; but again, remember as you think about that, Q2 is the highest quarter in cards, usually. I would also remind you that NCOs can be a little lumpy in commercial, since we're at the bottom, but everything--when you look at all the metrics, NPLs, 30-plus day delinquencies, reservable criticized, they are all going in the right direction, and they are really our leading indicators on the portfolio and they're all pointing to a very strong environment and a very strong portfolio.

John McDonald

Okay, that's helpful. Thank you.

Operator

We'll take our next question from Glenn Schorr with Evercore ISI. Please go ahead.

Glenn Schorr

Hi, thanks very much. I want to ask an NII question, and I saw the comments on ex-global markets, the net interest yield being up 12 basis points, deposit betas are good, so the core business that we all focus on is good. I do want to talk about the actual pick-up in wholesale funding costs, because the yield up 49 basis points on Fed funds purchased is big. I know it's a steeping of the short end, but the question I have is, is that something that we should expect to be with us throughout this rate hike cycle if the short end of the curve keeps steepening? Is it something that you're able to hedge, because it does make a pretty big difference in NII.

Paul Donofrio

Are you talking about the increase in the cost of our long-term debt quarter over quarter?

Brian Moynihan

Fed funds, Fed funds.

Glenn Schorr

Fed funds, wholesale funding side. Page 9 of the supplement has the average balances.

Brian Moynihan

Just think of it--it's matched book, so it moves together pretty quickly due to the fact it's all short term, both on the liability side and then they're long assets, but they price up as the curve moves. But there's some stuff in the second quarter that we usually have there, that is the dividend transactions and things like that, which affect it, so I'd pay attention to it next quarter. You might see it settle in a little bit more like it traditionally does.

Glenn Schorr

Okay, that's good, because the flattening out on total net interest income is really that, as opposed to the core business, that's why it's more important than usual now?

Brian Moynihan

Yes.

Glenn Schorr

Okay, and then just one question on advisory. Year-to-date, you guys have lagged peers some. I don't know if you feel that's a couple of a big deals or a sector or two that you want to deepen coverage in. I'm just curious to get your thoughts on advisory.

Brian Moynihan

Oh, the M&A advisory fees? I think it is. It is, just sometimes you get the right side of a deal, sometimes you get the wrong side of a deal, sometimes you're not in a deal. But even though we performed solidly in line with the fee pools and stuff year-over-year, we know we can do a better job there and the team is working on it. We had a record quarter in the second quarter last year, and so the \$1.4 billion level is more in line with quarters

across time, second quarters. But the team knows they can do a better job and are after it.

Glenn Schorr

All right, thank you.

Operator

We'll take our next question from Jim Mitchell with Buckingham Research. Please go ahead.

Jim Mitchell

Hey, good morning. Maybe just talk a little bit about loan growth, what you're seeing. Obviously the [indiscernible] has been showing signs of life. Are you seeing that as well, and how do you think about that going forward in terms of your outlook for loan growth?

Paul Donofrio

First off, I guess our perspective is customers are optimistic given tax reform, the economy is strong, and confidence feels high, so customers are going to react differently to those factors near term - some may pay down debt from tax savings or repatriation, but some are going to invest and borrow. In large corporates, growth in any one quarter can bounce around a little depending on acquisition financing, so having said all that, our near-term expectation on loan growth remains unchanged. We still expect total loan growth to be low single digits at the top of the house, if you exclude the headwinds from the run-off of the non-core mortgage book and all other, growth within the business segments should be mid single digits. I would also note in the slide deck, year-over-year growth has been relatively consistent now over the past couple of years.

If you look at the different categories, you want a little bit more color, we anticipate modest growth in consumer loans. On car, we've seen mid single digit year-over-year growth which has modestly increased over the last couple of quarters. With respect to consumer real estate, originations are solid and balances are growing well, but there are headwinds continuing from the run-off from the non-core portfolio; and remember, we're booking 90% of our mortgages now on the balance sheet.

I mentioned in the remarks that we expect auto growth to be flat to down as we focus on organic growth and rely less on third party, and note that in all of these categories, we're very focused and remain focused on prime and super-prime.

Jim Mitchell

So you're not seeing any real acceleration yet?

Paul Donofrio

I wouldn't say we've seen acceleration. I think it's been consistent growth. You know, we have a pretty diverse set of clients that we service. In any one quarter, one may accelerate more than the other. If you look at this quarter, we saw really good growth in small business, we saw good growth in structured lending and GUM, so in any quarter we might see growth but it always seems to average out of at that sort of mid single digit level.

Jim Mitchell

Okay, and as we think about in that context deposit growth slowing, I don't know if it's a large impact from the TRUPS, how do you think about--and your rates on [indiscernible], how do we think about NII growth going forward given the implied curve today?

Paul Donofrio

Yes, well we will clearly benefit from the June rate hike, Q3 is going to have an extra day, and we're also going to benefit from expected loan and deposit growth, but these benefits are going to be offset by rate increases on deposits. As you know, we've been increasing rates in GUM and global banking. The issue is we just don't know when we will increase in consumer. It's going to depend on the competitive environment, so it's probably a little misleading for me to give you all of you some sort of numerical guidance as we just don't know the timing of any increase in consumer.

Having said that, year-over-year we're up a billion dollars in the first half.

Jim Mitchell

Okay, fair enough. Thanks.

Operator

We'll go next to Betsy Graseck with Morgan Stanley. Please go ahead.

Betsy Graseck

Hi, good morning.

Brian Moynihan

Morning, Betsy.

Betsy Graseck

A couple questions. One is on deposit betas and getting a little bit more color there. I know you mentioned in the prepared remarks the overall deposit beta. Can you give us a sense as to where you think you are in the commercial, the wealth, the consumer buckets? I'm just trying to get an understanding of which buckets are higher than others, and do you see an acceleration in any of these specific buckets from here?

Brian Moynihan

I think, Betsy, the customer base has performed very differently depending on what the cash is used for. If it's transactional cash, whether it's a consumer or whether it's a wealth customer or a company, they're using that money and it's in the flow, and therefore the rate side of it is not as important as you're paying for service on the commercial side, or the consumer side just the cash flow getting out of the household. If you look at it on the investment side, obviously all segments when they have the access cash that they don't need to conduct their daily business moves, and so if you look at our pricing strategies across businesses that Paul talked about earlier, you see them differentiated not only by business but also by market and sub-markets within business, and so if you look at the powerful engine and the trillion-plus of deposits, \$1.3 trillion, consumer is nearly \$680 billion of it, and of that \$300 billion-plus is checking, which moves very slowly because it's transactional.

The good news in consumer is we've grown number of checking accounts for the first time in the last six or eight quarters consistently due to all the repositioning we're doing with accounts, and the average balance has gone up and are all checking, so that is very beneficial for us going forward. So without getting into all the numbers, and Paul can hit that, you just have to think philosophically, half that balance in consumer or checking are not going to move much, and the rest of it is money market and will move as the market moves and competition moves. We've been able to maintain discipline on that side and generate another \$30 billion-odd of year-over-year deposit growth, which is pretty good, and that's all core market share gains because we're not doing CDs and other stuff.

Then on the institutional corporate side, we've moved it, and Paul gave you some of the statistics. For commercial side, obviously the highest end moves fastest, and yet we've been able to maintain growth in balances while still maintaining discipline on pricing.

Betsy Graseck

Okay, and you spoke to the non-consumer side growing nicely. What about on the commercial side, are you seeing a shift from NIB to fees, or are you holding your NIB in the commercial group?

Paul Donofrio

Well, most of the deposit growth in global banking has been in interestbearing deposits, so we are definitely seeing a shift there from non-interest bearing to interest bearing.

Brian Moynihan

But it's very different by business, so in the business banking segment, it's five to one non-interest bearing to interest bearing, and then when you get to corporate, it's more interest bearing than non-interest bearing. So again, it differs by the type of customer it is too.

Betsy Graseck

Yes, okay, but I guess part of the point you're making is that that's in the run rate already?

Brian Moynihan

Yes, and so the point is that you'll see--that's the thing. If you go back since the tightening started in '15 and think about the global scheme of things here, you can see those tightening moves across, that you see what's happened with the deposit rates. They'll continue to move, but you back that all [indiscernible] you still see the asset sensitivity just under \$3 billion for 100 basis point rise, 70% is in the short term, and that takes all the stuff we're talking about and puts it into the forward curve assumptions.

Betsy Graseck

The checking accounts that you're growing on the consumer side, do you see that more in your branch expansion areas or is that more in your, for lack of a better word, legacy footprint?

Brian Moynihan

It has to be in the legacy, because the expansion footprint is so small. When you think about it, it's digital sales, it's in the legacy footprint, it's deeper relationship management. But we've grown those checking account numbers at the same time the primary percentages kept moving up. We're now at 91% of the primary checking account in the household and the average balance has grown also, so think about that dynamic - a higher average balance, primary households going up, and growing the number and it has

to be in the core franchise. There's not enough new branches out there to make a difference when you have the size of franchise we do.

Betsy Graseck

Got it. Then just lastly, can you remind on the pace of the branch expansion over the next year or two? I know it's a four-year forward that you announced, but just try to understand rate of change here over the next year or two.

Brian Moynihan

About 500 over the next four years has been, and so you saw some of that dynamic this quarter. It picks up because literally just getting locations set and getting a build out, so you'll see it pick-up over the next several quarters, but it takes about four years to get to them all. Thirteen this quarter, to give you a sense, so it will pick up as we move forward.

Betsy Graseck

Got it, okay. Thanks Brian.

Operator

We'll go next to Gerard Cassidy with RBC. Please go ahead. Gerard, check your mute function please on your phone.

We'll go next to Ken Usdin with Jefferies. Please go ahead, your line is open.

Ken Usdin

Thanks, good morning. If I could follow up a little bit more on that lower right part of the funding side, Paul, can you walk us through the benefits you expect from trust preferred redemption and if you are going to have to refinance that, and what would be the net benefit as you think about that and forward NII?

Paul Donofrio

Sure, so just a reminder everybody, these securities are becoming just expensive funding at this point. I think you all know, they no longer count as capital under the fully phased-in rules, nor do they count at TLAC, so while there are a number of things to think about if you're going to call them, the primary focus was on the one-timer from loss relative to the ongoing lower interest expense that you are alluding to. If you think about that ongoing benefit, we think the savings are going to be roughly \$140 million per year or \$35 million-ish per quarter.

Ken Usdin

Do you have any need to refinance or is that a net of any incremental funding as a swap, or is this going to be a net nice benefit?

Paul Donofrio

That assumes we're refinancing.

Ken Usdin

That's a net? Okay.

Paul Donofrio

But again, to be clear, we're not refinancing with preferreds. We're refinancing with bank debt or unsecured senior debt.

Ken Usdin

That's what I meant - just the replacement financing for getting rids of the higher cost TRUPS.

Paul Donofrio

Yes, that estimate I gave you assumes we refinance in an efficient way.

Ken Usdin

Okay. Then also, you mentioned the market impact on long-term debt. Did we see any of that 30-90 day disconnect still come through on average this quarter, and do you expect that to get better as we go forward from here?

Paul Donofrio

Yes, we did see it this quarter. There was a quarter over quarter increase in long-term debt yields - they were up, I think, around 38 basis points, and that's driven by the spot increase in three-month LIBOR from January to April as most of our debt is swapped to floating and resets in the first month of the quarter. So it's about what the rates are at that moment in terms of understanding the increase in the cost of the debt.

We're thinking about that. We're working on different ways that we can align what happens on our loans, which are mostly one month LIBOR too, what happens on our liabilities with mostly three-month LIBOR, so more to come on that.

Ken Usdin

Okay, because that was going to be my final question, is just what can you do to arrest the increase, to Glenn's point before, of those three bottom lines on the lower right side of the liability side, which are moving far faster than any deposit beta?

Paul Donofrio

Yes.

Ken Usdin

Okay, so we'll wait and see. Thanks Paul.

Paul Donofrio

Yes, we're working on that.

Operator

We'll go next to Mike Mayo with Wells Fargo Securities. Please go ahead.

Mike Mayo

Hi. You said the average checking account size is up. It's gone from what to what?

Brian Moynihan

Depends upon a time frame, but it's moved up over the last three or four years, Mike, from average size of--so if you want to go from '14 to now, it's gone from \$5,000 to \$7,500, and in the last year it's gone from \$7,000 to \$7,500.

Mike Mayo

Okay, so does that help keep the deposit betas lower for longer? I guess if you were to offer 1% less in interest, what are we talking about here, \$75 a year? In terms of that \$75 of what someone might give up, they get all the mobile banking and online checking and everything else? Is that how we should think about it?

Brian Moynihan

I think there's lots of trade-offs consumers make, but this is the money going in and out of their checking account on a given day, so you're growing the average balance, the \$7,500 between our preferred and our retail segment, they'd be different each segment, but this is money in motion, for lack of a better term, Mike, as you're thinking about it, so to move it around

very carefully has implications if they don't keep the balances there if a payment hits or something like that. It's pretty sticky in terms of balances, but the key is when you think about the consumer overall, it's as a percentage of total consumer deposits it is nearing half of that in checking, either interest-bearing checking, which is low cost, or non-interest bearing. That's the key. That's what's driving the checking growth, it's not coming from CDs or other types of high cost deposits driving the total deposit growth.

Mike Mayo

Then consumer efficiency, consumer banking efficiency ratio of 48%, I'm not sure if that's the lowest in history, but maybe that's good news, bad news. That was our forecast for you to hit three years from now, and you're here in the second quarter, so is that kind of front-loaded? Should we expect that to stay at 48% or can you improve a lot more, and if so, where?

Brian Moynihan

Mike, as you know, we don't sit there and say 48 is great and let's stop. We say, how do you improve the operating effectiveness, so I think if you look at that, they'll continue to work to improve it. They've done it as they generate more NII, which drives their business model, as you're well aware. A little of that on a same expense base makes a heck of a turn, and if you think about, 850 basis points of operating leverage year-over-year matched quarter is pretty effective, so it's a combination of all those investments I talked about earlier coming true and the efficiency embedded in that, the combination of more sales digital and efficiency embedded in the sales process, because this 48% counts everything, and a combination of continuing to grow in checking accounts and the deposit balances, which are the highest potential revenue growth product forum in the short term with a big business like that. You've got to remember, that business made \$2.8 billion after-tax this quarter, which makes it one of the biggest companies in America.

Mike Mayo

One last follow-up. With all the digital banking expansion, are you looking to ramp up your marketing spend? Your marketing spend did not increase, at least in contrast to some of your peers, and the thought there is as you relate to customers less with branches, more with digital, maybe you want more support from a marketing standpoint, but that at least is not showing through in your expense numbers.

Brian Moynihan

Yes, what you see as marketing is a representation of bought marketing, paid for, all that type of stuff. But remember that the integration of the customer information, the platforms we use, is a very efficient way to market, and so especially going for the stair-step deepening on our own clients, we know what we know about the clients and the messages that go out to the branches to set up calls with Brian Moynihan because has a need, etc., are driving it. That's not expensive and it's not necessarily what people see in the marketing and line item. It's comes through the talent and teammates that we have in our data information group, which is thousands of teammates that work on this every day, so it's more in the personnel line than it is in the marketing line, Mike, if you see what I mean.

Mike Mayo

So it's kind of geography in one sense?

Brian Moynihan

Yes, but it's about, all told, I think 35, 40% of the sales transactions are initiated by a marketing lead, for lack of a better term, driven by analytics into the branch system or into the digital experience.

Mike Mayo

All right, thank you.

Operator

We'll go next to Matt O'Connor with Deutsche Bank. Please go ahead.

Matt O'Connor

Good morning.

Brian Moynihan

Good morning, Matt. How are you?

Matt O'Connor

Good, thank you. Just circling back on net interest income, as we think about the outlook, it seems like there's some positives in the sense of the lower debt costs and some of the things that you alluded to. Obviously there's also expectations that deposit betas pick up. When we put it all together, if you care to provide some more detailed guidance on the net interest income outlook, that might be helpful.

Paul Donofrio

Look - I guess the best guidance I can give you is our asset sensitivity, which again there's \$2.8 billion for 100 basis point move with 70% of that on the short end. As you know, that modeling includes a 50% pass-through rate, so as I said before, we have some nice tailwinds in this quarter, and going into year end, we've got the rate hike, we've got the extra day, and we're going to see loan and deposit growth, but that's going to be offset by whatever happens on the deposit side. Again, the best guidance I can give you is just look at our asset sensitivity.

Matt O'Connor

Okay. I mean, I guess the asset sensitivity--you know, we've had rates move up more than expected the last few quarters, and obviously there is some one-offs in the net interest income, but it hasn't been a very good guide the last few quarters. NII has been relatively flat and obviously rates have been guite favorable, so.

Paul Donofrio

We've grown quarter over quarter \$660 million, first half of the year I think it's \$1.2 billion on a GAAP basis. I'm not going to sit here and tell you to double that because we just don't know what's going to happen on rate paid; but to your point, in parts of our business, in the consumer business we haven't increased rates materially but we are increasing rates in GUM and in global banking.

Matt O'Connor

Okay. Just separately, if we looked at the credit card fees, those came in better at least than I had been looking for. I know there is, I think, still a drag in the year-over-year comps from the U.K. sale, a little bit there, so just talk a bit about maybe what's going better there, and I think you had some new product offerings as well that recently came out.

Paul Donofrio

Yes, in 2Q17, we did have a small non-operating charge, so I wouldn't use this quarter over quarter, year over year growth rate as the growth rate going forward. More generally, we're seeing growth in our card balances and we think that's going to continue in 2018 as we add new accounts at a healthy pace. We've seen combined credit and debit card spend, as you know, is up - I think it's up 8% year-over-year, but that card line does face headwinds from competition around rewards, and as you know, we are focused on total revenue. We're not focused on any one line item, we're

focused on total revenue and delivering for our clients. We're focused on attracting relatively high quality card customers and then rewarding them for deepening their overall relationship with us, and we think that strategy is driving incremental deposit growth, making our deposits more sticky. It also lowers our costs because those people tend to interact less with the bank.

Matt O'Connor

Okay, thank you.

Operator

We'll go next to Saul Martinez with UBS. Please go ahead.

Saul Martinez

Hey, good morning. On NII, Paul, obviously part of the lack of clarity around the NII guide is in part due to the uncertainty around retail deposit beta, and on the consumer side where you haven't seen much, if anything, in terms of deposit rates moving up. But is there anything that gives you pause that we are nearing a tipping point, any changes on the margin in consumer behavior? Are you starting to see, for example, any migration or sense that there will be migration out of non-interest bearing into higher yielding instruments? Just curious if there is anything that gives you pause that maybe we will start to see deposit costs move up, because it's obviously not showing up in the numbers in any meaningful way just yet.

Paul Donofrio

Yes, well the short answer, the very short answer is there's nothing that gives us pause. The longer answer is as [indiscernible] look at every part of the United States and every MSA and looks at our competitors, so we notice activity, we see people testing this or that in a given market. But so far, we don't see anything that gives us any concern, and again--I don't want to go over it again, but I think you all have to remember what consumers value is not just [indiscernible] them, they value the entire relationship, they value the nationwide network, they value the mobile ability, the safety, the transparency. They value preferred rewards - we give them more when they deposit more with us, so the whole thing--you know, that's part of the whole equation.

But the short answer is we just really haven't seen anything so far that would make us think things are going to change rapidly, but we'll see.

Saul Martinez

Okay. No, that's helpful. If I could also just ask a follow-up question on the increase in funding costs on the Fed funds, you mentioned--if you could clarify what you mean by settle in. Should we interpret that as remaining at the current 2.15%, or is that to suggest that there should be some sort of normalization in 3Q and a bit of a tick down in the funding cost line there?

Paul Donofrio

I think the way you think about--you guys are obviously looking at something in the supplement, but the way I would think about funding costs is in global markets, which I think is what this is boiling into, in global markets when we grow equities, as we've been growing equities, the dividends we receive on equities, the fees we receive from trading equities, that's all in trading com profits. But if you're growing equities, you have to pay for that, so that's in the interest expense. In addition if you look at FIC, as rates rise, you've got to pay for that as well, your cost to fund FIC goes up, and most o four inventory is bonds which are fixed rate, so your NII does not go up right away until those bonds get replaced. As rates rise, you're going to see that phenomenon affect our global markets NII, but we've seen the improvement in trading and com profits. I mean, equities is up 17% this quarter, year-to-date equities is up, how much - 24, 28%? So you know, it shows up--it's geography.

Saul Martinez

Got it, so it's trading-related NII, but what we're looking at is Page 9 in the supplement - you know, the cost went to \$1,462 million versus \$1,135, and it's a sequential increase of about 49 basis points. But it sounds like it's related to the global markets side, as you said.

Okay, thank you.

Brian Moynihan

That's where it comes from.

Paul Donofrio

Look - the only other phenomenon this quarter is in credit card, right? You have the phenomenon of people paying down their card balances because they get tax refunds, and if you look at the credit card portfolio, that means that transactors, the people who borrow money from us inter-period, they're a bigger portion of it. So I think those are the two phenomena that impacted NII in the second quarter that are seasonal, that it happens every year. If you go back year after year after year, you saw this phenomenon from 1Q to 2Q.

Operator

We'll go next to Nancy Bush with NAB Research. Please go ahead.

Nancy Bush

Good morning, gentlemen. A couple of questions for you here, the first one on digital usage. It seems to be sort of accelerating beyond a pace at which even you expected, and I'm wondering if you have the ability to sort of look at digital usage by age, segment, etc. Are there any variations from what you expected early on, are we seeing more usage not just by millennials, and has the pace of digital usage sort of altered your expectations for branch expansion over the next few years?

Brian Moynihan

I think, Nancy, what you're pointing out is the common theory is that this is all young kids, but there's not enough young kids in anybody's customer base to drive this kind of activity, so it has broadened out dramatically. When you have 75% of the checks are deposited in ATM or through the mobile device, that is 75% of all the checks written that consumers deposited with Bank of America, so it's across the board; whereas something like digital - Erica, obviously the cohort is younger just because people, their familiarity with a voice activated, artificial intelligence assistant and the usage of it. By different types of things, you see different activity, but you have sales of mortgage or auto definitely also skew higher in age because the nature of people who are buying homes and cars, so it's really across the board.

I think what you're pointing out is really the difference between now and five years ago or 10 years ago, where the activity conducted by grandparents on mobile phones is high, and so as I always told the story, we had a 100-year-old person who became mobile enabled a couple years ago, which I think is tremendous optimism, but it's across the board and that is the difference. Then the usage of it is integrated high touch, high tech, so there's still people--you know, there's still talent, teammates taking \$50 million business to the branch a quarter and doing a great job with them, and we're driving people to branches for relationship management at the same time we're doing other things with their devices, so it is absolutely a combined set of capabilities and you're looking across all of them.

What that means in branch expansion, what we're doing is retooling and outfitting branches and ATMs, so we're getting all the ATMs will have the ability to cash checks to the penny, which is important to actually use that as a payment device, and expanding the branches and markets we aren't in doesn't cost a lot from marketing. We went digitally first in Pittsburgh, for

example, which is a different way to go about it, due to the fact that we already have a nationwide brand and customers there in Merrill and U.S. Trust in the credit card, and mortgage customers from the past, so we can drive that. You would expect that it will have implications for the branches, but remember in the branches, even though we've come down another 100-odd year over year, the numbers of people in them are going up, and that means that they're bigger stores, bigger destinations, less about on the corner transactions. At the same time, they're tremendously important in the community, so we continue to develop our community-based branches in markets which tend to need more face-to-face help.

So all that together, it's a complex thing, but at the end of the day when you put it all together, we made \$2.8 billion after tax, 48% efficiency ratio, deposits grew by \$35 billion year-over-year, \$26 billion of which was checking, to give you a sense, which relies on all those great capabilities to fuel it and why we think we're taking share.

Nancy Bush

So I guess what you're saying--I mean, there has been a tendency in the industry to look at digital versus branch as sort of an either-or proposition, and you're saying that that's not necessarily correct at this point?

Brian Moynihan

Yes, a half million people went to their mobile device, set up an appointment and came into the branch, another million responded to calls, and 50 million people walked in, and yet we had a 1.4 billion log in, so you start thinking about it, it's an absolutely integrated experience and a competitive advantage to have both. I think that plays out generally in retail and I think it plays out in financial services.

All during this time, Nancy, the other key thing to remember is customer satisfaction scores, which you and I have talked about for a long time, continue to go up and are at all-time highs even when we're making changes in the branches sometimes, which cause customers to recognize a change in the basic system, either closing a branch and consolidating it or how the drive-ups work and things like that.

Nancy Bush

Okay. Yes, my follow-on is also on a note of expectation versus reality. There has been an expectation, I think in the industry, that there was going to be a quarter or quarters in which the credit quality environment changed dramatically, and it's been an expectation about CRE, etc. etc. I guess you said that your charge-off ratio had been under 50 basis points for, what, 15

of the last 17 quarters or something like that. Should we change our assumptions about a change in the credit quality environment? Are we in a new environment that's something we haven't seen before, where it's just consistent?

Paul Donofrio

I think we can never--we are a bank, Nancy, as you well know, and therefore the general economy is always going to have an impact. The question is, have we positioned the company through our responsible growth work better than anybody else, and so we think we have. That means even if you hit an unexpected--which we don't expect to happen, and our consumer activity is the highest it's been in many years here. Payments by consumers are up 9% for the first half of the year versus last year, so everything shows as the consumer driven U.S. economy is in very good shape. You saw the retail sales numbers today, so all that bodes well for the 12, 24, whatever months, but given that we are creatures of economy, you're going to see us get affected by the economy if there's a recession, if there's a recession that we do not see coming in any near term.

The way to think about that, though, relative to peers and relative to the industry overall, is you have the stress test, which is a hit the wall without any prior preparation into a very steep decline in the economy in a very short period of time, and you can see that each year our losses, so to speak, in that scenario keep coming down incrementally because the underlying quality of the credit that we do, and by the way we're not alone in the industry, we're better than the industry but we're not alone, and so I think the industry has done a great job of making sure we maintain--you know, keeping our head on our shoulders relative to credit. The core banking, stress test banks, you can see the statistics.

Now, think about the last four or five years - oil and gas was going to be a problem, we put up a bunch of reserves, we ended up taking most of them back through. Commercial real estate was going to be a problem - we ended up going through that with very little loss and great recoveries last year, something like that. We don't do subprime - we let that play out in other people's. Auto loans were going to be a problem, you see that we haven't seen much change there.

So are we underwriting to lower loss standards in good times than we did in prior generations? Yes, as our company, a difference in credit card, maybe underwriting at a normal 4% unemployment to 5.5% charge-offs versus now, we underwrite maybe 3, 3.5, and that's what you're seeing the normalization get to. That's the difference that's fundamentally different, but the real key was also to balance the portfolio so we didn't have so much

unsecured credit card risk if we hit a cycle. So it's just the way we run the company, and you're seeing it--and it's 14 out of 17, not 15, but give us next quarter and we'll show you again.

Nancy Bush

All right, thanks very much.

Operator

We'll go next to Marty Mosby with Vining Sparks. Please go ahead.

Marty Mosby

Thanks. Paul, wanted to ask you, everybody is talking about the flatness of the yield curve, but if you look at the three-month to two-year, you had talked about the pulling a little bit of your cash, that's the part of the yield curve that actually is pretty advantageous. You don't have to go out with duration actually to pick up 80, 90 basis points, so was that part of what your thinking was as you were kind of deploying some of that liquidity?

Paul Donofrio

We're always thinking about the trade-offs between capital, liquidity and earnings, and when we--when securities mature in our portfolio or when we have extra cash to put to work, we're going to be looking at that yield curve and we're going to be trying to optimize that trade-off between liquidity, capital and earnings. So the answer is yes, we've noticed what the yield curve looks like and we are investing appropriately.

Marty Mosby

Then Brian, I've got two more philosophical questions for you. One is as you've come through all of the regulatory requirements and working through what issues you had coming out of the financial crisis, do you think Bank of America today is better prepared to be able to really fund economic growth as it looks out more than internal?

Secondly, there's been turnover amongst the leaders or the business managers within our sector. When you first came in, you were kind of the new person on the block, and now you see yourself as--you know, you've kind of been the one around almost the longest. Do you see yourself as taking more of a role as a pillar or a leader in the sector now that you have matured into your job?

Brian Moynihan

I think I might just be getting old, Marty.

Marty Mosby

We're all doing that.

Brian Moynihan

I think the leaders of the major institutions, going to the dialog with Nancy just a few minutes ago, we take very seriously the requirement we have to drive the real economy, do it the right way, have it the right amount of capital and liquidity so nobody has to worry about our industry again, and I think a role personally as a leader in that, along with my colleagues, is critical, and we all see it that way. None of us are-we want fine tuning in regulation, we don't want it taken back to where it was, where people could make serious mistakes. We want the portfolios balanced, we want the capital and liquidity there, because at the end of the day under the FDIC scheme, we are a co-insurance for the activities of our industry and we take it very seriously.

We've had great leadership in our company with stability, and it's been a pleasure to serve with the teammates. I'm in the ninth year now as CEO and we've very little change for the last seven or eight years, other than people retiring, and we were just recognized as the best bank in the world, which is great for the teammates and an honor to receive it on behalf of them.

That's, I think, the broader philosophical view, that we'll continue to help shape this industry at Bank of America, but I don't think my colleagues think differently, and I think we've been through a lot to get here and learned a lot of lessons that will continue to apply.

Marty Mosby

Thanks.

Operator

We'll go next to Gerard Cassidy with RBC. Please go ahead.

Gerard Cassidy

Good morning, Brian. Good morning, Paul.

Brian Moynihan

Missed you the first time, Gerard.

Gerard Cassidy

I know, I apologize - telephone problem. Brian, maybe you could share with us, you look at your returns on elevated capital by business line, and if you average them out, they come well over 22%. Obviously your stated return on equity is just over 10%. Clearly, the capital you guys are allocating to the business lines is less than the consolidated capital that you carry, so when I look at your tangible common equity, let's call it just under \$200 billion, and the allocated capital is about \$128 billion, have you had discussions with the regulators about--because I know it's CCAR constrained, you've got operating risk as well. Have you talked about them what's the real need of capital for banks like yours in terms of the new guys that run these agencies, versus what it was like under the last administration?

Brian Moynihan

Well, I think one thing you've got to remember is goodwill is goodwill, it doesn't amortize, and so that \$70 billion is going to be sort of stuck there. We run off maybe \$100 million a quarter or something like that, it used to be a little bit more. The tangible common equity of a company in the mid-7s, Gerard, there was a day in the mid-2000s where we were running under 4 and I think touched 3, and maybe even under 3, so we have substantial tangible common equity. Going to Marty's question, that means that we will be, and likewise our colleagues, will be pillars of strength, so we obviously have some serious dialog as the right way to keep enterprises capitalized efficiently for safety and soundness. I think that if common equity Tier 1 is 11 and change, those are over-capitalized relative to our standard of 9.5.

The problem we've got is now you've got this [indiscernible] buffer so you're trying to figure into the stress and capital buffer and all that stuff, and I think we keep needing to have a dialog with the industry and with the regulators to keep to getting to a middle of the road position here, because under-utilized capital is not the right thing. If we can get that capital back out in the system, it can be used to support someone else. That is actually good for the industry and also avoids and recognizes that running a business that has consistent loan growth of 5% really quarter after quarter after quarter versus the year before with the right credit is actually the right way to run it, so to make that all work, you've got to let the capital out of the industry that isn't needed or earned and not needed to support growth.

Meanwhile, I forgot to answer Marty's question. We are driving the real economy. There's no recently we have to do this - we've been doing this for years, so if you look back and look at our commercial loan growth, it's been mid single digits, and our small business loan growth this quarter was very strong and has been for many quarters, as the team continues to drive it.

But all that capital still doesn't equal all we have, and you're right - we need to keep that balance going, but let us keep working it now we've got sort of a--you know, we've sort of got a long term, everybody is at the capital standards, everybody has met them, everybody has met the 19 standards, etc., and we've got to get through the last couple rules and then figure out how to manage the outcome to the right place. This company's industry is so much more strong than any other industry in the world relatively, and that will bode well for our country as we move through the next cycle.

Gerard Cassidy

Following up, Brian, on the capital, clearly you had a good ask on the CCAR returns. Can you remind us where you think long term the dividend payout ratio can get to when you sit down with the board? Could it get to a 40% level?

Brian Moynihan

Well, we have said 30%, and largely it's trying to figure out how all the rules and regulations work, and also where you'll never have to cut the dividend in times of stress and things like that. Let us get it up there and we'll figure out where it goes from there.

Gerard Cassidy

Okay. Lastly, obviously you talked about the value of total relationships on your consumer side. You also talked about you're adding more customers with credit cards, households, brokerage house clients. Can you parse for us how much do you think you're taking away from other competitors just versus new people coming into the financial system? Do you have any idea what that is?

Brian Moynihan

You can calculate it because the population growth and the shifting demographics, we are taking, we believe especially in the consumer bank, share, but at the end of the day, we're so big that we just have to grind out the growth through doing a great job. It inherently has to be slightly faster than the economy, slightly faster than the population growth, so we're taking share. But you've got to remember, on the commercial side we're also increasing call it new logos, new clients through the expansion of relationship managers and the depth of those clients. I think that that takes time to build, and it's building up because of just the nature of moving a commercial relationship from X to Y company. But the combination of what we can do locally in all the markets with a combination of our global platform, our research team, our ability to talk across the world and our

cash management platform, there's very few of us that can compete at that level and that will continue to play to our benefit. Increasingly with middle market investment banking, we've added in the markets 50 of them so far, we're seeing tremendous--despite the fact that our overall investment banking fees bounce around, you're seeing the portion of it coming from that middle market client base is strong, and so we think we have a competitive advantage and we're just continuing to push that hard, including this additional \$500 million in investments due to the benefits of tax reform.

Operator

Thank you. We'll take today's final question from Brian Kleinhanzl with KBW. Please go ahead, your line is open.

Brian Kleinhanzl

Great, thanks. I just had one quick one, and a lot of them have been asked already. Is there a way that you could size what the runoff portfolio did quarter on quarter, so we can kind of get back to what the core loans did sequentially?

Paul Donofrio

I'm sorry, the run-off portfolio?

Brian Kleinhanzl

Yes, within the loan book. You said you were still seeing some of the headwinds from the run-off portfolios coming down, but I didn't hear any dollar amounts what the size is now for the run-off portfolio.

Brian Moynihan

It's been averaging about \$3 billion to \$4 billion per quarter, and it's in--you can actually see it in the deck, I think on Page 8. We break it out for you right there - we have total loans, then the run-off portfolio, then the business segments, and then we added this quarter so you could see the consistent year-over-year growth in loans we've been experiencing.

Brian Kleinhanzl

Okay, great. Thanks.

Operator

That will conclude today's Q&A session. I will turn the floor back to Lee McIntyre for any closing remarks.

Lee McIntyre

Thank you everyone for joining us. Another strong quarter - \$6.8 billion in earnings. If you review Page 2 of the slide deck, you'll see it - we grew loans on a core basis and grew deposits on a core basis. We grew revenue on a core basis at 3% and we brought expense on a core basis down 3% for a 14th consecutive quarter of operating leverage. Returns are strong and we continue to drive it, and we look forward to seeing you next quarter. Thank you.