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# 2020 INVESTOR DAY

TRANSCRIPT

February 25, 2020

# MANAGEMENT DISCUSSION SECTION

## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

Good morning. Morning, everyone. Welcome, whether you're in the room here with us or listening online, thank you. Thank you very much for joining us for our 2020 Investor Day. I'm Jason Scott. I'm the Head of Investor Relations for JPMorgan Chase, and I'm lucky enough to have been up here introducing this event kicking it off for four years. And in fact, believe it or not, this is actually the 15th straight year we've hosted a firm-wide Investor Day.

We have been through a financial crisis, transformational M&A, a lot of regulatory changes. And while the environment has certainly evolved since we started our streak, if you will, I think recently especially you've heard a lot of consistency in our strategy and approach. And you've seen us execute on that strategy. Shows up pretty clearly in our results and look, frankly, we talk to you about it all the time.

So that being said, at this point we don't believe that we need to do an Investor Day every year. And there's a good chance you might see us take a break in 2021.

Now, look, of course, that could change depending on how the business and the environment evolve, and we definitely reserve the right to change our mind. So before you decide to fill my inbox with either congrats or complaints or whatever sentiment you have, just remember we still have a lot to share with you this year for sure. You'll get to hear from some of our business heads talk about what they do every single day to make this company a leader across the businesses, how they invest and think about long-term strategy and success to this company.

You will definitely hear about our leading financial performance, how we can continue to drive value for you guys over time. And look, whether we do an annual Investor Day or not, we are committed to being transparent in our reporting, engaging with you on financials, strategy, whatever you want to talk to us about, it doesn't change that one bit. Okay. So look, we'll let that simmer for a bit here, now here are a few logistical items and please hope you pay attention to that.

Breaks, so for those of you online and in the room, we'll do the first two presentations before taking a short break around 9:15, and we'll have another break just before 11:00 AM. Second, survey, we've had it every year. It's no longer printed. We're doing electronic only. So that will be available tomorrow. Please take the time to fill it out when you get it. We really want the feedback on the event, on the presentations, on the materials. Whether we do an Investor Day next year or not, help make us better.

Third, something new actually, during that second break a little before 11:00, we'll have a number of folks outside the rooms here demonstrating some of our latest digital capabilities for CCB. They'll be the folks in the black Chase T-shirts, probably the only folks in the black Chase T-shirts, so they should be easy to spot. Go find them, ask them questions, get them to show you what they have. So look, I hope everyone sticks around for the whole day, listens to presentations from our business heads and asks a ton of questions.

And now last but not least, please turn off your phones or silence them. When you ask a question, remember we've got a lot of people listening on the webcast, so please wait for the mic and when you get it, remember to say your name, your firm, and your company. Also don't forget to take a look at the forward-looking statements at the back of the materials.

So thank you. Thank you very much for coming and I will turn it over to our CFO, Jenn Piepszak, to kick things off.

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## Jennifer A. Piepszak

*Chief Financial Officer, JPMorgan Chase & Co.*

Thanks, Jason. Good morning, everyone. So I'll start where we typically do, with an operating model that is Complete, Global, Diversified and At Scale. This isn't just a tagline for us, but a key source of strength and differentiation and not just in delivering recent performance, but really positioning us to outperform on a relative basis in any environment.

We start with exceptional client franchises that are customer-centric and comprehensive in the set of products and services that they offer. We have unwavering principles that are not just about a fortress balance sheet, but about risk and culture. And then we relentlessly focus on the long term, investing through the cycle, focusing on customer experience and innovation. And then sustainable business practices, here the concepts are certainly not new, but perhaps the emphasis is. So I'm going to spend a little bit more time here on page 2.

For us this isn't just about promoting sound governance and serving a diverse customer base, but about the impact that we can have on communities by integrating sustainability into everything that we do.

So I'll start with our existing commitments, which you are all familiar with and I'm happy to say that we expect to achieve both of them by the end of this year. We're really proud of this work. But we're not going to be able to tackle big issues like climate change unless we address it in the context of broader development needs such as those reflected in the UN Sustainable Development Goals.

To that end, as you saw in our announcement yesterday, we're going to step up our efforts to advance these goals. Going forward, we'll articulate our efforts across three areas of focus, and we'll measure progress in a way that's consistent with the UN standards. The three areas are green initiative: supporting climate action, clean water and waste management; social, which is increasing access to housing, education and healthcare; and economic development, which is about advancing infrastructure, innovation and growth.

To hold ourselves accountable, we're going to expand beyond our original green financing target to a new one that reflects these broader goals. This year alone our goal is to do at least \$200 billion in financing toward these objectives. And we're going to look for ways to grow this number over time.

And as a point of comparison, in 2019 we did more than \$175 billion in financing under this framework and that included \$50 billion of green financing. As part of this, we became a member of the Climate Leadership Council because we believe that we need policy solutions to help address climate change.

And as you know, we launched the J.P. Morgan Development Finance Institution last month. We're going to issue a Green Bonds for the first time, and we're also investing in research and advisory capabilities to help our clients in their transition to a lower carbon footprint.

Importantly, all of this is above and beyond our philanthropic activities like our commitments to Inner Cities and programs like New Skills at Work. For us, this isn't just about doing good business, but also about doing the right thing in markets where it's needed. And doing the right thing for our clients, customers and communities is part of the reason why we have such strong leadership position across the board, which you can see here on page 3.

In CCB, we serve 63 million households and 4 million small businesses in the US; 75% of our checking households consider us their primary bank. And as you know, that's a critical metric for the health of any consumer banking franchise.

In the Corporate & Investment Bank, we do business with more than 80% of the Fortune 500. And we're number one globally in both IB fees and Markets revenue. In Asset & Wealth Management, we have the number one private bank in North America, and 88% of 10-year mutual fund AUM performed above the peer median.

And then in the Commercial Bank, we serve 18,000 C&I clients and 34,000 real estate clients. And because of the great partnerships that we have between the CIB and the Commercial Bank, we had record investment banking revenue with this segment in 2019 of \$2.7 billion.

This strength was certainly obvious in our 2019 results, which you can see here on page 4. We had just under \$119 billion in revenue, \$36.4 billion in net income, and 19% ROTCE. And while these absolute results were supported by a benign macro backdrop, on a relative basis, we outperformed peers across the board. This isn't just about great execution, but the result of our continued investments – bankers, advisors, new branches, geographies, and tech. And then on the overhead ratio, which you can see on the far right, 55%, that's down nearly 200 basis points from 2018. And this wasn't just expense discipline, but also revenue growth.

So now turning to page 5 for a quick look at our multi-year performance. Here you can see our pre-tax over the last five years. And the headline number is quite strong at a 9% CAGR, but more importantly we saw good growth across our businesses, every one of them seeing growth across the period. And then on the right, a few macroeconomic indicators that illustrate the environment over this period, 50-year low unemployment, solid GDP growth, rates off the zero bound. As I said, the environment undoubtedly was supportive. But a big part of our success, certainly our outperformance versus peers was again the result of our investment agenda.

In fact, page 6 really puts these investments in perspective. First, looking at our revenue growth over the last several years, you can see that we had strong growth in both net interest income and non-interest revenue. And then on NII, while growth and mix have been a driver as you can see in the \$7 billion bar, rates have been a more meaningful driver, especially as retail deposit betas outperformed expectations. And that wasn't just luck; in part that was certainly again, the results of our investment agenda, investing in branches and ATMs and the digital customer experience.

On the right, you can see that we didn't just let this benefit drop to the bottom line. We increased investments by more than \$5 billion over the same time period, and that's \$2 billion in tech and \$3 billion in non-tech. And these investments really have positioned us well for the future. So what were these investments?

Here on page 7, we show you a small sample of what we've invested in, so I'll just touch on a few themes here. Across all our businesses, we've expanded our distribution both in the US and internationally. We've created a more complete set of products and capabilities; and investments in tech and cyber have provided better, safer experiences for customers and clients. Importantly, we also invested to deliver

productivity and cost efficiencies at the same time. And then, something we've been talking about more and more is the implementation of AI across each of these areas. And this benefits our customers and clients, but also makes us faster and more productive.

So when you step back because we are Complete, Global, Diversified and At Scale, we were able to maximize the benefit of the macro backdrop and take that and invest to make us more Complete, more Global, more Diversified, and more At Scale. And I'll talk in a few slides how this has positioned us well to face more difficult operating environments with both cyclical and secular challenges. But first it's worth taking a look at our share in a few key areas here on page 8. Since 2014, we have gained share across our businesses, and these share gains have come not just from us getting more than our fair share of market growth but even in businesses where wallets have been flat or down, we have seen share growth as clients consolidate their wallets with the better, more complete providers.

So on to the cyclical challenges on page 9. First starting on the left, in 2019 we had three rate cuts here in the US and the implieds are currently pricing in two more for 2020. This has obviously put pressure on deposit margins, most notably in CCB. And then in the upper right economic growth, while still positive has slowed, and consensus is for growth to slow further with the big question of course being when the expansion in the US will come to an end. And then in the bottom right is a reminder, we're over-earning on credit right now. We're obviously not immune to these cyclical challenges, but our diversification does provide some offsets, as you can see on Page 10.

Here I'll start with lower rates on the left. Mortgage origination volume in CCB was up more than 30% in the lower rate environment. And this has a direct relationship to higher agency trading revenue in CIB.

In AWM, demand for yield drives strong flows within our fixed income products. And in the commercial bank, we saw higher origination volume in commercial term lending as clients there also took advantage of the lower rate environment. And on the right you see similar dynamics on geography and clients. In the upper right, obviously, Europe had some challenges in 2019, and we more than offset that not just with good growth in North America, but growth in Asia as well.

And then in the bottom right, if you look at loan growth while we know that C&I loan growth is not a great indicator of the health of a franchise, it certainly can be an indicator of business sentiment. And here we more than offset that with consumer with strong growth in the Card and AWM.

And now turning to the secular challenges on page 11. These are just a few examples. I'm sure we could all think of several more. I'll start on the left with Card net interchange. We are all familiar with the increased competition in the rewards space and that has led to significant pressure on Card net interchange.

And then in Asset Management, the shift from active to passive and this one doesn't just pressure management fees, but it impacts the entire value chain, including custody and fund admin and Markets revenue. And then the FICC wallet, while it's leveled off recently has obviously seen a precipitous decline over the last decade. And then on the far right, a point which could be made any number of different ways; the growth in alternative pools of capital and the emergence of new players who intermediate our customer relationships or disrupt the market with new products and services. While the drivers of each of these challenges are quite different the outcome is relatively similar. They all contribute to the margin pressure that we see across the industry.

And turning to page 12, you can see several examples of where we have seen that margin compression. However, in all cases we have been able to offset or mitigate the margin compression through higher volumes. Starting on the left within Asset & Wealth Management, we see lower overall revenue yield on our AUM. This revenue pressure is also acutely felt by other asset managers; clients who we serve in other parts of the firm. Securities Services in particular. However, in both of these businesses, we have more than offset this pressure by growing share and volume. And of course, few areas have seen a more rapid margin contraction than markets as wallets have remained challenged and more trading has gone electronic. But here too, we have grown trading volume to offset lower revenues.

And as it relates to Credit Card, while we see a big contraction in the net interchange rate, our overall net revenue rate has only marginally contracted as we've grown outstandings 25% during the same timeframe. And then also in the category of enhanced client competition, Investment Banking serves as an interesting case study. While the general trend in the industry over the past five years has been for each bookrunner to earn a lower fee, because of our global distribution capabilities and our ability to commit capital to provide clients with execution certainty, we have been able to mitigate this trend.

So all of this is why we remain confident that we can outperform on a relative basis regardless of the environment because it comes back to our operating model laid out here on page 13. Our model is simply built to deal with these challenges.

So in summary here, our complete and global franchise allows us to deepen with clients, offering more products and capabilities everywhere; and when you combine that with our scale, we are able to grow volumes with efficiency to offset margin compression, and our diversified franchise across businesses, geographies and clients support stability across cyclically changing environments.

So let's take a step back and look at this model and our performance from a much broader perspective. Here on page 14 we show you two graphs. In each of these, the y-axis is the cumulative growth in pre-tax earnings over the last 20 years, and the x-axis is the stability of

earnings. First, it's worth noting on the left where we look at a broad range of industries that banks in general have performed at or slightly better than the median. And this is from 2000 through 2019, so it included the 2001 recession and the financial crisis.

This contradicts the view that banks are not only slow growing, but volatile at that, which you can see in the relative valuation as banks are the only sector trading below 13 times. More importantly when you look at the graph on the right comparing us to other banks, you can see the power of our model. The diversification of our business model as well as the recurring nature of a substantial portion of our revenues have contributed to faster growth and more stability relative to the peer group. We have been a clear outperformer.

So now I'm going to shift gears to balance sheet, liquidity and capital starting on page 15. Here, we look at our balance sheet evolution over the last two years. As we discussed last year, coming into 2019, we expected that higher rates and continued quantitative tightening would result in lower deposit growth for the industry in line with what we had seen in the back half of 2018, about 2%. However, the deposit growth we actually experienced has been very different. For the year, our actual growth was almost 5% and that growth has accelerated with each rate cut.

The other story is about the mix of interest-earning assets on the right. Although total loans are down on the back of our capital and liquidity optimization, selling mortgages and reinvesting in securities, loan growth remained solidly positive in other areas, Card in particular. And then in terms of cash deployment, here we've also been able to change the mix with higher yielding liquid alternatives providing further support for NII. But the offsetting growth is perhaps less obvious on the slide since it shows up in a number of different places not just securities.

Now, let's look at liquidity on page 16. Probably what's most notable on the page is the shift from Fed cash to Treasuries, which you can see on the left. The drivers behind this shift are twofold: first, the relative value of securities versus IOER. And second, the Fed's balance sheet contraction as you can see on the bottom of the page. This impacted the supply and demand for financing. And so we deployed more cash into repo activity as the economics became more attractive. It might be obvious, but it's worth noting here, that doesn't mean that we are less liquid necessarily. In fact, you can see total HQLA has been largely stable. And then even beyond HQLA, we have more than \$600 billion of other liquidity sources available to us, bringing total liquidity to over \$1 trillion.

Having said all that, we do have specific cash minimums and they relate to our resolution requirements and our own internal risk appetite for liquidity. And given the repo disruption in the middle of September, which was largely driven by the Fed balance sheet contraction, we have been in active dialogue with our regulators on how we think about these minimums. And as a result, we have concluded that we can reduce these minimums, which means it's possible we leverage the debit cap and the discount window from time to time. We think this is an important step for us to take to help break the stigma here, and it's also consistent with the public comments from the Fed.

Before I leave this page, I would note these lower cash minimums would have meant that at the margin we could have deployed more cash into the repo markets in September, but it wouldn't have changed the fact that there will always be an inflection point on the Fed balance sheet as it relates to bank demand for reserves.

And now turning to page 17 in GSIB. There's a clear and present need for recalibration even if it's only tactical adjustments prior to full recalibration. And I should say here that the public comments from the Fed on this topic have been constructive and helpful, but it's still worth emphasizing a few points. As you can see from the GSIB score progression in the chart on the left, banks have only become more constrained with several banks running close to or in the next bucket for several quarters during 2019. The formula implies that U.S. GSIBs are increasing systemic risk despite broad-based recognition that they have in fact been reducing systemic risk. And as banks manage the scarce resource, it could cause unnecessary disruption to clients and markets over time.

So a simple way for the Fed to address this within their current rules would be to index coefficients to GDP growth, which the Fed has already identified as an issue, remove the 50 basis point cliff effect by restructuring the bands to smaller increments, and then to further reduce year-end pressure, the GSIB calc. should move from a spot measure to a quarterly average. And as we say on the slide, we believe that these three taken together as a package would be capital neutral while expanding capacity without increasing risk. But they need to be taken together as a package. And if we don't see a targeted plan of action soon, this pressure will only get worse.

So, now looking at capital on page 18. We've incorporated everything the Fed has indicated to date on SCB, and there are no surprises here. Our target range is unchanged at 11.5% to 12%. And as a reminder, our binding constraint is standardized capital, which is why we show it here. But if we were to look at our advanced ratio, we ended 2019 at 13.4% implying significantly more excess capital above our regulatory minimum.

And then on the right-hand side, most importantly, the hierarchy for thinking about how we use our excess capital has not changed. We always prioritize investing in and growing our businesses either organically or through acquisitions and offering an attractive and sustainable dividend. And only when we have satisfied these two objectives will we buy back shares. And some have asked, at what price would we think differently about buying back our stock. And here it's worth noting that if our multiple continues to increase, it certainly doesn't change this hierarchy for capital deployment. But the relative value of the alternatives to buying back stock will increase all else equal and growth opportunities on a relative basis may look more attractive.

And then just a point on acquisitions here; they must be strategically compelling. They must have a high probability of successful execution, and of course, the financials must make sense.

So now moving on to the outlook, I'll start with NII on page 19. At last year's Investor Day, we showed you a path beyond 2019, where higher rates would largely be offset by deposits repricing, and therefore we move higher on balance sheet growth and mix to \$58-60 billion over the next few years. However, this path was clearly disrupted in the middle of 2019, but the outcome is actually not that different. On the one hand, rates are much lower than expected, both on the short- and long-end. But as I just discussed, the deposit growth picture is also very different. And so looking at 2020 given this current backdrop, we expect NII to be slightly down from 2019 as lower rates will be offset by balance sheet growth and CIB Markets NII.

It's important to note that the increase in CIB Markets NII is primarily from lower funding costs, which is largely revenue neutral as there is an offset in non-interest revenue. And for this quarter, we expect NII to be closer to \$14.2 billion versus the \$14 billion that I said at earnings. And then for 2021, assuming continued strong growth in deposits and card balances, we think around \$60 billion is achievable. Of course, all of this is market dependent and yesterday's volatility is a good reminder of that.

Now moving to noninterest revenue on page 20. As always, it is difficult to provide meaningful guidance for fee revenue in the short run given the impact that Markets can have in any one period. However, volume-driven noninterest revenue, which constitutes about two-thirds of the total, continues to grow at a steady pace, which was about 3% in 2019, despite headwinds from a smaller servicing book in mortgage and lower Card net interchange.

As you can see at the bottom of the page, the core underlying drivers continue to show good growth, and we expect these to support a 3% CAGR over time in volume-driven NIR. And given the NII to NIR dynamics and CIB Markets revenue that I just mentioned, if you assume the rest of market-dependent NIR is flat year-over-year, which of course is an assumption, and then you adjust for the notable items last year that are included in the \$200 million in Other on the slide, this would mean that total noninterest revenue would be about flat in 2020.

Now, I'll shift to expenses starting with the overhead ratio on page 21. While we have reduced the overhead ratio by an impressive 300 basis points since 2015, looking at the component parts, it is really even more impressive than the headline number. You start with the first bar, which is the \$8 billion from higher rates, which is offset by the increase in investments. And then business growth, that's 5 percentage points on the ratio. This is growing revenues by \$10 billion with basically no additional expense as efficiencies have largely funded this volume growth.

Going forward, given the rate-driven headwinds in 2020, we will likely see a slightly higher overhead ratio this year; but in the medium term, the overhead ratio should trend below 55%.

Here on page 22, you can see that adjusted expense was \$65.3 billion in 2019. This was an increase of 3% over 2018 driven by volume and further investment-related expenses. As I said at earnings, we expect 2020 expense growth to be less than the 3% that we saw in 2019 and the guidance here confirms that view for 2020, but let me walk you through the component parts.

We start with investments where technology net investment growth is a smaller portion of this bucket as we continue to realize the benefit of previous investments rolling off and our developers becoming more productive.

Next, we have revenue-related growth, which will always be non-regrettable. And offsetting this growth, we expect approximately \$700 million of a reduction in our structural expenses, which you can think of as the firm's run the bank costs. This is driven by cost efficiencies spanning workforce optimization, broad-based scale benefits, and tech efficiencies. And so taken together, we expect adjusted expense growth to slow this year to approximately 2.5%. And beyond 2020, we expect expense growth to moderate. But as a reminder and I should say it because I know my boss will, I will take you back to our capital hierarchy to just reiterate that our first priority is to grow the business and to the extent that we make those decisions that can manifest itself here in expenses. So what we have on the page is our best estimate at this point in time, and as always we'll keep you updated.

Finally, a quick moment on credit on page 23. You can see the 2019 net charge-off rate of 61 basis points for the firm or \$5.6 billion, mostly driven by Card. Today we are not seeing signs of deterioration in our portfolios, and so we expect the 2020 NCO rate will look very similar to 2019 with charge-offs of just over \$6 billion, which are higher year-over-year largely on growth and mix and largely driven by Card.

Lastly, I would just remind you on reserves we benefited from a number of Home Lending reserve releases in 2019 that we don't expect to recur. And under CECL in a period of growth all else equal, Card will be higher. So therefore, in 2020 we expect net reserve builds to be higher; and as is always the case if the credit environment changes, we'll react quickly.

So to wrap up on page 24, our results for 2019 clearly demonstrate the success from years of relentless execution. And more importantly, our investments have further strengthened our franchise and ability to outperform on a relative basis in any economic environment.

So looking forward from where we sit today, the underlying economy remains on solid footing and should support our ability to earn at or above our 17% ROTCE target over the medium term; although risks are probably more skewed to the downside, particularly in the near term given uncertain factors like the coronavirus. But regardless of the macroeconomic backdrop, we are confident that the strength of our operating model will continue to generate significant shareholder value and peer leading returns.

Now I'm going to turn it over to Daniel. Thank you very much. I'll be here through lunch for questions.

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## Daniel E. Pinto

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Corporate & Investment Bank, JPMorgan Chase & Co.*

Hi. Good morning. Thank you for being here. So we are going to follow this year a similar format that we used last year. So I will give you an overview of the Corporate & Investment Bank. After me we will have Carlos talking about Investment Banking and Teresa about Securities Services. And then I'll come back. I'll wrap it up. Last year we focused in Markets and in Wholesale Payments. So, let's go to page 1.

So, 2019 was a strong year overall; \$38.3 billion in revenues, \$12.3 billion in net income, our cost-to-income ratio of 55% and our return on equity of 14% on \$80 billion of capital. Capital has gone up in the last five years from \$62 billion to \$80 billion. So, those \$18 billion, 90% of the increase is related to methodology changes and higher capitalization, only 10% of it is related to new business initiatives or business growth.

In the same period, the wallet available to this type of business globally has gone down, reduced by 4.6%, but our revenues moved from \$33.3 billion to \$38.3 billion, an increase of 15%. And most important, the net income has gone up by 34% in the same period, demonstrating the operating leverage of the business.

Moving to the next page, expenses; \$20.7 billion in 2018 increased to \$21.1 billion in 2019. This amount increase is fully explained by expenses related to the increase in revenues. We did invest over that period of time in technology and talent that was mainly financed by benefits in FDIC charges and bank levy.

In terms of return on equity, so 15.9% or 16.2% excluding legal in 2018 versus 14.0% or 14.4% excluding legal in 2019. So how do we explain the change? So 130 basis points is revenue growth net of expenses that I mentioned in the previous page related to those – that revenue growth.

Interest rate has been a headwind of 50 basis points, all other expenses net to 0%, as you saw from the previous page, and as the new corporate income tax settles into a stable level, that number is higher in 2019 than it was in 2018, creating a headwind of 50 basis points.

The capital of the Corporate & Investment Bank has gone up by \$10 billion from 2018 to 2019, and that is a headwind of 200 basis points, getting us to the number that we produced.

In the following page, if we were to split the lines of business of the Corporate & Investment Bank at a more granular level, and this information is based on Coalition and Dealogic, so we were in 2019, number one in 16 of these 24 lines of business, top 3 in 7 and not top 3 in one – that is Trade Finance, where we are sixth, but it's a business that we are addressing and improving. And not only globally, when you look at on the regional basis; number 1 in North America, number 1 in EMEA, number 3 in Asia Pacific, where we continue to invest and continue making progress.

But even at this 24 lines of business level, this is not granular enough. We continue working day in and day out in every country, in every product at a very granular level to continue finding areas where we can grow more and faster.

So now a quick update on the four lines of business. So first on Investment Banking. You will hear a little more from Carlos in a few minutes. But the story is the following. In the last five years, the wallet has been flat, \$77 billion in 2015, same number in 2019. Our market share has gone up from 7.8% to 9% last year.

We made progress across all the lines of business. So we're number 2 global in M&A, and increased the market share from 8.3% to 9.2%. We are number 1 in Debt Capital Markets, and we increased the market share from 7.9% to 8.7%. And we're number 1 in Equity Capital Markets, increasing the market share from 6.9% to 9.4% last year. We've been the leading Investment Banking business based on fees for the last 11 years in a row.

On Securities Services, also you will hear a little more from Teresa after Carlos presents; so this is a big area of priority. The Asset Management industry is going through a bunch of challenges and is transforming itself. And as that process happens, we need to transform our business in line with that.

And we are making a lot of progress in this space. So just from 2018 to 2019, we increased Assets Under Custody by 16%, Assets Under Administration by 24%. It's not in this page, but operating deposits have gone up in the last five years by 18%, including 2% last year. Our revenues last year have gone down by 1%. And, even in that decline, you have an increase in fee revenues of 4% and that is compensated by margin compression and lower interest rates. When you look at over the last several years, the growth in fees versus growth in Assets Under Custody or Assets Under Administration, fees are growing lower representing the challenge of margin compression. That is being compensated by operational efficiencies that you will hear about from Teresa on how we are growing the business.

So next one for Markets. In the last five years, the wallet for Markets has gone down by 11%. Just the last five years. You had a big drop before that. In Equities, the wallet moved from \$68 billion to \$56 billion but our market share going up from 8.4% to 11.3%. In Fixed Income from \$109 billion to \$101 billion and our market share has gone up from 10.1% to 12.3%. And overall in the last five years, our market share in Markets across the whole industry has gone up by 2.5% points.

Clearly, it is the business that has faced the most challenges, but the strategy that we're following, the investments that we are making, and the talent of the people is really making these very big challenges that we have in front of us, a bit smaller – and an opportunity overall. So, we talk about increase in capital of \$18 billion, on the following page. So \$16 billion out of this \$18 billion goes to Markets and the same rule applies that only 10% of that \$16 billion goes to new business, the rest is methodology changes and increase in capitalization.

Let's go now a bit more granular in how that capital was allocated. So in terms of headwind on return on equity, 300 basis points of headwind for the Equity business and 600 basis points of headwind for the Fixed Income business, but on an overall number of 500 basis points. So the return on equity on the business in Markets in 2015 was 15%. So we have a headwind for capital of 500 basis points that was compensated or partially compensated by increase in top line and market share, in a reducing wallet, of 300 basis points. So the ROE, fully-loaded for expenses and capital, of the Markets business last year was 13%. All the lines of business at a more granular level within the Markets division have marginal ROE substantially above cost of capital.

So now on Wholesale Payments. Big area of focus and priority, we decided early last year to put all our Wholesale Payment assets together under one leadership, with Takis reporting to Gordon and myself. And those pieces are Treasury Services, they are the Merchant Acquirer, they are Trade Finance and the Commercial Card. There is no other bank that have this mix of business in-house. And the objective of doing this is really enabling clients to do very simple things. So to make and accept payments at anytime, anywhere in the world with any method that they decide to choose. We want to help them to reduce the complexity and improve the operating model of how they manage their payments and liquidity. And very, very important, very important is do all that in a safe environment and in a secure environment mainly led by the investments that we're making in control and cyber protection.

So technology plays a big role on this and important to having an infrastructure or building an infrastructure that is common to all these assets is very important and we are working on that. We are modernizing all the technology infrastructure that underpin this business. We are working on client connectivity no matter how the clients want to connect with us or interact with us. We are working on it. We are working on improving the client experience at the time of on-boarding the client and at the time of servicing them.

Data is a big issue for us and for the client, making available to them with great set of analytics that they can take advantage of the data that we have – that we have for them, it will be really a massive competitive advantage. So I think that this business in itself, in the years to come, is one of the biggest opportunities that we have across the company.

In the following page, this page is about only Treasury Services. From 2015 to 2019, the revenues of Treasury Services across CB and CIB have gone up by 45%, of which the darker green part of the graph is the CIB increasing by 39%. The most important or the most interesting part of this is something that demonstrates something that we have discussed before. The overall wallet in the last five years for this industry has gone up by 7%, but our revenues have gone up by 45% and also our main competitors have gone up between 30% to 40%. And the point that I made in the past was this is a very fragmented industry. Our market share five years ago was 4.4%, now it's 6%. And it's an industry that because of the pace of investments that are required, cybersecurity, control and other issues, I do believe that it will continue to concentrate wallet towards the bigger players, the bigger participants. So I see opportunity here.

And to finalize on Wholesale Payments, so these are the areas where we believe some of these opportunities will present. So first is small businesses in the United States. The lower-end of the Commercial Bank plus small businesses in Retail. So we have millions of clients and only a very, very small portion of those use our Merchant Acquirer service or our Treasury Services. So that is a big area of growth. A big gap with some of the competitors in that space.

We very recently acquired InstaMed and the idea was to create a vertical solution to target the opportunity in the healthcare services industry in the United States by getting InstaMed, that provides a great bunch of services to those clients and attach that to our payment infrastructure.

Corporates, particularly outside the US. You remember the story of our Global Corporate Bank. We are making a lot of progress. There is still a long way and a lot of opportunities to unravel there.



E-Commerce, very fast growing industry that really is becoming a big opportunity for us as we help them with their core payments, with their money movement, and help be the infrastructure behind them.

And then, finally, on Financial Institutions. We do have a big market share but we do see growth there through innovation. We do believe that the Interbank Information Network, that we announced a while ago, that now has 400 participants will be a good venue to deliver new services and products to that client base. So we do see more coming into this space and I think, as I said, I believe that this is a great opportunity. So we'll stop here and then now pass to Carlos to talk about Investment Banking.

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## **Carlos Hernandez**

*Executive Chair of Investment Banking, JPMorgan Chase & Co.*

Okay. Good morning. So today I will discuss the performance of the Global Investment Bank, the strength of our franchise, and the factors that contribute to the ongoing success. As Daniel said it, we have had a leading consistent performance for the past several years. Continuity has allowed us to deliver that performance. And I will discuss how we achieve that and why it is so critical to our financial results.

We have made very deliberate decisions on where we wanted to invest to grow our business. We choose to be complete and diversified. We have made targeted investments over the past several years and are able to show returns on these investments. Finally, we see the industry changing and evolving and this presents new opportunities. We have delivered strong performance and I believe there is significant growth potential.

We have maintained a number one rank in Global Investment Banking for the last 11 years. And in 2019, we achieved a 9% market share, our highest share in a decade. During this time, we have expanded our lead, increasing the gap between us and our closest peer to 140 basis points, and the gap to our top five largest peers to 315 basis points.

Our leadership position reaches beyond the top level product category into sub-products where we hold number one positions in IPOs, high yield bonds, investment grade loans, among many others. The wallet composition by product and region changes year to year. We have demonstrated consistent leading performance and grown share through these cycles because of our scale and diversification. Across regions, we're number one in North America and EMEA for years. And in the past five years, we have taken leadership positions in APAC and LATAM and we continue to be number one across most products. In addition, we have grown faster than our top peers in all regions and most products. And we see potential in sectors we're not yet in the top leadership positions. But now that I have discussed our performance, I want to share our approach to coverage and how we have positioned the business going forward.

There is a lot of volatility year on year in the size of wallet in each individual sector, region or product and you need to be prepared to stick with your clients through the cycle. For example, in the technology sector wallet, an average of \$9.1 billion in revenue the last five years. However in 2019, it was 14% higher. And in 2015, it was 19% lower than this average. In China, the average wallet was \$2.8 billion over the same period, but it was up 15% in 2018 and down 17% in 2015. Within these wallets, the product composition changes every year as well. For example, in 2016, in the technology sector, DCM, accounted for 42% of the wallet, but only 25% in 2019. In China, the wallet is primarily composed of DCM and ECM with significant year-to-year changes. The same is true for all sectors and regions. Our breadth and scale allow us to be across sectors and countries every year, giving us a platform to deliver superior financial performance.

Similarly, at the client level, the business is episodic. On average, large clients have a transformational transaction once every seven years. But this overstates the frequency as many clients will only have such a large fee event every decade or maybe more. Although large transactions are important, they only make up 10% of the overall wallet. Smaller and medium transactions make up the other 90%. But even these only occur on average around every three years. You need to do well across both types of transactions, and we have the number one share in both wallets. In 2019, we captured 14.5% of the large fee transactions and 8.4% of the smaller and medium transactions. But most importantly, we continue to grow our shares there. In the period from 2015 to 2019, we grew our share in the large fee category by over 300 basis points and 100 basis points in the smaller and medium-sized category.

We make sure we get the chance to compete by investing in client relationships through the ebbs and flows of their businesses. I always say when we lose a deal, it wasn't today, it just manifested today. And the same is true when we win deals, it was over the last several years. But how can we maintain such a consistent coverage. First, our scale and diversification provides a lot of operating leverage and let us invest in our people even when their sectors or clients are facing challenging times. Second, our clients value continuity. And our bankers know we invest in building those trusted relationships through the cycle. Third, as Daniel stated, we are leaders in flow businesses. This gives us the opportunity to have meaningful dialogue with our clients year after year and help them with their ongoing needs.

We talk a lot about market share gains, but we are not willing to gain share at any cost. So, we have been very thoughtful in where we want to invest. We need to think about the value to clients, that you can serve clients well in a sector like Pharmaceuticals if you're not strong enough in a subsector like Biotech and be able to bring that perspective to the dialogue.

Since 2015, we had made targeted investments to maintain and grow share in segments that offer the biggest opportunities. We also made investments to take leadership positions in some sectors we did not yet have a top position, and have been successful in increasing our share and rank in those sectors. We have similarly done the same across regions and products, and as a result, we have improved our share and rank across many countries. It is too expensive to invest in every wallet. So, you have to choose which battles you want to fight. And we are prepared to sacrifice share for better quality of earnings. We choose to be complete in our coverage and not comprehensive.

The industry landscape has been changing, creating new opportunities, allowing us to effectively pursue economic growth. Tech and analytics are core to our business. We are able to deliver greater insights to our clients faster while freeing up capacity to pursue new opportunities and improve our client coverage. The IPO market is evolving with rising interest in alternative solutions. In response to this, we're not only coming up with new products, but also improving our existing products to address the needs of investors, issuers and regulators.

Equity private placements is now 2.5 times the size of IPOs. This is a trend in the industry, but also a growth area for us. We are in a unique position to connect private investors with smaller corporates leveraging the strength of our Commercial Bank and our Private Banking franchises. There has been growth in the middle market with many competitors taking note of this opportunity. Five years ago, we invested in building out a Regional Investment Bank in key markets with an operating model that allow us to more effectively cover smaller clients. As I mentioned, we're also leveraging technology and analytics to free up banker capacity, allowing us to pursue more opportunities with new and existing clients.

The international growth remains an opportunity for us. The international expansion of the Commercial Bank and the Global Corporate Bank will allow us to better serve thousands of new clients. And we're expanding our capabilities in China now that we're licensed to do business onshore.

In our business, relationships and people are what matter. We are creating continuity in our business by consistently investing in client relationships, people, execution and innovation. We're innovating and leveraging technology to improve our ability to deliver for our clients. We're able to bring them greater insight, leveraging tools that let us do today in minutes what used to take days. And this innovation is improving the overall banker experience. It's streamlining some of the most time intensive task so they can focus on more interesting client work. This let us attract, retain, and develop the best people. We have a world class franchise with more potential to be realized ahead of us.

Thank you and now let me hand it on to Teresa to talk about Securities Services.

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## **Teresa Heitsenrether**

*Global Head of Securities Services, JPMorgan Chase & Co.*

Thank you. Good morning. I'm Teresa Heitsenrether and I'm going to give an update on our Securities Services business, a core part of the CIB franchise, and a business that we've been investing in for the past several years. I'll start with a quick overview of the business and then talk about some of the drivers of our strong growth and performance. Then I'll share some perspectives on how our industry is evolving and how we're positioning to help our clients with their changing needs.

Securities Services provides post-trade services that are an integral part of the ecosystem of our Asset Manager and Asset Owner clients. Our client base is well diversified across segments and geographies and our top clients are also top clients of our Markets and Banking franchise, giving us a better understanding of their overall needs.

For over 40 years, we've had an industry leading global custody franchise and we've moved up to the number two ranking with Assets Under Custody of just under \$27 trillion as we ended 2019. In Fund Services, we've made significant progress in closing the gap to our top competitors and we are now a leading global provider of accounting and administration across the full range of traditional and alternative fund types. And we partner closely with our colleagues in Markets and Treasury Services to offer cash, FX, securities lending and collateral solutions that are of increasing importance to our clients in optimizing portfolio returns.

The business has gained share and generated record growth since 2015. Continuous investment combined with a relentless focus on client experience have allowed us to achieve and maintain our highest level of client satisfaction ever. This has resulted in record new business wins as well as record growth and retention with our existing clients. We successfully completed the largest and most complex transition ever done in our industry. And we did so while also converting a number of key wins. In addition to the 55% growth we've seen in our Services business since 2015, we're currently onboarding an additional multi-trillion of assets from existing custody clients who are entrusting us with fund accounting services that they're outsourcing for the first time. These tend to be long-term mandates and further deepen and solidify these key strategic relationships. Also fueling our growth are investments in new and enhanced product and market capabilities, allowing us to provide comprehensive solutions for our clients.

Our record growth is also driving record performance. Revenues for the business have grown 16% since 2015 despite a challenging industry landscape. As Daniel noted, revenues in 2019 were down slightly versus prior year with NII declines due to the low rate environment largely

offset by fee and deposit growth. With respect to NII, the declines were due primarily to rate compression in the short end of the curve and are not reflective of any notable changes in our deposit mix or client payouts which continue to be competitive.

We achieved record fee revenues in 2019 with year-over-year fee growth up 4%. Even with this strong performance, we're not immune to the substantial fee compression happening in the asset servicing industry. And we expect fee headwinds will continue to be a challenge going forward.

To offset some of the impact of the fee compression, we've been investing to improve our efficiency. We've made significant progress in optimizing our operating models and in streamlining and enhancing our technology. These investments are delivering meaningful scale improvements and have enabled us to absorb this record growth while keeping our operations head count largely flat.

In addition to our investments, we're disciplined in the way we manage the business. We take a thoughtful approach to commercial negotiations and we partner closely with our clients to drive continuous efficiency improvements that are mutually beneficial. We maintain strong expense discipline, with modest increases over this period that are largely attributable to our technology investments as well as one-time and volume-related costs relative to our new business growth. The results are evident in our margin improvement. While we have benefited over this horizon from tailwinds due to rates and FX, we have delivered several hundred basis points of margin improvement as a direct result of these investments.

And while we're proud of the progress that we've achieved to-date, we're by no means complacent about the future. Our industry is evolving and the dynamics of the business are changing as our client needs change while they navigate an increasingly challenging asset management landscape. While assets under management have been steadily growing, the associated fee pool has been shrinking, causing our clients to look for ways to improve efficiency and reduce their expenses.

In order to defend fees, our clients are investing in more complex markets, products, and strategies, as they compete to deliver consistent and differentiated performance. This increased complexity is driving up their cost and it's outstripping the back-office capabilities of many asset manager clients.

And finally our clients need timely, accurate, and aggregated data, to help them manage multi-asset class portfolios that are distributed through a variety of vehicles on a global basis. They're struggling to bring information together in a way that improves operational efficiency, informs the investment process and meets the increasing digital demands of their end investors.

So with that backdrop, how are we positioning the business to help our clients achieve their goals? Our strategy is centered around three pillars. First, we're investing in technology with data at the core. Rather than investing in our technology around product-specific verticals, we've adopted a more client focused approach by developing a common data backbone that integrates activity across products and allows our clients to access it in a way that's easy and productive.

Next, we're leveraging the power of the CIB. We have the unique advantage of being the only leading global custodian with a number one Markets franchise. This allows us to leverage the significant investments we've made in the technology and operations that support our own Markets business for the benefit of our clients. Back to my earlier comments about the complexity in client portfolios, we have expertise in trading the same products that our clients trade and so we're well positioned to serve them at scale. And of course, we protect our clients' data and maintain the appropriate privacy boundaries.

And finally, by combining our data backbone with the capabilities of the CIB, we can deliver integrated front-to-back solutions to meet clients' needs across the full investment lifecycle. Starting in the post-trade space, we've adopted an open architecture approach and have developed direct integration with a number of client order management systems. We're the only provider to offer fully integrated, two-way workflows that provide clients with updates in real-time and eliminate the need for costly reconciliations.

We're also developing our next generation strategic middle office that will go live later this year. Again, leveraging the technology and operations that support our own trading desks, we're developing scalable cross-asset solutions that address a number of the challenges of legacy lift and drop models. The vast majority of middle office functions are still retained in-house and we believe that there's potential as clients look to improve their expense base for some of this to be outsourced to providers who can deliver meaningful capability and scale improvements.

And finally, moving up the value chain to the investment process, we're exploring opportunities to enhance client value by providing our own data, risk and analytical capabilities "as services" to our clients. We recognize the importance of also having the flexibility to choose from a number of best of breed providers. And so we're partnering with third-parties to give clients seamless access through our platform.

As we look forward, Securities Services is uniquely positioned to deliver a number of benefits to our clients. We have deep strategic relationships and understand their front to back needs. We have the ability to leverage the capabilities of the CIB and the broader firm. We have the strength to continue to invest, regardless of the rates or market environment. And we have the scale and expertise to consistently deliver the highest levels of service. It's clear that our industry is evolving and the leaders in this space going forward will be those providers

who can deliver end-to-end solutions across the entire investment lifecycle. We have been consistently gaining share and improving performance and believe that we are well-positioned to meet the needs of our clients both now and in the future.

And now I'll hand over to Daniel for some closing remarks.

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## Daniel E. Pinto

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Corporate & Investment Bank, JPMorgan Chase & Co.*

So before we go to the closing part of this presentation, I want to spend a couple of minutes on technology not just for the CIB, just technology overall. It's a big priority for Gordon and myself, Lori, and the rest of the Operating Committee. And we very frequently get asked the following question: so are we getting the value for the \$12 billion that we're investing in technology – \$12 billion in 2020. And the answer is that the value because it's measurable, the value that we are getting today is by far more what it was four or five years ago, but still a lot more to get here. And essentially, we've been and we are focusing in four fronts. So, first, it's about the governance of our investment process. So, how do we know that projects that go multi-year, they are delivered in time, on scope, at the right price. And if it is not happening, we are constantly checking that.

Second one, and very important, is when resources become available because projects finish, so those are deployed to our strategic priorities that are going to accelerate our way to the target state. So, we are investing heavily in modernizing our infrastructure, data centers. We are executing our multi-cloud strategy. But in order to do that and get the advantage of all that, so we need to modernize all our applications as they are going to really get the benefit by moving into this sort of new infrastructure, if they are redone in a way that they can take advantage of. And that would allow us to increase resiliency, scalability and more re-use of the code that we use. Rather than starting every time from zero and develop into 100%, we will use what we have and add value on top.

So the next point is if all this modernization process continues, so we need to retrain and up-skill our developers and we are doing that. We need to provide them, and we've been working across the company, in giving them tools that allow them to spot the areas of inefficiencies and act on them. And they are really embracing it. So in the last several years, we've been working with them. Our developers do want to know how can they be more proactive and do more and extract more value per dollar of investment that we made there. And then lastly, but very important, is new technology evolve – machine learning, artificial intelligence, distributed ledger. We have a big piece of work to do in order to upskill our developers to embed those technologies in the way that they develop their day-to-day job, their day-to-day applications. But also is to train the business people to understand the power of this technology to be able to create the demand. So in this one, we are working on the supply side which is developers and in the demand side which is the business.

So, this is a massive priority. I do believe that in the years to come, as we modernize our whole infrastructure, there is a lot more output that we're going to get per dollar of investment than what we get today.

Now to wrap up on the Corporate & Investment Bank. So, we start from 14% return last year. We think that there is still, as I mentioned, more upside on the top line revenues net of expenses, so around 120 basis points increase. So, we are going – we are very focused in continue delivering on structural efficiencies, across, technology, operations, the support areas and others that will pay in excess whatever extra investments we need to do in technology and in talent. So that net will contribute another 30 basis points. So overall, we are maintaining our medium-term target of 16% return on equity in line with \$40 billion of revenues, 54% cost-income ratio plus/minus and \$80 billion of capital.

So the following page just to finalize, this is a way that we think about the present and the future of the business and how we run our business on a day-to-day basis. We are very focused. Clearly, very important in maintaining the day-to-day discipline of how we run risk, how the clients feel and the experience they have with us. And all this, how we optimize capital and all that. This is crucial because if we get this one wrong, the right of the page is irrelevant.

There is plenty to do even within the current model as we continue, as I said, dipping into different countries, different products, different regions, to extract more value of the services that we offer today. And that number is – it will continue to change but it's in the neighborhood of \$3.5 billion to \$5.5 billion over time.

And most important, on the right of the page, is how do we continue develop this concept of building the most successful wholesale financial services platform. And the way we think about it is the following. If we deliver on the modernization of the technology infrastructure and data that allow us to be very faster to create more products, will allow us to be able to offer to clients services that we don't offer to them that we use it for ourselves, like for example risk management. And create risk management as-a-service for example and many, many others. Also, in that platform, the concept of bringing in financial technology companies that they are great and finding solutions and really focusing on client pain, but they realize that client acquisition is not as simple. So therefore they're deploying their services to our platform, it will be a great way to go forward for them. So we need to continue working in making those services and products available to clients in a multi-channel, omni-channel way. And if all this happen, if all this happen, I just don't see why the client base that we are covering today will go broader, and by

offering more and more services and solution, we'll be able to go deeper into those clients too. So, today as a Corporate & Investment Bank, we have 9.3% market share globally. I have no reason not to believe that this market share will grow as we deliver in this strategy.

Before we go to Q&A, I want to make a couple of comments on sustainability that Jenn has addressed at the beginning. So there is no meeting that any of us go around the world where this issue is not coming up. It's just – and particularly, in the last two years has accelerated a lot. It is so important for any of the people that we hire particularly when we are hiring younger people, the stance of the company on this issue. And in the past, we did put some long term target, big numbers, and I think that this is not the way to go about it anymore because this situation is evolving so fast that whatever target and number that you put today for the next 10, 15 years most likely will be kind of obsolete very, very soon. And it's more about how you run the business and incorporate the ESG, Sustainable Development principles in the way that you do your business every day. That you have a proper methodology and a credible methodology to assess the impact of whatever you do on a day to day basis – in terms of green finance, in terms of social impact, in terms of economic impact. And that will help us to inform how we assess risk, how we develop products for our clients and how we advise them and how do we run our footprint. So like Jenn mentioned a number, and I think that this is the way to go. This is not an issue that is going to go away. It will be at the center of our strategy and will require a lot of focus from all of us.

So now, we have a couple of minutes – or we don't, but we will make a couple of minutes for questions. So first, hold on. I will answer the first question. So it normally is how the Markets business is doing in the first quarter and the answer is it is doing very well. So clearly, last year January was a bit weak. So, therefore, the year to year comparison is a bit favorable. But if we take the quarter-to-date growth year-on-year and we add to that a performance that is in line with the average of the last two or three years, we will have an increase year-on-year in Markets roughly in the mid-teens, which is quite good.

So now that I give you the guidance, so we can talk about other questions, talk about whatever you want.

## QUESTION AND ANSWER SECTION

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Okay, go ahead. Right up here.

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**Mike Mayo**

*Analyst, Wells Fargo Securities*

**Q**

Back to that \$12 billion technology spend, how do we, on the outside, know that this is money spent well? I mean, like you've gained share in investment banking, equities, fixed income, custody, wholesale payments, what metrics can we look at, say, in three years now, say, hey, that was successful or wasn't successful? What are you looking at internally so that you even know if these technology projects are paying off?

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**Daniel E. Pinto**

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Corporate & Investment Bank, JPMorgan Chase & Co.*

**A**

So, we have a bunch of metrics that we are not going to disclose. But the reality is that the key success is we're having there with top line, with our client satisfaction, with our increase in market share. If we are getting that and really do it in a cost-to-income ratio that is reasonable. So, we are delivering on that. You have to assume that we are doing something right and the technology investment is right. All of us, we are super focused on it in all the fronts that I tell you – that I told you. So essentially, this is what it is. We are not going to start publishing 300 Index to show that every \$1 of technology is well spent. But I have no doubt, as I mentioned, that the value that we get today is a little higher than what it was. And probably Lori doesn't want me to say these things, but I do believe that another 20% or 30% increase in value from the investments that we made today as the technology platform continue to be modernized.

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**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Okay. Betsy?

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## Betsy L. Graseck

*Analyst, Morgan Stanley & Co. LLC*

Q

Hi. Thank you. Just following-up on that a little bit. In the past, we've talked a lot in this forum about blockchain and how you're leveraging that with Quorum, and you referenced IIN, which is built on that. I just wanted to understand, is that still a key part of your strategy in technology? Because there were some comments or news headlines about how maybe you might be offloading that technology or you might be selling it to somebody else. Maybe if you could discuss that a little bit.

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## Daniel E. Pinto

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Corporate & Investment Bank, JPMorgan Chase & Co.*

A

Yes. So, blockchain is a tool, like artificial intelligence is, so much we learn in any under form of technology. But specifically on Quorum, which we are very invested on and we'll continue to do so, we are trying to find a way which it will become most effective, just not for us, for us and for the industry. That's why the news that you are seeing about. But the key on new technologies is for them to stop being treated as a new technology and being treated as something that every developer across the company can use in a day-to-day basis. That every business understands the value, the power, and the impact that that technology could create. So, that is what you should check and that will be what I, we and everyone else would like to achieve, rather than keeping it like this little thing on the side, that over time, will unlikely make any big difference.

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## Betsy L. Graseck

*Analyst, Morgan Stanley & Co. LLC*

Q

And do you see the benefit of the technology investment spend that you're making in the form – to ROI in the form of lower head count going forward or higher revenues? I know it's a mix of both but...

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## Daniel E. Pinto

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Corporate & Investment Bank, JPMorgan Chase & Co.*

A

It will be a mix of the two. I'll give you an example that is very interesting. So on the operations side, we are looking at manual touch points across the operations organization in the CIB, for example, several thousands of people. And then, we are looking to each of those and see how we can stop people doing manual things where we can make it automated, and then, how can we use new technologies to really improve it, for example, reconciliations are a massive issue. So, we are working and experimenting in our program– look at reconciliation by reconciliation, and by using artificial intelligence and machine learning, we enable to reduce the number of false positives, and the test that we have done is that we reduce false positive almost by more than 40%, which reduces and frees up time of those people to do something else. So, I think that there is so much growth here that I would be less concerned about the head count going up and down a bit, and it's the output that we're going to get for the headcount that we have or we may need as the output for the technology investment that we made today hopefully having a bigger output going forward.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

A

Okay. We got one last with Glenn right there, and then, we'll move on.

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## Glenn Schorr

*Analyst, Evercore Group LLC*

Q

Thanks. Curious on your comment about the currently onboarding of multitrillions of assets under custody, a lot of it being clients outsourcing for the first time. So, curious what you think client – what is driving their decision to go with J.P. Morgan, and how important are the relationships across the rest of J.P. Morgan in driving those decisions?

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## Daniel E. Pinto

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Corporate & Investment Bank, JPMorgan Chase & Co.*

A

The overall relationship is always very important but the quality of the service at the time where an asset manager decides to pick us or someone else is all related about the quality of the service. And the platform that Teresa is building is really something that is best-in-class, is effective, efficient, and really gives an overall client service for that particular need that is great.

So Teresa, do you want to comment on that.

All right, guys. Can we get you to grab your seats? Mr. Dimon, if you could lead the way and grab the seat down in the front here. I have to heckle him once every so often.

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## Teresa Heitsenrether

*Global Head of Securities Services, JPMorgan Chase & Co.*

A

For clarity that – what my comment is regarding administration services, so assets under administration from existing custody clients as they're outsourcing administration functions, and that's very much a scale and efficiency decision on their part to make sure that they can provide those services and actually do them in a cost-efficient way. The key there is that the fund administration business is very sticky business and it actually solidifies those relationships. We've already have the custody relationships, and to that, we're adding incremental services for those clients off the back of the service that we've delivered in custody and they're entrusting us with additional services.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

A

Okay. Daniel, Teresa, Carlos, Jenn, thank you very much. We're going to take a short break. The schedule says 9:35. Given the slightly delayed start time, 9:40.

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## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

All right. Everyone in the room, welcome back. For those of you online, we're just about to start with the Consumer & Community Banking section. Could I have the team over by the door close the doors, and anyone who's halfway in, halfway out can – I see Jamie is on the wrong side of the door, okay, but we'll close it anyway. Yes, we're going to close anyway.

Okay. Welcome. Gordon Smith, Consumer & Community Banking. Welcome to our section. I'm going to be joined today by Thasunda Duckett, who you all know very well. She has presented with us for a number of years on the Banking businesses. And for the first time in this section, Marianne Lake, who you all know and have enjoyed doing seven sessions as CFO of the company. So, it's absolutely fabulous to have Marianne in the Consumer business.

So Jamie, how are you? We started. All right. So, welcome back.

So, let's get started. I'm going through the strategic priorities page. They remain very similar and simple in that structure and I think effective in their outcome. We bring in new customers, obviously driving engagement across multiple channels, focus relentlessly on improving the customer experience and driving productivity. We closely manage expenses and simplify our business. As Daniel said earlier we've made a great deal of progress on the technology front and continue to do that with some very disciplined and rigorous structure around how we put investments to work and how we then monitor those investments.

As always, we're intensely focused on the regulatory and risk and control environment. We invest here very heavily. We invest here first. We identify any breakages that we see and we fix them and we automate them. And make sure that that work is done permanently, and that is always an ongoing piece of our business. And then, of course, we work to hire the best diverse talent that exists anywhere in the industry.

Turning to page 2, for those of you following online, we're the number one US card by both sales and outstandings, the number one primary bank in our footprint, and we've opened just a little over 90 branches in our new markets. In fact, at the close of the year, we were opening just shy of a branch a day. That momentum, obviously, isn't the same every week, every month, but we have just outstanding momentum there.

We have the largest, fastest growing mobile active customer base. We have 28 million customers, either visit, call or log in daily – 28 million daily. We use technology and machine learning to reduce fraud losses in the credit card business by 50% over the course of the last five years. And our already approved offers at conversion rate about 20% higher than traditional offers. Consumer lending, delinquency rates continue to look strong. You'll hear more from that from Marianne momentarily, and Jenn touched a little bit on that in her presentation earlier. And all of these efforts resulted in a return on equity of 31%.

The key metrics we drive are up, with the exception of average loans, where we sold \$43 billion over the last two years, largely in the home lending space. Active mobile customers were up 12%, and average deposits across the Banking businesses were up 3%, with very disciplined pricing. Our guidance is largely consistent with prior years, as you cast your eyes down the guidance column, and we've maintained our 50% overhead ratio commitment. But from where we are today, 50% will not be a straight line year-over-year-over-year. Maintaining our return on equity guidance of greater than 25%, and credit performance continues really to be superb, and as I mentioned earlier, the environment still feels very, very good.

Turning to revenue, for those following online, on page 4, revenue was up \$3.8 billion or 7% year-over-year. Volume was the major driver, primarily card loan growth, auto lease income, and of course, deposit growth. We've also benefited from pricing actions, mix, and the macro rate environment.

Turning to page 5, expenses increased to just shy of \$29 billion, \$28.9 billion, in line with our guidance. The nearly \$1 billion of volume and revenue-driven expenses, largely auto lease depreciation and home lending production. Investments, we spend an incremental \$800 million investing in future growth, partially funded by lower structural expenses. The largest drivers here were with our market expansion in retail bank, marketing investments, and continued investments in technology. We invest, of course, for the medium to long term in each of these cases. And I think it's very encouraging that as we look at the path ahead, that we see significant continued opportunity to continue to invest and grow these businesses. Structural expenses – expense reduction driven by efficiencies in home lending, operations, and we saw improvements in fraud rates.

Moving to page 6, we are running our underlying businesses more efficiently. Over the course of the last five years, our cost to serve each household has declined about 14%. The share of transactions completed through self-service channels has increased by more than 10 percentage points. And our operations teams around the world have seen more than a 20% improvement in productivity. And net new money per financial advisor has increased by 25%. Overall, you should expect us to continue to drive efficiencies in the business, as we experience increased expenses from volume-driven activities.

Turning now to page 7, our new branches pay off faster than they did five years ago, seven months faster in the legacy markets, and we're very encouraged with the momentum that we're seeing in the new market expansion. Obviously, that's early, but those early signs are very encouraging. Each year, I've given you a sense of our 5,000 plus or minus branches, how many are not profitable. This year, the number is zero. Roughly, I'm going from memory, last year was about 9, and roughly, the prior year was something like 13 or 14 or some numbers south of 15. So, we monitor those numbers very, very carefully and adjust as we see fit.

We've invested more in marketing, where our return on acquisition investments have improved 25% over 2018. The marketing investments have driven 8 million new credit card accounts, expected to generate more than \$88 billion in spend and \$18 billion in loan outstandings over the next three years. It also generated 3 million new consumer bank households, and expect \$26 billion average deposits and investment from those customers all over a one-year period.

Our investments in digital and customer experience have resonated with our customers. We have 22 million customers who visited our Credit Journey, the online capability that lets you check your credit score. If you haven't tried it, please do. And as Jason said, I think, right at the beginning, those of you who are here in the room, please take a moment to see one of the Chase team that are in the black Chase T-shirts and they will give you some demos. I hope I see you're all Chase customers, and if you're not, we'll help with that, too. We've had more than 160 million Chase Offers activated, and our Net Promoter Scores across the businesses are at an all-time high.

Moving to page 8, our customers' value-add service model, the branch convenience and our market-leading products, convenience, critically important in choosing a retail bank. This value proposition has allowed us to maintain pricing discipline. And for example, we retained more than 95% of our primary relationships, and mature household attrition is down 20% since 2014. On the card side, we retained more than 95% of card sales volume, 2019 over 2018, and our peak loss rate for engaged customers – remember, for many, many years now, we've focused on this engaged customer metric – shows 50% lower losses.

And I'm just going to finish on page 9 by highlighting that we really feel we have built over many, many years a really unique franchise that differentiates us amongst our peers. The largest credit card business, the leading primary bank in our footprint, the number one business bank based on primary relationships, and the number two mortgage servicer.

This scale and breadth gives us several advantages. In the expansion markets, our existing lending customers open bank accounts with 50% higher average deposits than customers who are new to Chase. Candidly, that was surprising, the magnitude, and again, all of these numbers are relatively early but very encouraging.



For our multi-line of business customers, attrition is one-third lower for customers with a bank and a card account. Deposits and investments are greater than four times higher, when an affluent customer takes a home loan with us. So as a result, our franchise is more valuable than the sum of the parts, and I think you're seeing that very clearly in the numbers.

So with that, what I'm going to do next is hand it over to Thasunda to talk about the Banking businesses. She'll be followed by Marianne. Then I'll come back, and with the management team, we'll handle any questions that you have. Thanks very much, guys.

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## Thasunda Brown Duckett

*Chief Executive Officer of Consumer Banking, JPMorgan Chase & Co.*

Thank you, Gordon, and good morning, everyone. I'm Thasunda Brown Duckett, CEO of the Consumer Bank. I want to begin with the progress we've made against our three strategic priorities, which you'll see on slide 10. One, we're acquiring new customers and deepening existing relationships at scale. We've increased Consumer & Business Banking deposits and investments by nearly \$350 billion over the last five years. Two, our customers continue to engage with us, both digitally and in branch. Over 75% of our checking households are primary bank, and we're the number one business bank based on primary bank relationships, which is a testament to the strength of our franchise. And three, our progress is the result of focused investments and increased efficiency. Since 2014, we've lowered our cost to serve by 20%, and increased deposits per branch by more than 60%. Advancement in our mobile and ATM technology have helped reduce the number of everyday branch transactions, leaving more time for our bankers to deepen relationships with our customers.

We're operating from a position of strength in both the Consumer & Business Bank, with strong deposit growth across both businesses. Consumer Bank momentum continues, with average deposits growing to \$543 billion, a 7% growth rate over the last five years and 3% year-over-year, as we've maintained pricing discipline. Client investment assets increased to \$358 billion. That's 27% growth, and we continue to see further opportunity.

We're also seeing similar strength in Business Banking, with deposits growing at 8% over the last five years. And we are tapping into the power of our customers that have both a personal and business relationship with us. Around 80% of our business customers also have a consumer bank relationship, and these customers have 3 times higher consumer balances on average. Overall, we are outpacing the industry in deposits and investment growth through the rate cycle and have improved customer satisfaction across both businesses by more than 5 percentage points.

Over the last few years, we have invested in developing an industry-leading continuum of solutions that are designed to meet customers' needs at every stage of their financial lives, from students who are just getting started, to the affluent, with much more complex financial needs. We're there for our student segment through tailored products and increased branch presence on and around college campuses. Students are nearly 25% of our new checking accounts, and since last year, we've increased student account production by 18%.

For affluent customers, we're using the power of the full Chase ecosystem to deepen relationships. 66% of our Sapphire and private client customers are cardholders, and their balances have grown by 20% year-over-year. So just as we've expanded our product portfolio to serve more of our customers' needs, we're also broadening our reach to acquire customers at scale across those branch and digital channels. We've increased account acquisition 11% year-over-year, with continued strength in branch production. We're also scaling digital account opening, reducing the median time to open a consumer checking or savings account to 3.5 minutes, making it even more convenient for customers to engage with us digitally.

The shift to digital, in combination with improvements to our targeting and offers, has brought down marketing cost over 15% per household. So no matter how you choose to join us, whether digitally or in-branch, we are growing our primary bank relationship.

Moving on to slide 14, this time last year, we were just getting started with market expansion. Now, we are well underway. And so far, the results are beyond our expectations, with over \$1.5 billion in deposits and investments. Since we announced our plans, we've entered 16 new markets, we've opened more than 90 new branches, and have nearly 150 standalone ATMs. We are getting smarter with our ATM and branch placement by using our card transaction data to understand where our customers live, work, and shop. This enables us to strategically optimize our branch footprint as we enter each new market. We already have 6 million-plus Chase cardholders eager to deepen their relationship with us in these new markets, and these customers have been a key driver to our early success, representing 40% of new-to-bank relationships and holding over 50% higher average balances than pure prospects.

As Gordon shared earlier, we are deeply embedded in the lives of our customers. We are seeing a continued shift to lower cost digital payment, and the investments we've made and our capabilities have made it easier for people to pay with Chase. P2P payments continue to scale, with 9.8 million active Chase QuickPay users, a 28% increase year-over-year. 35% of checks are now deposited via Chase QuickDeposit, simplifying the customer experience and driving efficiency for Chase. Our customers are also highly engaged with our digital capabilities. Over 23 million customers are mobile-active, an increase of 10% year-over-year. Increased engagement across payments and digital helped drive primary bank relationships, which have grown by more than 20% over the last five years, and these relationships are core to our profitability. They're highly engaged, they're valuable, and they're more likely to stay with Chase.

Turning to slide 16, we continue to reduce our cost to serve while optimizing our branch network. Enhancements to our ATMs and mobile apps have made it easier and more convenient than ever for customers to self-serve. Everyday branch transactions have decreased by 49% on a per-customer basis. As customers continue to choose self-service more frequently, bankers can focus more on advice. Our digital-first companion branches, as well as our standalone ATMs that can complete most everyday branch transactions, offer customers more points of convenience. We also continue to stay laser focused on changing customer preferences and have ensured that our network is flexible and able to evolve quickly. Around 75% of our branches can be exited within five years.

So in conclusion, we're building on our position of strength, and we have several unique assets which differentiate Chase. One, our scale. Over 60 million households have a Chase relationship. And about a quarter of our consumer households are multi-product. This highlights the power of our franchise and the opportunity to further deepen with our customers. Two, the strength of our brand and our omni-channel model opens up more growth opportunities. Together, they enable us the ability to scale through digital account opening and extend our physical presence through market expansion. And three, our data and analytics are driving more effective customer outreach, marketing, and network optimization, all of which leads to growth at a lower cost. The strong results we've seen across the business enable us to continue to invest in strengthening these unique assets and will help drive continued outperformance.

And with that, I'd like to turn it over to Marianne Lake. Thank you.

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## Marianne Lake

*Chief Executive Officer of Consumer Lending, JPMorgan Chase & Co.*

Okay. Thanks, T. As Gordon said, there's no one more thrilled than me to be here this year to talk to you about our Consumer Lending franchise. And given the breadth of the three businesses that we cover, Card, Home Lending, and Auto finance, it's not surprising that the priorities you see here on the page are the same as the priorities you saw for CCB in totality, and I will be touching on all of them. It is about acquiring new customers, and then, deepening our relationship with existing customers. And we are growing our multi-product household at two times the rate of total households.

We're investing in our digital platforms and integrating them across asset classes, so that we can engage with our customers earlier and in a more personalized and holistic way. All of which is enabled by leveraging our data advantage and the investments that we've been consistently making in technology and marketing.

The fourth bullet point here on this page, we've also made great progress simplifying and optimizing our businesses across multiple dimensions. That's balance sheet, capital, liquidity, and of course, operating with discipline, not only in risk management and control, but also in expense and efficiency, while we are delivering improvements in productivity.

So diving then in, we'll start with acquisition and deepening on page 18. To fully appreciate the value of the Consumer Lending businesses, it's first important to understand that they are a material acquisition funnel for our deepest relationships. On the top left-hand side, you can see that Consumer Lending introduces more than half of all new-to-bank households each year. A third of our deepest relationships start with Lending, and when we market to these customers, we see three times the response rate versus a traditional consumer bank offer.

The upshot of that is on the right-hand side. Lending households contributed more than half of net deposit growth last year. And these multi-product customers are materially more satisfied. Attrition rates, as you can see, are significantly lower, and profitability is about two times higher. Our Card customers are not only contributing to strong growth in our existing markets, but also proving to be an enormous enabler and accelerator in expansion markets as T said. And on the bottom right, I should point out, it is not all about Card. Home Lending is a real relationship business today, and that's increasingly true. We end up with more than 4 times the deposit and investment balances when a customer gets a home loan with Chase versus a competitor.

This is all fueled by the power of our data on page 19. Our scale across our businesses is unmatched in financial services, which does give us a data advantage, and we are unlocking its power. Today we have current income information on over 40 million customers in our 60-plus million households. But the so what here is that for 30 million of those customers, we didn't have to ask, because we have their relationships and we have the data to calculate their income.

Additionally, our scale in Card allows us to see 10 billion transactions a year. And we're using all of this to drive better outcomes for our customers and for us. Gordon mentioned it, but on the left, you can see in 2019 that we launched our already approved offers. They're differentiated in that we are proactively showing our customers their total borrowing capacity, they're offers for which they are already approved, not just prequalified, giving them the certainty of offers we will stand behind and a simplified one-click experience because we know them. To date, we've shown those offers to 10 million customers and counting and the early results are strong, with conversion rates about 20% higher.

As I said, we are now digitally verifying income at scale, which is a game changer in Home Lending, and it is driving both faster cycle times and higher pull-through rates. And this same income information also allows us to be more targeted in terms of credit line increases for eligible customers in Card, which you can see is also driving greater engagement. And on the right, we have best-in-class fraud prevention and detection capabilities, and we have industry-leading loss rates. Our investments in machine learning have reduced the cost of fraud by 24% year-on-year and by about 50%, or about \$260 million annualized over the last five years.

So the next frontier is to leverage this data advantage and to bring together our existing assets, so that we can engage with our customers earlier on page 20. We are aware that our leadership positions, our market share, our margins are someone else's opportunity, and they are looking to disintermediate us in payments and potentially beyond. But we also can close the loop with our customers. We have the data and we have the capabilities to move up the commerce funnel, to get consideration from customers earlier, to make contextually relevant offers to them, and in doing so, we intend to deepen our moat and defend and accelerate payments and banking market share.

As such, we're integrating our existing digital assets to improve the customer experience and accelerate the appeal of individual journeys, bringing our customers to our ecosystem more frequently, so they can learn about their financial situation and they can plan their lives. On the left-hand side of this chart, if you start at the top and track down, you can see those capabilities that we already have that ranges from personal financial management, including goals-based savings and import aggregation. You can see our proprietary Credit Journey tool, allowing customers to understand their credit health and their borrowing capacity. And as Gordon said, we have 22 million customers currently enrolled in Credit Journey.

We've launched new digital capabilities to help customers to understand and to manage their most important financial assets: their home and their car. And at the bottom, we are driving incremental value to customers, to merchants, and to our partners alike through our commerce platforms including Chase Offers and Ultimate Rewards. As I said, we do have all of these assets today, and the work that we are doing is to seamlessly integrate them.

So on the rest of the page, you can see an example of a journey. In this case, our customer is starting in Credit Journey and understanding their credit score and understanding their borrowing capacity. This customer may set themselves a goal to save for a down payment for a bigger home, using our goals-based savings capabilities. They can also review the value of their current home and they can explore their neighborhood through Chase MyHome, and we've had over 1 million visits to this site since we launched last year. And through that same flow, this customer can one click into a simplified digital mortgage experience, which I'll talk a bit more about later. So this is one example of a journey. There will be similar opportunities to explore your car and vacations and every day and meaningful purchases. As Gordon said, we think the whole is greater than the sum of the parts, and all good things come from deeply engaged customers.

So moving on to page 21 and we'll just dig a little deeper into Card. Card is a national scale business, and it's fueled by having the best products, the best services, and the best value propositions for our customers, engaging with them, and then deepening our relationship as I showed you earlier. It all centers around payments, which is at the heart of deeply engaged relationships, and it's how we earn the right to manage our customers' operating accounts and balances.

And we're outperforming the industry. We grew digital payments by 13% and physical payments by 4% last year, which is driving strong and consistent growth in key metrics, which are at the bottom of the page. It's a sustainable 5% to 10% growth both year-over-year and over five years in all of active accounts, spend and lend. And year-over-year our adjusted net revenue growth was 8%, with a five-year CAGR of 4%. So our performance and our growth is sustainable because of our unique assets on page 22.

It bears repeating, we are the clear number one issuer both in terms of spend and lend, and our Ultimate Rewards loyalty platform is tied at number one in assessed value for customers. The quality of our product lineup has been consistently recognized in the industry, sweeping the board at The Points Guy awards last December, but we're not complacent. In fact in the last two years, we have launched a new product on average every two months, and there is more to come. And we are co-brand partners with some of the most admired companies in the world. We're investing heavily to maintain these leadership positions, and we're innovating to create simpler experiences, which you can see on the right-hand side. We have created a single unified payments platform or a single payments front door. We've made it simpler to provision Chase cards into digital wallets, and we now show our customers where they have their cards on file. And we are providing incremental value through merchant-funded offers with more than 160 million offers activated to date. These capabilities and more are scaling rapidly, and you can see some of them outside.

On physical payments, tap-to-pay is also seeing rapid adoption. In only a year, customers with contactless cards are using them for about 5% of transactions, which is nearly 2 times that of digital wallets that have been in market for years. And when our customers tap to pay, which they did some 15 million times in December, they're also seeing an acceleration of the secular trend from cash to card, with an associated 16% lift in spend. We're leading the industry in rolling out contactless cards, and we will have substantially all of our customers contactless by the end of this year.

Finally at the bottom of this page, our strategy is working. We have industry-leading top-of-wallet spend share, which is the holy grail, and we're leading by a decent margin in total and across all key product categories. And continuing to widen the moat, you can see on the bottom

left gaining 50 basis points of share year-on-year, that was 110 basis points of share over two years, which is in turn driving increased share in sales and outstandings year-over-year from an already high base.

So as good as that is, we continue to believe that there is more opportunity to gain share, including in lending on page 23. As I said, we're number one in terms of lend. We have approaching 17% market share, but our customers have up to \$100 billion of addressable balances away from us, and we intend to capture a larger share of it. And while innovation is important here, it's also about blocking and tackling, which you can see on the right-hand side. We are using our data to get even better at pricing for risk and knowing the customer to whom we can responsibly extend more credit. And through innovation, we are enabling customers to pay and borrow as they choose through features like My Chase Loan, My Chase Plan, and point of sale financing with our partners. And as we are executing on all of these strategies for our consumers, we also believe the same opportunity exists in small business. It is a long game, but year-over-year, our share was up 55 basis points as you saw on the previous page.

So let's turn to Home Lending on page 24. Home Lending is also very well-situated as we enter 2020. We've made very significant progress simplifying and de-risking the business. And we now have that high-quality and customer-centric business that we spent the last five years building. Notably, as of January this year, the Net Promoter Score for this business hit the 50s, and production customer satisfaction is in the 80s. 2019 was a tale of two cities driven by the macro environment. Total volumes were up 32% year-on-year, with revenue margins about 40% wider. From a risk perspective, the delinquency rate here is very low; in fact, it's at its lowest point in over a decade and continuing to come down, and we ended the year in a net recovery position. So from here, the work that we have to do is to future-proof the business in order to maximize profitability in every part of the cycle, which includes a critical focus on driving down cost.

To that end, the next page highlights the progress that we're making delivering end-to-end digital capabilities. So what have we done? Last year we rolled out our digital mortgage offering, Chase MyHome, which replaced some of the most frustrating parts of a mortgage origination, think of the things like the physical paperwork and signing and all the faxing. And by the end of last year, 80% of loans used these capabilities and it's supported record levels of customer satisfaction, pull-through rates that were double-digits higher, and improved cycle times against the market backdrop in which they were extending. And we followed that by rolling out a suite of additional digital tools to complete the end-to-end experience.

Starting before the point of a loan, we can now offer customers digital advice, including estimating their buying power. We have made further improvements to the core application and fulfillment processes, including pre-filling applications, digitally verifying income, and leveraging automated valuation. And finally, once we have the loan, our customers can see their available equity, they can see the value of their home, and we give them options to lower their monthly payments.

We have only just started. You can see that these capabilities are clearly working for our customers and they're scaling rapidly, having grown to assist a double-digit share of our customers in a matter of only months. And we are winning with our target primary bank customers, where we are seeing better than industry growth and 15 percentage points higher recapture rates year-on-year.

So complementing these digital efforts on page 26, starting with production on the left-hand side, we're also making targeted changes to our retail coverage model. We're retaining advisors in branch for our highest opportunity branches, but we're moving coverage to be more centralized for others. You can see that our overall sales head count was down 16% year-on-year, but remember, that was supporting volumes that were up significantly, very strong levels of customer satisfaction, and industry-leading cycle times. Advisor productivity was up by more than 40%, yes in part driven by the market opportunity, but also as a result of the actions we're taking, and costs per loan were down by nearly 20% year-on-year.

You've heard it before, we strongly believe in omni-channel capabilities. Retail coverage remains critical to a strong customer experience, especially among our affluent customers. And on the right-hand side, we've also demonstrated success reducing both head count and expense in servicing, both down over 50% versus five years ago and double-digits year-on-year, achieved by reducing exposure to higher-cost non-performing loans and through relentless process improvement including automation.

So moving on then to page 27 and a moment on risk management and balance sheet optimization. Obviously today, the macro environment is generally constructive and credit is benign, which is reflected in the strong absolute credit performance you see across each of our businesses. And on a relative basis on the left, we have a significantly lower risk profile than the industry. Only the paranoid survive, and we are constantly refining and surgically tightening to protect the balance sheet through the cycle. But despite these industry-leading delinquency rates, because of our scale advantage, we are still able to deliver best-in-class financial performance. In the middle, you can see in Card, our share of subprime lending is 4 percentage points lower than the industry. And in Auto, we are successfully managing layered risks. And on the right in Home Lending, we have also been optimizing our balance sheet, capital and liquidity position, executing on \$43 billion of loan sales over the last two years, which was accretive to both the business and the company in total.

So bringing it all together for Consumer Lending on page 28. I hope this page speaks for itself, strong performance year-over-year and consistently over five years in underlying drivers and in credit performance across businesses. We didn't spend time today on Auto, but it's true there too, and you can just pick a few numbers on this page: Card sales volume year-over-year up 10% and 10% over five years; Card

outstandings up 7% year-on-year, as our lending strategies are working; Home Lending origination volume up over 30%, and Auto loans and leases up 7%. And looking forward, we would expect to continue to deliver this strength in performance, obviously market-dependent.

So to close then for CCB, each of our businesses is performing strongly, each is profitable standalone, and each has real opportunity ahead. And we ended 2019 with very strong levels of customer satisfaction across the board. But as Gordon said, we do continue to see real opportunity to grow through investments in data, in digital, marketing and expansion, and we will continue to take a long-term view. And these investments are driving real cost to serve efficiencies. Our omni-channel strategy, including physical distribution, is also a key strength. Branches are critical not only to banking but also to lending, and lending in turn fuels acquisitions for banking in both our existing and our new markets, it's a real virtuous circle.

But what differentiates this company is the power of bringing it all together across products and across channels. We are successfully deepening relationships. The mix of our businesses and our scale is driving material improvements in customer returns, and we see further opportunity to accelerate that. We will continue to operate with discipline in both expense and risk management, which will sustain our leadership positions and strength in performance. And of course, it doesn't hurt that in my opinion, we have the best team on the planet.

So with that, we'll take questions. Gordon will come back up. Thank you.

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## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

Marianne, T, thank you. Phenomenal job. Actually one thing I'm just going to add – because Daniel did really set the mold by giving and answering the first question – is: I hope you will see the talent that the company has. Jamie is relentlessly focused on how do we just keep growing leadership at all levels across the company. And you can see great examples of – with the people who have been up on the stage today.

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# QUESTION AND ANSWER SECTION

## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Okay. So we got Chris Kotowski over here.

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## Chris Kotowski

*Analyst, Oppenheimer & Co., Inc*

**Q**

Good morning.

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## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

**A**

Morning, Chris.

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## Chris Kotowski

*Analyst, Oppenheimer & Co., Inc*

**Q**

So you suggested or you said 90 new branches over 16 new markets, so that would be five or six branches per metro, which might have historically in your footprint had 50 or 100 branches per. And do you plan to keep it permanently, like physically lighter footprint in those new markets? Do you have to offer concessional things like higher rates to attract deposits in those markets where you don't have the scale? And then secondly, what does the learning from building that out tell you about your existing branch footprint?

## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

A

That really was a multi-part question, Chris. So, we bring enormous – and I'll let Thasunda add a little bit to this in a moment. We bring enormous data now to really understand exactly where is the right location to put a branch, how do we make sure we meet all the requirements for the lower and middle income segments. We have the power of the credit card data and the debit card data that shows where our customers are spending. And all of that boils down to where we'd most like to be. And then of course, the team have to then go out and say, well, you know what's available in exactly those locations and so on. There's no question that it will be less dense, and you're seeing that. But think about these things, it's something that we are constantly evaluating. I'm not saying every day; it's really kind of every month. As we sit down and go through the business reviews, we look at the performance of the branches, and if we think we need to add more, we'll add more. So, the branch network is not something which kind of concreted in place. It's something which is constantly evolving, and the initial targets, we've set out are just the initial targets, we'll continue to expand where we think our customers need us. Thasunda?

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## Thasunda Brown Duckett

*Chief Executive Officer of Consumer Banking, JPMorgan Chase & Co.*

A

No, I think that's right, Gordon. The only thing that I would add is, as we've shared before, 10 years ago to your point, we would have said we needed 100 branches and 50 ATMs to cover the market. Given the strength of our brand, leveraging the installed customer base with over 6 million customers, given our omnichannel model and the investments we've made in digital account opening, and then lastly when you think about the data, as Gordon said, to optimize our footprint – both with the investments we've made in our ATMs as well as our companion branches – it's allowing us to ultimately create more points of convenience and be able to serve our customers. So a lighter footprint, but as Gordon said, we will continue to evolve. The last thing I would note is remember, this is an organic build. We are building one branch at a time in every market, which is allowing us to continue to be smart, continue to understand the changing needs of customers, and ultimately the results so early are exceeding our expectations.

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## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

A

And Jamie was just making the point from his table there, it's not five, but we're giving you the results of the earlier stages. So these will continue to build out as we expand the new builds.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

A

Saul?

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## Saul Martinez

*Analyst, UBS Securities LLC*

Q

Thanks. So, I think historically we've thought of the new bank customer starting with a checking account and maybe moving to savings account, a card, a mortgage over time with the bank. It seems, if I understood you – the presentations correctly, it seems like you guys have kind of turned that on its head a little bit, with over half of new-to-Chase customers starting with a Consumer Lending relationship. So I just wanted to get your perspective on how unique that is, or rather how much of your success in doing that is from Chase-specific factors, your ability to invest in data analytics, your brand, your branch infrastructure, versus just, say, execution on a given strategy.

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## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

A

That is true. I have at least traditionally thought of the customer relationships starting with the checking account and then growing beyond it. But the success we're seeing from those credit card customers in the geographies that we have not had retail banking was not in our business case and is quite an exciting step for us. And we've been building the credit card company we have today for many, many years, so we've gone from about 13.5% market share to about 23% market share. And Marianne described, we are relentlessly launching new products. It's

such a competitive play – market segment, but the power of that credit card franchise has proven to be much more valuable for it than at least I initially thought that it would be. Marianne, would you like to add to that?

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## Marianne Lake

*Chief Executive Officer of Consumer Lending, JPMorgan Chase & Co.*

A

Yeah, I would – so the thing to also remember is that we've been a digital acquisition business in Card for a long period of time now, where digital account opening is, I wouldn't say new, but accelerating dramatically in the banking space. And given that we have more than 20% share, it's not entirely surprising that more than half our customers new-to-bank would be from lending. I think the trick then is in making the products and the customer experience so extraordinary that their propensity to want to do more with the company gets better and better each year.

So it's the investments we've been making in the products, the experiences, the value beyond points, the digital, the brand, all of those things are then combined what drives our customers to look beyond lending and want to engage with us in existing markets and increasingly in expansion markets. And the same is true if you look at Home Lending, it's more of a relationship business today than it was five years ago. It will be more of a relationship business tomorrow, and it's because all of these things work best together. And the more interoperable they can be, the more loyal our customers will be.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

A

Okay. We got time for basically one more. Betsy?

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## Betsy L. Grasek

*Analyst, Morgan Stanley & Co. LLC*

Q

Hi. Could you speak a little bit, Gordon, to the efficiency from here? You've delivered significant improvement in efficiency, and it feels like part of that is the shift to the digital channel. A lot of your existing customers have gone to digital. How do you think – how should we be thinking about that ramp from here and the efficiency improvements and the pace of those efficiency improvements from here?

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## Gordon A. Smith

*Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking, JPMorgan Chase & Co.*

A

So Betsy, I think we're on a long journey here, where we're actually in the relatively early stages of it. So I think that the mobile and digital capabilities that we're bringing to the market will just continue. Thasunda used the example of a digitally opened account being about three minutes; it used to be about 34 minutes when a customer went into a bank branch. So we're going to continue to see those efficiencies. And when we look at machine learning and artificial intelligence, I used the example that we focus on fraud within the credit card business, and why did we do that? We just tried to be very narrow in an area that we felt we could really drive down losses, improve economics, and be a benefit to the customer and very measurable. And listen, I don't really know anything about American sports, but I guess in baseball terms, are they seven or nine, however many innings, but like we're in the second – if it's seven or nine, we're in like two. And I know it's not less than that, but – so we have – I think we have a really long way to go, and it's just exciting to see what technology is doing.

And by the way, just helping us, and you've heard this from us from these meetings over the last many years, we're relentlessly focusing on simplifying the customer experience. And Marianne talked about the power of a customer having multiple products with us. Now we can just make that so easy. But before, it was not easy, and the customer may well have wanted to be both a credit card, a retail banking, and a home lending customer, but it was hard work. Those barriers are falling away rapidly.

So with that, it's my pleasure to welcome to the stage Mary Erdoes, who will cover the Asset & Wealth Management businesses. Mary?

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## Mary Callahan Erdoes

*Chief Executive Officer of Asset & Wealth Management*

All right. So for those of you who I don't know, I'm Mary Erdoes. I'm CEO of the Asset & Wealth Management business, a business that is near and dear to lots of people in this room's hearts. But the irony is that we're going to talk about one of the smaller businesses in this firm, and it's

ironic to think that a \$3 trillion global franchise is smaller, but it really puts into perspective everything that Gordon and Daniel just went through this morning in terms of the size and the scope and the scale of our CIB and CCB franchises.

So it's just – it's a lot to digest this morning, so many good things. But now let's take a moment to frame what the Asset & Wealth Management business is and how it fits in to the broader firm. So who are we? We are one of the leading managers of assets in this world for institutions, for individuals, for sovereign wealth funds, for central banks. How did we become that? First and foremost at the beginning and the end of each and every day it's investment performance. We have an unwavering prioritization of our portfolio managers and our analysts and our traders before anything else that happens in this bank, and we take care of them for the long term so that they can invest as fiduciaries on behalf of other people's money. And if you do that right over many, many, many years, it's not a surprise that you have 88% of your 10-year numbers beating benchmark peer averages.

And I think when you're in the business for 200 years, it's really hard to bring things to life. But this month just to give you an example, this month, we are celebrating our 135th anniversary of our first mutual fund. It was started in 1885, was in the UK, and it invested in emerging markets countries, United States of America, to find railroads. And today it is a top-performing small and mid-cap fund in the UK, still with a long-term track record of 135 years. So that's pretty hard to replicate and we have continued to do that year in and year out.

But very importantly, it's not based on any one-hit wonders or one asset class. This is a business that covers each and every asset class, each and every region around the world, and each and every client type. To date, the way that we have been successful is with the largest clients in the world that I talked about. But the future is very different. The future is about the digitalization of everything that we do. And when we do that, we can bring the J.P. Morgan intel inside to a much broader audience. And we will continue to do that with the best talent. Inside of J.P. Morgan Asset & Wealth Management, we make it a place that you want to come and stay for your entire career. We invest in our people heavily; 95% of them stay with us for their entire career.

But I think what's maybe even more important is if you were inside of our firm, to feel the diversity that we foster each and every day. Here is a stunning statistic that is not normal in the Asset Management business. 39% of our assets under management are managed by some of the most successful female portfolio managers in the world, 39%. It's a pretty great place to work, and we never stop innovating. We continue to invest in everything that is new and important in the world from alternatives to ESG.

And so let's look and see how we've done. 10 years ago, I stood up here for the very first time, and actually many of you were in the room, because so many of you are long-term loyal investors. And I looked and I said at \$1.2 trillion in assets under management, I really think we can grow this business. But \$2 trillion looked very far away. And today, we are very proud fiduciaries of over \$2 trillion in assets under management and over \$3 trillion in total assets.

We've become a very reliable and consistent engine of growth for this firm, setting records each year in different parts of what we do. And so 2019 wasn't an exception to that. And I want to just take you through some of those records. Now this page is very busy. It's not meant to overwhelm you with stats. It's actually meant to reinforce how diversified our success is. Each one of these line items has a team around it. That team drives that business in, day in and day out. They're working on waste cutting, simplify to grow, innovating, and obsessing about moving faster for our clients and our shareholders.

If you look on the left side, whether it's active equity AUM, Paul Quinsee's team doubling our active assets in the past 10 years. In fixed income, Bob Michele's team tripling our assets. Over on the Wealth Management side, clients with TCP of over \$100 million, Andy Cohen and his efforts to focus on our high end of our client base have nearly tripled the number of super wealthy clients that we manage assets for. And then if you look across the bottom, the technology that we invest across these two businesses, Mike Urciuoli heads up our global technology efforts, he invests about \$1 billion a year across these two businesses in AI, machine learning, cyber protection. And then operational efficiencies, a very important lateral hire that we made from one of our major competitors, Julie Harris, helps to run a global operation that leverages all of the massive efficiencies that we have across this firm.

And it's kind of hard to overemphasize the power of being inside of this firm and the scale that you get. And the irony is that 10 years ago standing up here, I don't think there's an asset management firm in the world that would have said that they get any benefit from being inside of a bank. And today, it's just hugely different. I'd just take you through some of the benefits. We talked with T about the power of the branch and all that she's done to transform this thing, okay? But what might surprise you is that each and every day, some of the wealthiest clients across the United States of America walk into those branches each and every day, not because they have to, but because they want to.

And when you think about the brand and who we are, the brand of J.P. Morgan Asset Management, this is where we have a disproportionate effect on the firm. Many of you know Darin Oduyoye who's in the back there, many of you in the press team, you know him because two-thirds of your requests of interviews that you have for people on TV are from the Asset & Wealth Management subject matter expertise that we have across this firm. And the talent, the talent engines that we run, we see 68,000 new people every year. Robin Leopold and her team, she's up here, she runs our global HR franchise, she runs an absolute machine. It is harder to get accepted in JPMorgan Chase than it is to get into Harvard.



And within Asset & Wealth Management, my HR business partner, Lauren Tyler, she has been relentless at trying to hire talent laterally from the outside from some of our greatest competitors, and what's really amazing is that over 50% of the people that we've hired laterally are diverse. We're making a very, very big impact and continuing to do this. But I think what might be most gratifying for each of us, and we've touched on it on some of the comments this morning, and hopefully Jamie will get into it in a little more detail in his comments at the end, is our ever-present community engagement. Peter Scher is also right here up in the front. He has completely changed the way that we think about that for the firm. JPMorgan Chase has thousands of employees who don't just give their money from our firm; very importantly, they give their time and they give their expertise, whether we send the teams of people to Detroit, or whether they're in the outskirts of Paris, trying to help to educate and to give back. And it just makes it better for everybody, and quite frankly, it's just better for the firm. It's very rewarding.

So let's look ahead at the next decade. Everybody's hand wringing over all of the problems that exist in the asset management industry, and we are looking forward. We're focused on five major drivers for the future, ranging from the Wealth Management business right here in the United States of America, to the global Private Banking business, to the scale of our Asset Management business under the new leadership of George Gatch, who I see there. We're ramping up our alternatives offerings, which are so important increasingly to clients who want access to new and important areas in the marketplace, and possible opportunities to acquire either companies, teams, or technologies. Only if the price and the cultural fit are right, we don't need M&A for scale, but there's a lot going on just in the past couple of weeks, if not the past couple of months, and we want to be sure that we are seeing each and every opportunity.

But to be clear, the single biggest opportunity on this page is number one. It's right here, and it's right inside this firm. The U.S. Wealth Management business is the wealth management of \$50 trillion of assets in the United States of America in this sweet spot. Take just for instance the space as an example of the \$1 million to \$10 million. Well, there are 22 million people in this country that are in that segment. Chase banks half of them; half of them are already clients of ours, but guess what, we only do investments for 5% of them. Only 5% of our clients do investments in that space. We still have 95% to be able to make inroads to. And when we add investments to what we do with clients, on average, the deposits double and overall share of their wallet triples.

If we just added another 5% and making a dent into that 95%, it would be another \$2 billion in revenues for this firm. How are we going to do all of that and attack this opportunity across the entire wealth spectrum? We've rearranged ourselves to pull together one team, to take advantage of all the investors that sit across the country, in those branches making those inroads with those clients, J.P. Morgan investors sitting inside of those branches, and we're combining it with the great digital work by Kelli Keough and her team, who we hired from Schwab, to start You Invest for us.

Combined together, we are going to make this a very, very powerful offering across the United States of America. And to do that, we needed to find somebody who understood that this is at the intersection of the two iconic brands that we have: J.P. Morgan and Chase. And it's very important that we understand it is the J.P. Morgan investment expertise that we are infusing with the great Chase brand and reach. And the best person to do that is the person that has been working on those two brands for the past decade, making them who they are, and that's Kristin Lemkau. I don't know if everybody knows Kristin, I actually, just stand up for one second. It's super exciting to have you at the helm. And she's just the absolute perfect person to do that. And along with her partner, Dave Frame, who runs the US Private Bank, who I think is here somewhere, the two of them are just going to be unstoppable in being able to take advantage of what we've got across this country.

So, speaking of the private bank, let's just dig in there a little bit more. That is the second biggest driver of growth that we have across Asset & Wealth Management, is a very coveted franchise that Jenn talked about in her opening, it continues to deliver increasing shareholder value year in and year out, and we've done this for two decades straight. We have a formula. It goes like this. We spend a lot of time making sure that we are hiring the right people to take care of these very, very, very important client assets. And then we spend a lot of time JPMorganizing them.

After we JPMorganize them, we allow them to absorb themselves into the firm. They begin to partner with Doug Petno's commercial bankers. They partner with Carlos Hernandez's investment bankers. And together, they turn that power of the referral inside of this firm. And when they've earned the trust of those CEOs, those CEOs vote with their feet and become clients. And then, over time, when we do a good job, they vote with their wallet with more assets each and every year. And that's why we have a 9% market share in this space, in the United States of America.

But there's so much more to do especially internationally, if you look at that second bar, where we have less than 2% in the markets where we want to be in in the international space. Nicolas Aguzin who's in the back who has been running large parts of our investment bank for many years is now responsible for that international private banking space, and he is going to completely transform that. Every 1% that we gain a market share in this private banking area is another \$1.3 billion in revenues for this firm. It's very powerful when we think about doing it and growing it purposely.

How can we do that? You have to be a bank for these clients. We started on the left with making sure that first and foremost we were the right people to invest their money. Brian Carlin has created one of the most powerful investment franchises in the private banking space. We have more access to the best managers in the world, importantly, in the alternative space where we have exclusive arrangements with most of the best ones in the world. And we have then been able to transform this across to become their lead bank. Lending, which we talked about in Jenn's presentation at the beginning, had become a very important part of what we do for these clients. My partner, Vince La Padula, who's in

the front, along with the entire risk team led by Prasanna Someshwar. Together, they purposely go out and talk to these very large and sophisticated clients about how we handle both sides of their balance sheet. And we have become, in the last five years, the go-to bank for these very, very important families around the world. But we've done it highly collateralized, highly secured, and what we hope to stay as a net 2 basis point net charge-off rate. It's up 50% in the past five years, and we still have another two-thirds of our entire global client base that we don't make a single loan to.

Moving on to the other side of the business, the Asset Management side, where George Gatch has taken over this summer and has helped us to think about where we're going over the next 10 years. The next 10 years in this business, just like the last 10 years, you first start with investment performance, and you need scale. You can't rush that left side of the page. There's nothing you can rush about a 10-year track record. But very importantly, it's not just in the core asset classes of equity and fixed income which we talked about. Multi-asset solutions run by Jed Laskowitz and the Alternatives business run by Anton Pil are two of the most important areas of growth for our clients. But you can't just wake up one day and be in those businesses. You can't be in the multi-asset business unless you're in every asset class so that clients can come to you for solutions not just for the product that you have to sell on any given day.

And when you look at these growth rates of the industry across the size, the whole industry is growing at 7% on the top, and J.P. Morgan is growing a little bit faster at 9%. But in the highest growth area of multi-asset and solutions, we're growing at a 50% faster rate than the industry. And that's because of our very strong market share and investment performance. Each 1% share, just in that area, is another \$1 billion of revenue for our firm.

But let's talk about why that cross asset class is so important. You saw an acquisition this morning of an income fund manager. Income is most the important thing people talk about. Whether you are our largest Japanese investor or whether you're walking into the branch, you're asking the exact same question, where do I get income? The 30-year treasury has hit an all-time low and Greek bonds are less than 1%. How do I get yield? We believe J.P. Morgan has the most complete franchise across income offerings whether it's in equities, in fixed income, in ETFs, in multi-asset, and in alternatives. And when you look at this page, it's filled with funds that are the top three in asset gathering or have 4 and 5-star Morningstar ratings.

If you look at the first one, this is Clare Hart's Income Fund. It's the fastest growing of its sector. She's in the third percentile for her 10-year track record, and it's still half the size of its largest competitor. You look at the ETF in the middle, we're very late to the game in ETF, but we're not slow now. We have John Donohue, who runs our liquidity business, and Mike Camacho, who helped us to jumpstart this ETF business, just two years ago, started this fund. It's now this – it's now the second largest in its space. And on the far right side in the alternatives area, Paul Ryan, who runs our infrastructure team, brought in \$5 billion last year for a 5-star ESG-rated fund, but it's still a fraction of its nearest competitor in a continent far, far away.

This page, I just want you to look at this page, just those five areas, year-to-date, \$8 billion of net new flows, just year-to-date. So, income is very important and having it across asset classes is equally important.

On the alternatives side, we are celebrating our 50th anniversary. We have \$0.25 trillion of assets, and yet we feel like we've only just begun. We have very strong investment returns especially in areas like core real estate where we are the leader in the space, but there's so many more areas where we can grow. We're spending time on things like consolidating the private credit business. We've taken Meg McClellan, who used to be on the investment banking side as a trader, she was then the Asset Management CFO, we've asked her to spearhead those efforts. She's out there every single day with clients talking to them about how they can get J.P. Morgan to help them solve those solutions.

We even have places in here where we hire very special people, like our own Ben Hesse, many of you know, five years ago, we hired him to run a hedge fund in the financial services area. He came in, we sent him around the world to go meet with clients. He met with hundreds of clients. I don't think there was a single one that didn't invest in him. Over that five-year period, he was up 50% net, beating the benchmark by 27%, that's 2,700 basis points. I think he might have just top-ticked, he gave back the money in the middle of December, and it's pretty stunning.

So, for the last six weeks, I've been using him to get ready for this Investor Day, and he encouraged me to make sure that we talk about this fifth driver of growth, which is M&A. So that's why this next page is here, for Ben.

We always look at M&A in this firm. We do it each and every day, we have an entire team in the investment bank that does nothing but help each and every one of the lines of business to think about what's out there, what do we need, how do we think about all the tectonic shifts that are moving in the industry.

For Asset & Wealth Management, it's very different. It's a very, very unique place where mergers and acquisitions can be difficult. There's nobody better to guide us through this than our own Chairman, Paul Bateman, who was the architect of the Jardine Fleming's merger, for those of you who remember it, and he's been through many mergers since then. And he continues to tell us that no matter what, organic growth is always the best, always. But there are times when the industry changes and it changes drastically, and you want to be totally on top of it. And that's what we're doing right now. We're looking at everything, but we're looking for adjacent capabilities. We're not looking for scale, we don't need it. We've got what we need. We want to just keep growing what we have. We're very selective. We think about if there are

teams. There are teams like Brad and Leander who we hired to be able to think about a special situations fund. They joined us exactly two years ago. They raised \$1 billion last year, and they're already starting to invest it this year. But they fit because they were a perfect cultural fit for us, and that's the most important thing.

And I think what's maybe different inside of this firm than others is for us, the cultural fit and the governance of how you think about bringing on team or technology or add-ons into this firm, we do that part and parcel with our control's partners. They're not there at the end just say yes or no to a transaction. They are there every step of the way to think about is this going to fit in the J.P. Morgan family. And I think that's so important.

But Daniel and everyone talked about the headwinds in this asset management business, so I just want to hit on that before wrapping up. There are many of them. Everyone in this room understands them better than anyone on the outside of the fee pressures, the headwinds, active versus passive, et cetera. We are trying to sail straight through that and continue to focus on the things that are going to take us to the future. What's the first and foremost one? Investment performance; we've already talked about that. Alpha beats everything in life.

We need ETFs for the future. We were late to the game, but we're the fastest growing of those who have started since we did. We use proprietary tools to think about other ways to add value to our clients in ever increasing commoditized business. When you think about the proprietary tools that we have inside of our own firm, our risk management tools, we are starting to give those to our clients to use them on their own portfolios and be able to have the risk management of J.P. Morgan inside. But we're also continuing to use things, like David – Dr. David Kelly's Insights. If you don't know about them, the people in your firm do. One-third of financial advisors in the United States of America who don't work at JPMorgan Chase use Dr. David Kelly's Guide to the Markets when they're out there talking with clients. Just think about that. It's a super powerful way for us to add value to the people that we value who are giving us and entrusting their assets with us.

And it's ever more important in times like now. When you think about what's happening in Asia, we have Dan Watkins and Kam Shing who run our Asia Asset Management and Private Banking business together with Richard Chambers who helps us with marketing across the globe. We have taken content where we used to do, call it, five different calls a week with our clients. We're doing 10 a day over there. Why? Most people are working from home. They're trying to think about – 50% of our workforce is working from home and we have 4 times the engagement with our clients because we're using all of those insights from across J.P. Morgan to help our clients think through how and when they're going to navigate these markets even if they're not able to make it into the office.

Let's go to my favorite page. We call this the Skittles page inside where we look at it every week. It's like a perfectly diversified portfolio across stocks and bonds, and countries, and asset classes, only it's our business. And that's what makes us steady throughout the cycle. It doesn't have to be green every year, every column, every row. Some of them are. If you look at wealth management, you think about the growth that Eric Tepper and his Chase Wealth Management business and Jeremy Geller in the private bank, they've never had a not green part. They've never not brought in net new flows. Andrea Lisher runs our retail business here in the US and across the Americas, never had a negative year of flows. You just think about that.

We have a saying inside of here that we're not striving to be the biggest, we are striving to be the best. But if you work to be the best, years like 2019 will happen. \$194 billion of new assets into the firm, and we're going to work really hard to make sure that those clients have everything they need while we continue to invest. What are we investing in? More talent to be in front of them, taking care of them each and every day, more technology, things like You Invest, machine learning, tools that we can give our clients, giving added value time back so they can think about higher and better use of what they are doing with their days, ESG strategies. You will see lots from us across asset management and wealth management. We have the experts in the industry that we've hired to be able to help us to think through how to continue to deliver. And then China. I actually think anyone who manages money anywhere in the world in any sector, if you don't have on-the-ground research in China, you're not going to be able to understand what's happening in the global industry. We've been there since the 1970s, and we're finally on the verge of having a majority interest where we can control everything that we do there with our stake in China.

And these are just some of the ways that we're going to continue to grow revenues and assets. We have huge wind at our back, and we want to go with that, and we want to continue to invest. And so, what we want to end on are the targets.

You are very familiar with these five targets. You saw from Jenn's numbers up front. We're doing very well on all of them except for pre-tax. We've chosen to take all of this opportunity and momentum that we have on the revenue and asset flow side and reinvest that. And because of that, I'm going to drop that target to 25%+ because I don't want anyone inside of here to be beholden to a number during a time where they should think about how to continue to grow. And I'm going re-underwrite each and every one of the rest of those numbers, and we're going to continue to work hard to under promise and over deliver to you in this business, but I think only has endless opportunities, and hopefully the next 10 years will be even better than these last 10.

And with that, I'm happy to take questions or we can go on a break.

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# QUESTION AND ANSWER SECTION

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Anybody? We've got a time for a couple if you have. Oh, here. Brian?

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**Brian Kleinhanzl**

*Analyst, Keefe, Bruyette & Woods, Inc.*

**Q**

Just a quick question on the market share gain potentially. You mentioned that 1% gain is \$1.3 billion of revenues, but how soon given the investments that you're doing can you get a 1% market share gain? So you'd be done in a year, is it a three years, is it a five-year plan?

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**Mary Callahan Erdoes**

*Chief Executive Officer of Asset & Wealth Management*

**A**

It's in the medium-term, I would say. It's a big and best – you're talking about – just to be clear, the numbers he's referring to are when I was talking about the global private banking market share around the world, and it's a vast and growing area. Even if we didn't gain market share, we would still continue to grow with the wealth that's growing around the world. But we think we are setting ourselves up for continued market share with all the investments that we've made, and I think you should see that over the coming soon period of time.

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**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Ken?

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**Ken Usdin**

*Analyst, Jefferies*

**Q**

Thanks. Hey, Mary. Obviously, a lot of activity in the mass affluent space last week and last month – last several months. Can you talk a little bit more about You Invest? You mentioned in your slides actually that more of the assets are coming in from non-clients where originally it seemed like it was going to be an internal focus first. So, can you talk a little about those two sides of things? How is the environment for the mass affluent sector changing given the industry consolidation? And has the strategy changed or is it different just insight that you've gotten in terms of where the assets are initially coming from versus what you expect? Thanks.

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**Mary Callahan Erdoes**

*Chief Executive Officer of Asset & Wealth Management*

**A**

Yeah. It's really both in it, and it dovetails with what Marianne was talking about. So, we go after clients in many, many different ways. And when you think about You Invest and what we've done, we haven't even begun to tap the potential. We were late to the game when we launched it internal. Why? Because we needed to fit in with the chase.com powerful interface we have out with the 63 million clients that we interface with. And if we can make that a seamless interaction, we now have all the tools that we need to be able to do that. We have also recently launched You Invest Portfolio. And so, when you think about the complete suite that you have, now you have to figure out how to turn it on. And when you turn that on, you have to be ready to have all the people there to be able to help because as much as we think that everyone wants to do things from home on their iPhone, eventually, it becomes complicated enough that you also want help.

So, for us, it's never just one channel. It is the complete interface of being able to help clients when they want, how they want and with whatever seamless interaction they want. And if it's all web-based, if it's also with a human being, and being able to do the two. That's why our branch has become so powerful in this. And that's why pulling together the way we serve the clients live as well as digitally is the most important thing that Kristin Lemkau will help us to deliver as we move forward.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

A

Okay. We have one more on back. Steve?

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## Steven Chubak

*Analyst, Wolfe Research LLC*

Q

Hi. Steve Chubak, Wolfe Research. There's been a lot of interest of late in the corporate stock plan business. It feels like given number one IB share, really strong corporate relationships in Daniel's business just feels like it would be a natural extension of the opportunity within the wealth management space. I didn't know if that was something you could expand on in terms of opportunities for M&A that you cited whether that's an area that you might look to add as a capability?

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## Mary Callahan Erdoes

*Chief Executive Officer of Asset & Wealth Management*

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We're certainly looking at all of those things on the stock plan business an equally important growth area for the whole industry.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

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Okay. Great. Thanks, everybody. Thanks, Mary. Remember, we got the CCB demos on either side of the room during this break, so go ahead and check them out if you get a chance. Thanks, everyone. 15 minutes.

Okay. As everybody's coming back in from the break, just want to hit a couple of things before we start the next set of presentations. We've got two more coming up here, and we will conclude the day with lunch for those of you here in the room in New York around 12:45 or so. Please note that lunch will be served on the 42nd and 43rd floors here. There are several elevators that are reserved to help get everybody upstairs. Nevertheless, we do have to go up 30 floors from here, so please make your way promptly over the elevators and get up.

You should have all received an e-mail by now from JPMC Investor Day with your table assignment. Hopefully, most of you guys saw that, 42nd floor or 43rd floor. So, please, take a look. We'll have folks to guide you either way, but take a look for that.

Also, I know the breaks are not that long, but if you missed the demonstrations or you didn't get a chance to go check those out at this last break, we will have those same folks up on 42 and 43 as you make your way towards the lunchroom. So, if you didn't get a chance, maybe take a few minutes then. That's about it.

So, I want to turn this mic over to Doug Petno, the CEO of Commercial Banking, to put an exclamation point on the business presentations today.

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## Douglas B. Petno

*Chief Executive Officer of Commercial Banking, JPMorgan Chase & Co.*

Thank you. All right. Good morning, everyone. We're in home stretch, thank you very much for hanging in there with us. I want to start by adding my thanks to all of you for joining us today. We really appreciate having you. And it's great to be together to update you on the progress we're making in Commercial Banking and the many opportunities we have ahead of us for the business. For some of you, today is going to sound quite familiar. First, we are executing what's been a very consistent strategy for us. I'm also going to echo several key themes you've heard from all of my partners this morning.

Mainly, our clients remain at the absolute center of everything we do, and we're relentlessly focused on delivering solutions to them that drive their success. And in doing that, we benefit greatly by being a part of JPMorgan Chase. It gives us breadth and quality of capabilities, it gives us scale and operating leverage, and importantly, it gives us substantial capacity for sustained investment. So these investments have put us in front of more and more clients while meaningfully extending our competitive advantages.

To remind everybody, in Commercial Banking, we have two C&I businesses, our Middle Market Banking team focuses on small and mid-sized companies that are often private and Corporate Client Banking is focused on our larger clients with more complex needs. In our commercial real estate franchise, we support multifamily and larger scale real estate investors and developers, and we also have a dedicated team to

finance the construction of affordable housing. Across all of these businesses, we continue to execute with patience and discipline, and the results have been terrific.

While our 2019 financial performance was understandably impacted by underlying interest rates, the fundamentals for the business remained outstanding. And if you focus on what really drives value in Commercial Banking, it's all about adding great clients and deepening those relationships over time. And to do that, we've made sustained investments in our people and our capabilities.

Just in the last two years, we've hired over 300 bankers and established a presence in 24 new markets. All of this has led to more client activity than ever before. In the last year, we added 1,700 new client relationships, and this is 70% higher than it would have been just two years ago. This intense client focus and our disciplined execution led to our strong financial results for 2019, \$9 billion in total revenue, record investment banking revenue, record treasury services revenue, and steady loan and deposit growth. Mindful of market pressures and where we are in the economic cycle, we are maintaining our underwriting discipline. And net charge-offs for us last year were just 8 basis points.

As I mentioned, we continue to make meaningful investments to drive our long-term strategy, and we have done that while remaining relentlessly focused on our core operating efficiency. So, overall, it was another strong year for the business last year, and we generated a 17% return on equity.

If you think about our addressable market, the white space for our business, our opportunity to grow is absolutely enormous. We've identified and are currently calling on almost 40,000 prospects across our C&I businesses. And we're especially excited about several market opportunities in particular. We're covering more than 5,000 prospective clients in high-growth industries like technology, life sciences, and disruptive commerce. And benefiting directly from Gordon and T's branch expansion, we can now cover governments and municipalities across 15 new states. And this is going to be quite significant for us over time. And as I'll discuss in a moment, we are actively calling on over 1,200 high-quality multinational companies in overseas markets.

As we add these clients, it's the breadth and the quality of our capabilities along with our outstanding team that allows us to build deep valuable relationships over time. Helping them open their first operating account, delivering value through our liquidity and payment solutions. We are providing capital to fund their growth. We're serving them around the world as their businesses expand globally. We are helping them access to capital markets, and we're advising them on their most important strategic transactions. So, as you can see, our overall opportunity to add clients and build deep relationships is massive, and we've been making great progress.

Our middle market expansion effort is an outstanding example of identifying a market opportunity and executing with purpose. As many of you know, since 2008, we've moved into 47 new high potential MSAs added locations in over 20 states. We've essentially doubled our national footprint over this time. And in doing so, we've hired almost 500 terrific bankers in these markets. As we've expanded, we've been able to compete and succeed because of the quality of this team, the strength of our brand, and the value of JPMorgan Chase's unmatched capabilities delivered at a very local level.

With this investment, we have successfully built a nice-sized bank, completely from scratch. We've acquired almost 3,300 new clients. We've added over \$15 billion in loans, over \$13 billion in deposits. And as you can see, our revenues have grown at a compounded annual growth rate of 34% since 2008. And this is getting us closer and closer to our long-term \$1 billion revenue target. It's important to note that when we enter these new markets, we become deeply active in our communities and we invest for the long-term. And the foundational investments for these newer markets are largely in place. So, as we grow, we achieve significant operating leverage.

To best understand the magnitude of this overall opportunity and the operating leverage we have, let's compare an expansion market for us like Los Angeles with a legacy market like Chicago. Both are quite similar in size. LA is the second largest MSA, Chicago is the third. And in each of the cities, we have about 3,000 clients and prospects. We've been in Chicago though for over 150 years. We've been in LA for just 9. And while we've had tremendous success and growth in Los Angeles, when you compare the two markets, you can see the enormous opportunity in front of us.

In Chicago, we have 4 times more deposits, 3 times more loans and 3 times more revenue than Los Angeles, and we're still growing. And even more exciting, just remember, we're essentially a new entrant in 27 of the top 50 MSAs. These are great cities like San Francisco, Seattle, Miami, Charlotte, and Philadelphia. And so, we're really only just scratching the surface in these newer markets. And our success in both Chicago and Los Angeles gives us confidence that we can achieve many, many multiples of this performance over time.

Let's now look at our middle market business in total. We've established coverage in 125 locations, we're in 75 of the top 100 MSAs. And through a granular data-driven approach, we've identified 36,000 prospective clients across the country. These are now marked in yellow on the map. And as you can see, our current footprint sits right on top of this enormous opportunity. In addition, we are very closely aligned with Gordon and T's national branch network. This is highly beneficial to us as it helps reinforce our commitment to these communities and it provides our clients with essential branch services. So being local to more great companies has been a significant growth driver for us, and our success continues to accelerate.

Last year, we added 1,500 new middle market clients. This is almost 3 times as many as five years ago, and we believe we are taking share in every single geographic region across the country. So, understandably, we're super excited to continue to deepen our presence in these new markets for many, many years to come.

Let's move outside of the United States for a moment. As you know, last year, we announced our international expansion effort, where we are focused on serving non-US headquartered multinational companies. And just like our US clients, these businesses are becoming increasingly global, and we believe we have real competitive advantages to meet their complex international needs, our global reach, our leading cross-border payments capabilities, comprehensive foreign exchange and trade solutions, and a truly global investment bank. I was recently in Asia and had the opportunity to meet with a number of really great companies, and it was obvious that we have a real opportunity to serve them not just in the United States, but as they move into other key geographies around the globe.

Since announcing this effort last year, we've made significant progress. We now have almost 80 bankers calling on 1,200 high-quality companies across 18 countries. And as I said on this stage this time last year, we are taking a very long-term view and are focused on picking only the best clients. And as we build and pick these clients, we benefit greatly from JPMorgan's existing local knowledge as well as its well-established risk compliance and control infrastructure in all of these geographies.

So, while we're just getting started, we're very excited about the client response and the activity we are seeing so far.

In addition to being local, we know our clients value industry-specific insights and tailored solutions. They want their bankers and their bank to really understand their business. As such, we continue to build upon our specialized industry teams. These teams now cover over half of our clients.

In the last five years, we've added six new industries and now have teams aligned to 17 specific sectors. And this coverage model has meaningfully improved our ability to manage risk. We have dedicated industry underwriting channels. Clients clearly value this differentiated approach, as they benefit from bankers that are fully versed in industry dynamics, they get access to a range of relevant content and research, they have alignment with our investment banking industry teams, and they have sector-specific payments and digital solutions.

One of our largest industry opportunities right now is in healthcare, and Daniel alluded to this, where we're making meaningful investments to serve clients across the entire value chain.

Each year, around \$4 trillion is spent on healthcare-related expenses, and the complexity around these payments is absolutely staggering. We currently have 800 clients ranging from individual providers to larger healthcare systems to insurers, and these clients face unique regulatory requirements and manual, paper-intensive processes. They're active across vast payments channels and are very active around B2B, B2C and C2B. To help them address these challenges, we're investing in our people and our capabilities, and we've added dedicated bankers and specialists aligned to this sector. And last year, as Daniel mentioned, the firm announced the acquisition of InstaMed, which is a complete end-to-end healthcare payments ecosystem. So, we are now able to provide our healthcare clients a more integrated payment solution efficiently connecting consumers, providers and insurers. I think as most of you know that's been a major, major pain point in the industry.

If you look across our broader payments platform, there are several key factors that distinguish us from our competitors. And it starts with a highly-trained consultative team bringing our clients an entire suite of wholly-owned global solutions, including merchant services, commercial card and cross-border payments. Being able to deliver these powerful capabilities in an integrated manner, dramatically simplifies our client's experience with us. It gives them a single provider, one point of connectivity, consolidated reporting and easy integration into the core processes and technology.

Our comprehensive platform also provides a full picture of our client's activity. It gives us data and insights that we can use to help them optimize their business by enhancing their working capital, improving their cash management processes, lowering their treasury services operating costs, and protecting their business. Being our clients' primary operating bank is at the heart of everything we do. And the value we deliver to our clients allows us to build enduring deep relationships, and it's the foundation for us to gather and retain long-term stable operating deposits.

Another great example of the power of our platform and the value of our broad-based capabilities is the outstanding partnership we have with the investment bank. The ability to deliver the world's best investment bank to commercial banking clients is unmatched in the industry. And since 2008, together we have grown investment banking revenues at a compounded annual growth rate of 10%. We have increased investment banking revenues every single year, and last year was no exception, we set another record with \$2.7 billion in revenues.

We're especially excited about the progress we're making in our middle market business, this has been an area where we've expanded our coverage and the results have been terrific. Investment banking revenues for our middle market clients last year set a record and grew 24% year-over-year. As a commercial bank, being able to deliver JPMorgan's investment bank is a huge differentiator for us. It allows us to build deep strategic relationships with our clients. And while we know our success has caught the attention of others, very few have our talent and our brand in combination with our local presence and focus coverage.

Growth for us has not just been with our corporate clients, our commercial real estate businesses have equally contributed to our performance. Our community development banking team delivers capital to support affordable housing projects. Last year, this team arranged \$2 billion in financing to support the construction of 13,000 units of affordable housing. Our real estate banking team serves the best investors and developers of larger scale commercial real estate assets. We have a \$16 billion loan portfolio in carefully selected markets and assets. And lastly, our commercial term lending business serves apartment building owners in the best markets in the United States.

Our average client here owns 25 rental units. Our average loan size is \$2 billion. We have a carefully selected \$80 billion loan portfolio, and we're the number one multifamily lender in the United States. These three businesses have all focused on picking the best clients, the best transactions in markets and assets we know and understand, and the results have been excellent.

As we continue to grow, credit discipline remains core to our culture. It begins with rigorous client selection and taking a through the cycle approach regardless of the competitive environment. Reflecting this ongoing discipline, net charge-offs for us have been less than 10 basis points for each of the last eight years. For us, loan growth is an outcome, it's not a strategy. Our C&I loan growth last year was modest at 1%. This primarily reflected targeted de-risking across our portfolio, as well as the decline in our tax exempt lending and government lending in the wake of tax reform. We have grown loans meaningfully in areas where we've chosen to invest notably our expansion markets in specialized industries.

In Commercial Real Estate, we originated \$27 billion in loans. This is driven largely by high refinancing activity as interest rates came down last year. Our real estate portfolio overall grew by 1% as we managed down and remained quite selective in our construction lending. While credit fundamentals remain strong, we constantly monitor for signs of stress, and we also recognize that we're at the very late stages of an economic cycle and that credit conditions won't be this benign forever. As such, we've developed detailed readiness playbooks to be prepared for an economic downturn in any form.

If you look at C&I, credit quality remains strong with no material broad-based signs of deterioration. And despite increased global complexities and a steady wave of uncertainty, our clients are generally optimistic, and sentiment is constructive. Overall, we feel very good about our C&I portfolio. It's diversified across industries and geographies. We monitor at a very granular level, and it's well-structured.

Any stress or losses we have seen to date have been idiosyncratic or concentrated in industries that we've been watching quite carefully. Oil & Gas in particular is facing significant stress, sector remains levered, it's impacted by continued pressure on commodity prices and limited capital markets access. Market conditions in Oil & Gas remain quite challenged right now, and we don't see those headwinds abating anytime soon. We're also focused on sectors such as Retail, which are undergoing broader secular change. But outside of these areas, we aren't seeing any material signs of weakness.

As we look at our competition, our traditional and non-traditional competitors are both competing aggressively on price and on structure, but we remain very confident in our underwriting and continue to find attractive opportunities to lend across our businesses.

We're seeing very similar trends in our Commercial Real Estate portfolio. And remember, this is a business that's focused on supporting high-quality investors and developers. We target the least volatile asset classes in the most cycle-resistant parts of the market. And the majority of our portfolio is in Commercial Term Lending. Remember, it's about 80% of our outstandings. And here, we remain very confident in the quality of these assets. They are funded term financings for stabilized apartments with predictable cash flows and very low leverage.

We focus on financing B and C class properties in large supply-constrained markets, like here in New York or in Los Angeles, and the portfolio is highly granular and diversified. And if you look at our activity last year, we monitor our new originations all very carefully, we've maintained our underwriting discipline. Last year's originations had a weighted average loan to value ratio of about 51% and debt service coverage ratio of 1.5 times.

And again, while we're in the late stages of an economic expansion, the underlying market dynamics for our real estate clients remain supportive. Multi-family rents and vacancies have benefited from the strong US consumer. And most new development around the industry has been relatively disciplined, which has led to healthy supply-demand fundamentals in real estate. Any weakness we do see in the market is in sectors that aren't a primary focus area for us, such as luxury condominiums in markets like New York or retail nationally where the market has a very large supply overhang. But overall, we continue to feel very confident about our current real estate portfolio, and have been quite pleased with its performance.

So, as I begin to wrap up, let me put Jenn's comments on expenses and investments into context for Commercial Banking. Much of our growth is a direct result of the sustained investment we've made over the last decade. Likewise, the investments we're making today will drive our performance for the next 10 years and beyond. We're entering new markets. We're hiring great people. We're investing in our teams, empowering them with technology and training. We're deploying data and analytics to gather valuable insights on the business, and we're continuously strengthening our set of comprehensive capabilities. Together, this will deliver even more value for our clients and dig deeper moats around our businesses.



As we build for the future, we remain equally focused on capturing the benefits of these investments while driving our core operating efficiency. Recent efforts have led to real benefits for us, including a 25% reduction in the time it takes to open an account, faster and more precise credit decisions, and material increases in the customer satisfaction scores across all of our digital platforms. All of this leads to a business that's highly efficient, while making the important investments to protect the franchise and drive future growth.

Looking forward, we're making steady progress toward our financial targets. We're closing in on our \$1 billion target in Middle Market expansion, as well as our \$3 billion target for Investment Banking. For International, as I mentioned last year we raised our target from \$500 million to \$1 billion as a result of our new expansion initiative. And with respect to our overhead ratio, given the current rate environment and the substantial near-term investment opportunities I've described, one adjustment we are making is we're increasing our medium-term overhead ratio target from 35% to 40%. And despite this change, we're going to maintain our 18% return on equity target to reflect the continued strong performance and economics in the business, as well as the capital credit and expense discipline in the commercial bank.

As I said at the beginning, we have a tremendous opportunity for growth across all of our businesses, and our strategy remains unchanged. We relentlessly focus on building deep client relationships that will drive value over time. We're complete, global and diversified, and this gives us an unmatched ability to serve our clients. We have the talent, the scale, and the investment capacities to drive continuous innovation across the business. We're taking a through the cycle disciplined approach, remaining highly focused on our risk & controls, and we're empowering and developing our people. So, I'm incredibly proud of the entire commercial banking team and really quite honored to speak on their behalf today. And hopefully, you can tell we're extremely excited about the many opportunities we have in front of us.

So, thank you all again for being here, and I'd be delighted to take any questions.

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## QUESTION AND ANSWER SECTION

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Mike, up here in the front.

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**Mike Mayo**

*Analyst, Wells Fargo Securities LLC*

**Q**

You've had great credit losses, but now you're expanding outside the US. I asked this last year, but now you're giving us more data, 1,200 multinationals and 18 new countries. And I'm just wondering about the risk tolerance that you have for making these new loans. And you've also talked about a lot of your business being driven by fees as opposed to loans. So, how are you entering these new markets, with which products?

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**Douglas B. Petno**

*Chief Executive Officer of Commercial Banking, JPMorgan Chase & Co.*

**A**

It's a good question. Obviously, hopefully in my prepared remarks, it's obvious we're very focused on the risks implicit with expanding in any new geography. As you know, Mike, as we've talked about in the past, about only half of our clients borrow from us. These are very big substantial meaningful businesses, and a heavily curated list. Every one of these names has been signed off on with our senior country people in all of these geographies. These are recognizable companies. So, we're not going deep into the middle market in any of these locations. Just happened to be a nice, attractive, scalable mid-corporate business that we could execute against to fit right underneath Daniel's global corporate bank. I suspect it'll be much less lending-intense and more about being their international treasury services provider, the US dollar clearing bank, provide foreign exchange, investment banking. There will be some lending, of course, but we have very well-established risk guidelines in place across all of these countries, and we're as focused on it as you are.

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**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Betsy, over here on the right.

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**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

Hey, Doug. A quick question. You glanced over at the B2B, C2C, B2C page, but maybe you could give us a little bit more color as to who is running that for you and for your clients, and how do you integrate into the rest of JPM. And could you give us a sense as to where you see the puck going with your B2B offering for your clients?

**Douglas B. Petno**

*Chief Executive Officer of Commercial Banking, JPMorgan Chase & Co.*

**A**

Are you referring to the healthcare business?

**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

Yeah.

**Douglas B. Petno**

*Chief Executive Officer of Commercial Banking, JPMorgan Chase & Co.*

**A**

So, as Daniel mentioned, we acquired InstaMed not that long ago, a few quarters ago. It's being actively integrated into JPMorgan as we speak. It sits within his Wholesale Payments organization, and we've meshed the client coverage teams – or in the process of meshing the client coverage teams. One of the real advantages is being able to knit their healthcare payments ecosystem into our core operating accounts, create sort of a seamless integrated offering for healthcare providers. So, all of that's – I mean, I would see that once we complete the integration, looking like just any other part of our Wholesale Payments operation, and being a very key offering for our healthcare clients.

**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

Is there any opportunity?

**Douglas B. Petno**

*Chief Executive Officer of Commercial Banking, JPMorgan Chase & Co.*

**A**

The big opportunity is that's a massive white space for us and for the commercial bank it opens up. We're now much more relevant to a large number of healthcare providers where we might have had a marginal relationship, we can have a very strategic and deep relationship because we have a complete treasury middle office solution for them. So, it meaningfully expands my white space in healthcare. We also are also cross-pollinating each other's client bases. So, they're bringing us to their clients, we're bringing them to our clients, and that's going to give us a big lift over time as well.

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Okay. Anything else? Okay. Great. Thank you, Doug. I appreciate it.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

I would definitely buy that stock. So, I'm going to just cover a few things quickly and spend most of my time taking questions or things that are on your mind. But first just a moment on ESG, corporate social responsibility, and the things that JPMorgan does, kind of, what you say, almost away from the main business. We take it very seriously. We take ESG seriously. We're not doing this to respond to the short-term or

the long-term. We think it's the right thing to do. We want to be a measured voice, a mature voice in solving society's problems. We think it's very important. We're very, very proud of the things we've done in Advancing Black Pathways.

I think the team kind of lean in, I think we can kind of bend the curve here. We've hired, at this company, in the last three years, we have 50% more black EDs and MDs. Having said that, we have issues, which you read about sometimes. We have issues that we want to fix. We're financing more and more black entrepreneurs. We're finding ways to get kids who are troubled, teenage boys into college. Some of us have been to some of the graduations, and the parents are crying tears of joy because, some would even say, they're happy their kid made it to 18, much less getting them into and through college and stuff like that.

JPMorgan Chase Institute is doing things like using the big data we know with all our customers to figure out better ways to do savings, mortgages, how to underwrite things. So, you're going to see more on that front. We think it's just important to continue the process.

Technology, I know you keep on asking the question, Mike, it's obviously a great question, because obviously we all worry about it, but it shouldn't be just technology. There are hundreds of initiatives taking place, and you've heard them all mentioned here. Some are getting AI, getting our management team to think about AI, but now AI, and data has been used in risk, marketing, fraud, underwriting, our customer relationships. We've even been doing a little bit AI in management effectiveness. So, we've actually isolated what we consider ineffective managers. As it turns out, those folks who were ineffective also were bad at diversity, bureaucracy and a whole bunch of other things, and we're going to use that to try to improve our management effectiveness.

Some of them are big projects, like they are hundreds and millions of dollars. The data centers, I forgot the number. Those data centers will be in some ways 5 to 10 times more efficient than we have today, and safer and better run and more protected, and more secure. And when I say secure, I mean secure in every level. If you went out to see some of these things and we don't tell you where they are, but you did, you couldn't get a truck bomb through it. We're going to protect this company in any single event.

And then, hundreds of these products are small. Their Credit Journey constantly improving upon that or if you walk the trading floor and you tap someone on the shoulder, I would guess about 30% or 40% are technologists today. Helping those sales person to trade or manage their risk and in ways that will astound you a little bit so. And the management team looks at those kind of all the time. You could always ask, could you have spent less money, could you have done it faster, is the NPV right? And we've been here. We're very upfront about it when we do a project it just didn't work or it took too long or we kept on changing it. We spent seven years doing something, some of it we're going to do regardless of NPV. So, just kind of think of it as table stakes.

And so, you heard a lot of great stuff here. Let me just mention, Jenn mentioned about our cash, the Fed, HQLA et cetera. So, I just want to reiterate. So, roughly \$600 billion of HQLA, that's mostly treasuries, are on account at the Fed. Treasuries were whether you owned a treasury or a repo, those pretty much would count.

And so what Jenn was telling you, we used to keep a number like \$150 billion of cash to the Fed. We're going to bring that number down by \$50 billion, \$60 billion, which means we'll rarely ever go negative. In the old days, we were negative all the time. You're expected to do that, and you didn't hold much money in the Fed cash account, and this frees up the \$50 billion or \$60 billion extra to go into repo. It does not eliminate that red line.

Most banks have redeployed the capital into repo, they still are required to keep all the HQLA at \$600 billion. And the only reason I pointed that out is because there are other effects that's going to have in the marketplace, which you see just like every time something goes wrong in terms of lack of liquidity in the marketplace, it is hard to redeploy that \$600 billion or the \$300 billion of liquid securities in intermediating or loans in a crisis, and that, to me, is a far bigger issue, but it's not an issue for JPMorgan, but it's an issue for how the financial system is going to function when we actually have tough times, which, as you know, we have not had for the better part of 10 years. And she also mentioned that that does mean we may go negative intra-day every now and then, and possibly overnight, though I think the odds are really small. But we are going to hit the discount window, not because we have to. We think it's time. We've spoken to all the regulators, and that's why it's there. It allows you to create liquidity in any security, a whole bunch of loans, et cetera, which is good for the system. And so we think it would be good just to remove this stigma, and let people do it - at a minimum test it. One or two banks have periodically tested the discount window to make sure it's there when it's there, and obviously we would not do anything like that without talking to regulators.

You heard a lot of positive stuff today. But obviously there are risks out there, I think the biggest risk that the financial system faces is cyber, we are extremely protected, but there are a lot of vulnerabilities away from JPMorgan. And so, we're obviously – and obviously we're always bearing reputation risk, which is one of our biggest ones, and we obviously don't want anyone ever doing anything wrong in any way, shape, or form at a JPMorgan place for any reason. And so, the management team is devoted to renounce bad actors, bad players, or whatever it is, but that is obviously a risk.

We're going to have risks. Someone asked me before about negative rates, and I don't think it's going to happen. I think that that whole issue is a huge issue, and I'd be happy to answer another question about it, or by the way, on the other fat tail is inflation and higher rates, and they're both out there that you should be thinking about, prepared for. We prepare for all of it, and we run what we call a fortress balance sheet

but really it's a fortress company. It's proper accounting. It's proper management. It's proper disclosure. It's proper transparency. It's conservative accounting, I see your chief auditor is here, and I like conservative accounting.

Okay. I want the most conservative accounting we can possibly do. I'd rather argue with them about why, which also means when we have a downturn, we're going to put up loan loss reserves as soon as we can. Loan loss reserves are ink on paper. Charge-offs are not, they're for real. The other one, I think the number is right. We went in the last crisis from \$7 billion in loan loss reserves to \$27 billion back down to what? Is it \$14 billion today or something like that? And I just – the sooner you recognize that stuff, the better. Get it up. CECL will make it quicker. So, you actually have a downturn. We'll be very responsive to that.

And so, obviously, there are issues. We don't know the cycle. The best protection for any kind of cycle is we run a very good company, a very good profit margins, et cetera. The only thing I should mention about G-SIB by the way, G-SIB repo counts multiple times in G-SIB, and that causes a whole other issue because G-SIB fundamentally doesn't measure risk at all, but it does punish repo. And so, one point, it might be -I think there should be recalibration or something like that. We're prepared for a cycle. A lot of our management team has never been through one, so I do worry about that. A lot of the management team has never laid people off, their bonuses haven't gone down for the better part of 10 years, but a lot of us had been through that, we're going to be prepared, and it also creates opportunities.

So, while we can – we know a lot of things we are going to do stop the negative effects of a downturn, we're mature, we know losses go up, we know clients need our help, we're going to help them in good times and bad times. But it's not going to stop us from investing in the things you heard about today. Not one single iota. In fact, my experience has always been that downturns create opportunities. They create opportunities with sales forces, with marketing. The NPV and marketing dollars can often double. If you have a downturn, things are cheaper to buy, you can hire people, train people, et cetera. So, we'll just manage our way right through a cycle.

What we saw here today is a lot of earnings power. We didn't show you, but I used to show years ago and we took a little crack at subscription revenues and stuff like that, but you can see a lot of these earnings are in the bag for next year regardless of a cycle, and in a large amount. And obviously, the loan losses will change, and NIR will change, and NII will change, and things will get squeezed. But the bulk of the earnings are the biggest protection for a company. And we are looking, and will be much more aggressive in acquisitions across the board. And they could be adjacencies like InstaMed or like WePay. They could be something that we just think is a little bit different. But I do think we'll have opportunity to do that as time goes on.

We're also facing – two last points, the competitive environment, and I say it's fully engaged, but I really do mean that. All the major banks in the United States, we have bank competition around the world the competition you know about. The Chinese banks are getting bigger and stronger every single day. That may not be true in the last couple weeks, but every single day. You have fintech coming, some are quite good and quite capable, and obviously we work with a lot of them. But a lot of them obviously want to take our clientele too.

You have private equity folks doing market-making. You've got alternative and capital markets. You've got hedge funds doing market-making. You have alternative asset managers getting involved in businesses. \$800 billion of direct private capital now is making direct loans, unit tranche loans in Doug Petno's business. So, we kind of see it, and it's a good thing by the way. But it is on our minds. We know that whatever we do here, we don't operate independently of the world, and so in every one of those businesses, in every part of the world, with all these forms of competition, they obviously want to do a better job than we do.

And then last but not least, I don't know, I was very impressed with the folks who presented up here today. It's all about management at the end of the day. They're the ones who build the systems, the technology and deal with the clients. They're the other ones who don't accept complacency and don't accept arrogance and don't accept the fact that not only are we trying to sell or something like that but they're trying to make sure we build our business for the long run. And we just have – there are a lot of people in the room, I hope you get to know them – these are really exceptional management people who are always looking at what can we do better, always analyzing our competition, always analyzing our failures. We do spend time in the management meetings about what don't we do well. Why did they do a better job? How come we didn't do that quicker? How come we didn't think about that? Integrate that in many which ways? So, my hat's off to the management team. I think they've just done an exceptional job, and it shows up in the long-term results.

So, I will stop there and open to your questions or comments. And Mike?

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## QUESTION AND ANSWER SECTION

## Mike Mayo

*Analyst, Wells Fargo Securities LLC*

Q

Hi. You got a 19% return last year and your target is 17%.

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

A

Yeah.

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## Mike Mayo

*Analyst, Wells Fargo Securities LLC*

Q

And you're guiding this year for higher expenses, lower revenues, worse efficiency, and you still have that \$5 billion of higher investment spend, so it seems like a little bit more of a trust me story, and that's why I keep coming back. What are some metrics that we can monitor externally to ensure that your investment spend, including technology, is paying off? So, you've done a great job the last five years. We are thinking about the next three to five years?

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

A

Yeah. So, you're exactly right. It's going to be a much tougher year in 2020. But we've always told you that 19% is over-earning a little bit, like particularly on the credit side, so we're quite knowledgeable of, something like that. And we're not looking to do any different. But the investment stuff we do, we do relentlessly all the time. It's not going to stop. It's not going to stop if you have a recession. It's not going to stop if you have a crisis. It's not going to stop for any which reason. The best way for you to measure it is look at the new ATMs. And I forgot how much they cost each. But like \$30,000 each or something like that. Look at the 400 branches that are opening. The overhead of that is something like \$500 million a year. Look at the sales force we're adding. Look at the — you go on our screens and digital products on the consumer side, the asset management side. We've got a bunch of skunkworks going to. We spend a couple hundred million dollars on various different things. We have high hopes for which may or may not happen.

And so, the best I can do is if you look at the presentations, you saw all the things we're doing that mostly are working, and they're hard to do. I told you that when managements grow, it's hard to grow. It's hard to hire people, open 75 new MSAs and things like that, because you've got to get — and we even used Big Data and AI on that. We didn't show you the presentations, I'm not going to tell you how much we do. I think we tell you all too much, by the way. But we use big data in locating those branches, like a lot of data, and it's amazing what we do today that we didn't do — that we literally did not do three years ago. So, you've got to trust us a little bit.

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## Mike Mayo

*Analyst, Wells Fargo Securities LLC*

Q

Think of the J curve, going down the J curve, your investment spending is increasing, returns go down. You come out the other side. What's your total investment spend or some context of when you come up on the upside of the J curve?

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

A

There's no — I would look at it more like pancakes, we're always adding stuff and they have their own dynamics, and the NPV, some things fail in year 1, some things fail in year 2. The Sapphire card that these folks built, I think that cost a lot of money per card. If you look at this and said what does it cost per card, accounting means, if they got it right we write that off in year 1. The NPV is very high, but you don't get it in year 1, you get in year 2 to 10. I don't care. I look at the NPV. I would do more and more and more. I could care less about the one-year effect. And I think you're making a mistake to think that we make all these decisions and they have all these ongoing effects, and we're not trying to manage it year by year. Years themselves are artificial. Accounting is artificial when it comes some of these things. We look at economics, the right thing to do, and then we do it.

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**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Yeah. Marty, right back here.

**Marty Mosby**

*Analyst, Vining Sparks IBG LP*

**Q**

Jamie, when you look at the last 5 or 10 years, JPMorgan was perfectly positioned, coming out of financial crisis, to weed out incremental competitors, gain all the market share that we're seeing. The businesses are all seeing contracting margins. So, if you kind of look at the next 10 years, is the opportunity as ripe as it was in the last 10 years or have you kind of matured into that market share gain?

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

No. I think we have huge opportunities for organic growth in every single business you saw here. Obviously, when you're 10% or 12% of fixed income trading, you have to really fight hard to get the next 0.2%. That's an obvious thing. In other areas, we have small percentages, and maybe we can do much better, but I think the opportunities in the next 10 years are there, but the competition is also there. It will be a tougher 10 years for us. And again, we don't look at those margins like that to make up for something when margins go up or down a little bit. It will not change our decision. We don't try to make up for something. And in a competitive world, I think it's a mistake to believe that you can increase your margins all the time. You can't. And one of the great slides that Jenn put up there was the slide of in all of our businesses, and you won't get it for five years. Basically, the spread compression has been 20% to 30%. If you go back 30 years, it's 80%. We're in a competitive business, and the benefits accrue to the customers ultimately. So, as long as we're earning good returns and fair returns, and doing a good job and everything we do is good, we're going to continue to do it.

**Marty Mosby**

*Analyst, Vining Sparks IBG LP*

**Q**

So now if I think about another growth avenue, the Securities Services business is supporting asset managers that you're competing against.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah.

**Marty Mosby**

*Analyst, Vining Sparks IBG LP*

**Q**

So, when you think about being able to downstream some of your stuff, as Securities Services kind of is, helping other folks that are in the businesses that you're in, is that another way for you to get another element of growth?

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yes, absolutely. And Teresa kind of mentioned that, that we're serving those people, more and more stuff and middle office and fund accounting and risk management. And yes, we are very used to both cooperating and competing with people. That is our business, I mean. And so does everyone else in our business feels kind of the same way.

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

We have a question here on the left, and then we'll come to Glenn.

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## Unidentified Participant

# Q

Hi, Jamie. Just a question on disruptive risks and cloud banking. This is fintech's partnering with regional banks. Why should this arbitrage exist for fintech's renting another bank's license and then earning unregulated debit interchange and then undercutting other licensed bank on fees? Just curious on your thoughts on that.

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

So, first of all you're making a good point, which you may not all know, because of Durbin. Some of these unregulated folks on that debit swipe earn twice the income we do. The net result of that is more unbanked in United States of America, and that's what Durbin did. And yes, that's a regulatory gap that gives people other opportunity. And there are some of these banks who are going to white label their banking services and be the back office or the main office or bank in a box for fintech startups. Whether that works, I don't think a lot of it is going to work. I mean, they're still struggling to monetize it. When you start seeing some of these folks advertising on TV, doesn't that make you question their distribution model? You think national TV advertising is an effective way to create banking customers? So, there are a lot of issues about this. But my view is that some of them are really good, and we should focus on the ones that are good, and not worry about the ones that have a model that we don't think is going to work. And a lot of them have done a lot of really neat stuff to reduce pain points, make it simpler, make it cheaper, Revolut was valued at \$5 billion because they reduce FX fees, which we should put on our product continuum list. Those are easy things for us to fix if we want. So, we just have to be responsive to what they're doing and make sure we do a great job with customers.

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## Unidentified Participant

# Q

I guess the corollary was, as banks, how do you think about the benefits that the mixes reinvesting in price and product experience? How much to do this price versus product experience?

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

It's both. I mean, you've seen in all these businesses – I mean, in some consumer businesses, you basically are giving the customer more and more and more and more. So, if someone said, banking hasn't done much for consumers' lives other than the ATM. Well, it's fundamentally not true. In the last 20 years, we've done -- tons of ATMs can do more, QuickPay, you can deposit checks by phone, you got better risk, better fraud, you got offers, you got online bill pay, you got debit card -- all these various things that we simply didn't have before. It looks -- the price is the same. In the wholesale business, it's much more you pay by the drink. That may be changing a little bit but it's always been you pay for this service and that service, and this service, but I think it creates opportunity, but again this is why it's very important.

Jenn put up the \$67 billion, if someone came to us, our operating committee, and said, we can spend \$1 billion and do this which is great for the company, we would spend the money, unashamedly and unabashed, so never consider that \$67 billion a problem. It also might be – we've spoken -- if the folks came and said to me, you know what, we should change the pricing model and it will reduce revenues by \$1 billion but it will accomplish great strategic growth, you're damn straight we're going to do it.

And I want my own management team to hear me in that one. We earn \$47 billion. We can burn \$1 billion to do something better, fast, quicker that we think is better as opposed to just be disrupted by other people all the time because you're not paying attention. And that's what I'm saying. The competition – yeah, and the competition is also the unknown competition. So whether you can get some form of competition from Apple, Amazon, Facebook, Google, WeChat, Alipay, you're going to get, of course, payments in white label, black label, and bank in a box, and marketplaces and, yeah, that's the world we're going to face, and we're prepared.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

# A

Yeah. Gerard and then Glenn.

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## Gerard Cassidy

*Analyst, RBC Capital Markets LLC*

# Q

Thank you. Jamie, can you share with us – you talked about the pricing pressures, and if you look in the capital markets area, obviously the FICC and Equities wallet share that you show have been flat to down even in Investment Banking. Aside from pricing pressure, are there other structural issues that have kept those wallet numbers flat in view of the fact that the markets have been quite strong for the last five years? And then as you go forward, is there going to be just further pricing pressure in the next couple of years you think?

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

So the way I'd look at it is there will be -- I don't call it pricing pressure -- there will be margin compression in all of our businesses for the rest of our lives and that's normal. That's called capitalism. Management shouldn't complain about it - that's the way it is. And that's a normal part. I think you saw it in FICC, you saw two different things. After the crisis, a lot of things that were high-margin disappeared. They were gone. Think of a lot of the securitizations and certain types of CLOs and stuff like that not to come back. They came back people were still underwriting credit, they just weren't doing a 1% CLO, they were doing the 10-basis-point bond deal or something like that.

And recently you've had some of the compression, I would call, electronification. So we just have 10% in the swaps business, we still do, sold them through exchanges. The revenues are much lower, the margins are lower, so is capital. So you're going to look at the business in total to figure out, is it a worth business, something like that? But if you're asking me, in FICC, you're down to just normal margin compression because you are absolutely correct in all of our businesses okay? Assets under management are going to double in the next 20 years. Bonds sold, they're going to double in next 20 years. The amount of \$1 billion companies is going to double in the next 20 years, the amount of emerging markets it's going to double in next 20 years. Nothing is not going to double, so the raw meat it's going to double. The margins will be coming down in a normal way. So I think with FICC you may have seen the end of it other than digitization which is still happening.

And a couple of years ago Daniel put up that chart that showed you the electronification either through exchanges, direct to direct or FX alt or whatever you called it that what percent we think might happen in each business, and we've been roughly accurate in that.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

# A

Glenn.

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## Glenn Schorr

*Analyst, Evercore Group LLC*

# Q

Yeah. So, obviously heard your comments and others' comments loud and clear on both competitive environment and pricing spread compression. We've seen a bunch of deals across financial land, some for scale, some for convergence across client segments. So, A, I want to get your high-level view on what's going on. It feels like we're at the early stages of a lot of consolidation. And two, we heard a lot about how you think about M&A for JPMorgan. Strategically I'm curious to just get a one liner on financial parameters of what you would and wouldn't do because I'm assuming whatever you want to buy, so does everybody else.

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

Right. So I do think you've heard about some of these pressures and stuff like that, so obviously if you're a smaller asset manager, it's a lot of pressure, smaller bank, maintain the cost to compete in the new digital world and the compliance world, AML and BSA, it's tougher. So I think there's a lot of reason you can see mergers in the United States both you know bank to bank and then people trying new distribution strategies and stuff like that or buying fintech companies. I think that's normal.

I think when it comes to M&A we should be very, very creative. So I think InstaMed was very creative. And I think Mary mentioned the word adjacencies. It could be the adjacency which is the acquisition. Think of Square did a great job building merchant processing. There is nothing mystic about merchant processing, but they built it by offering services to restaurants and other people, like data and the ability to process cash on the same machine you're processing your debit card and your credit card. And so people have done a good job.



And Venmo came out did a great job in P2P. Zelle is going to catch up and things like that, but like even on Zelle we meet all the time about how much we should be investing in Zelle to get it right, to serve clients, to get more market share, to make sure we do the right job. So it could be anything. It can't be a US FDIC insured bank by law, we're restricted from that by law. So we're going to be pretty open-minded, and the parameters will be if we think it makes us a better, stronger company.

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**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Betsy over here on the right and then we'll go left.

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**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

Yeah, Jamie, just wanted to understand a little bit about where you think your capital investment is going as it relates geographically.

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**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah.

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**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

So we know we talked a little bit with Doug around the expansion into Europe but maybe you can talk a little bit about how you're thinking about the rest of world Asia I know you've talked about China a lot in the past we'd like to hear what you're thinking about going there and what about Latin America?

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**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

As you remember, our capital investment also shows up as expense. So when you build these branches, which we think are enormously profitable, that will add \$500 million of expense every year. And then you need capital to support the deposits in the branch. So and we – you obviously look at both as something like that. In this new world, there is a lot of that going on. Capital expenditures are not what they used to be, so you include software, but it doesn't include certain types of R&D that we just simply expense that or something like that.

And most of our expansion is people and technology. I mean, at the end of the day, so when we add, we're not going to tell you everything we can add countries, bankers and countries, clients and countries, coverage and countries and every time we do that they need risk, legal, audit, compliant, credit, licenses and stuff like that to support that. You saw Doug talking about doing 18 countries. With all that support, he's relying for some of that support to already exist, so we're not going to have to add all the overhead.

In the United States, these branches with these – we're in, I think we're in all 50 major markets now and one day we'll be in 75 of the Top 75. And then a lot of it is building the technology and the other things that support the system. But it's more bankers, more bankers in private banking. You have more bankers in high net worth, you got more bankers and differently trained in the branches. We're going to have more bankers in a lot of countries overseas to cover more clients.

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**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

Well throughout the presentation there is opportunity to expand footprint throughout all the businesses. But I don't think you have in the slides this year the total payout that you were looking to do. So I'm just wondering are you suggesting that you're, going for the organic balance sheet growth over the payout.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

You talking about our capital deployment?

**Betsy L. Graseck**

*Analyst, Morgan Stanley & Co. LLC*

**Q**

Correct.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

With regards to capital, I would much prefer organic growth that used our capital and got a good return. I think compounding your capital at a good return is far better than anything else you can do. And we've been constrained for years to do that, we're less constrained today. That's why we can open the branches, we can do more stuff overseas, we think it's good for the growth of the world, we think it's good for the growth of the countries. I don't think we can use up all our capital, so there we'll be an awful lot of stock buybacks. And the other thing Jenn didn't mention is we're going to change how we do stock buybacks – we are not going to say exactly how, because I don't like actually telling the market what we do all the time. Because I think it's a mistake because everyone out there trades against all these various things so. But we'll probably be buying back less stock at certain prices and more as it goes down, and less as it goes up and more as it goes down or something like that. And that means that the numbers will bounce around a little bit but it will be far more efficient and cost-effective than just buying regardless of the price. There is just something about buying regardless of the price that I don't personally like.

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Okay. Andrew over here on the left.

**Andrew Lim**

*Analyst, Société Générale SA (UK)*

**Q**

Great. Thanks for taking my question. So I'm wondering how you manage capital on a quarter-by-quarter basis taking advantage of trading opportunities in CIB. So if you look to the fourth quarter, and it seems like US banks and JPMorgan in particular were much better than the European banks in taking advantage of attractive trading opportunities, it's like a switch that you'd turn on. So I'm just wondering, to what extent is that automated or are there high-level discussions where you're looking to take share?

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

That's Daniel and they can do what they need to do, they have certain constraints. The biggest constraint is being G-SIB at the end of the year, which we can do a pretty good job getting G-SIB down when we want mostly, I have to get the number, mostly by repo and a bunch. I mean, so not a good way to run a balance. I think the regulators should change it over time. But no, he can do – we do a lot of stuff that when the opportunity is there we take the opportunity. Yeah. I don't know if that answers your question.

**Andrew Lim**

*Analyst, Société Générale SA (UK)*

**Q**

Yeah.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah. I'm not comparing to the European bank. I'm simply saying that he takes all the opportunities he can.

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**Andrew Lim**

*Analyst, Société Générale SA (UK)*

**Q**

Well, with...

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**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

We're not capital-constrained when it comes to that.

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**Andrew Lim**

*Analyst, Société Générale SA (UK)*

**Q**

You're not. I mean, like in the fourth quarter obviously, look, there's a lot of opportunity in rates and in securitized products. There's a big ask from the CIB. So, now I guess maybe Dan, saying that...

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**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

I'm missing the question though.

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**Andrew Lim**

*Analyst, Société Générale SA (UK)*

**Q**

Where does it – how do you manage that capital allocation process? Where we see those attractive trading opportunities and you need to size up.

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**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

If he sees them, he takes them, and capital bounces around a little bit, other than G-SIB at the end of the year, right, which is managed by other things. But there was a conversation at the end of the year about doing a \$30 billion trade that we didn't get off by December 31. It would be some G-SIB points, and we can handle that by selling more over here, and yeah, that's just management of the balance sheet. Again, that's not the right way to manage the balance sheet, but we have to.

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**Andrew Lim**

*Analyst, Société Générale SA (UK)*

**Q**

Okay. Great. Thanks.

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**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

But what you can't do any more, and this is a very important distinction, is once you have your HQLA, you need your \$600 billion. In the old days you could arbitrage between, like a repo goes way up not by moving it from the Fed account to repo, but by arbitraging money from elsewhere to repo. That you can't do because you'll violate LCR.

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**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Matt?

**Matthew Derek O' Connor**

*Analyst, Deutsche Bank Securities, Inc.*

**Q**

Matt O'Connor, Deutsche Bank. We've obviously had a big drop in long-term rates here and hopefully it's temporary for a lot of reasons, but can you just remind us, or maybe a Jenn remind us of your sensitivity to long-term rates, and you did a good job showing some of the offsets, but...

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

So just correct me if I'm wrong, the effect for next year of the scene you see in long-term rates now is not very much. Yeah.

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

And we're filing the K later today so you'll have the disclosure.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

You'll see the 100 basis points, the short run, the longer rates and exactly what it does all things being equal which they are not. That's the all things being equal analysis.

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

Yeah. I think 100 basis points up is \$700 million parallel shift to 100 basis points up \$700 million, parallel shift 100 basis points down, it's \$2.6 billion, thank you Nicole.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

And the long-term will have an ongoing rolling effect that compounds over the years that's why it has a very little short effect in one year, but the second would be bigger, the third it'll be bigger as assets go off your balance sheet that you can't replace with higher rates.

**Matthew Derek O' Connor**

*Analyst, Deutsche Bank Securities, Inc.*

**Q**

And then actually just separately, it's obviously a very fluid situation with the coronavirus. But, can you talk about some of the kind of areas where you think volumes might be impacted? We're starting to see some non-banks pre-announce for trends here, and just some of your thoughts on that. Thank you.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

It's very hard to tell you, so I don't want to guess. Obviously, we hope it's contained, it's a human casualty. I mean, you feel terrible for it. The only question is when you have South Korea, Iran and Japan now with these rapidly increasing curbs, how bad is it -- how did they get there? Are they talking this more about they don't know who patient number one was in Italy, and did that come from -- I have this nightmare somehow in Davos all of us who went there got it. And then we all left and spread it. The only good news from that is it might have just killed the elites. So I just don't know, we'll just have to wait and see. I'm not sure it helps to guess.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Okay. Ken?

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## Ken Usdin

*Analyst, Jefferies LLC*

**Q**

Yeah. Jamie, in Jenn's presentation, she talked about GDP growth has been pretty stable, she talked a couple of times throughout the presentation about being later in the cycle. Last year's loan growth ex the sales was about 2.5% with cards still leading the way there. I'm just wondering, ex virus and just presuming the business that you guys all talked about continues to gain share, is it just tougher to grow the same type of loan growth at bigger numbers or is that a purposeful change given where we are in the cycle? Just any framework around loan growth would be great. Thanks

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah. So just again we can say it over and over, loan growth is an outcome. I don't care if it's positive or negative. In every single business, we've got standards and we stick to them. What we judge our self upon is did we add the bankers, did we add the clients, did we add the other products, did we add -- so like we want in the Card business My Chase Loan and My Chase Plan. If we fail to deliver that, I'll say we did a bad job. That's loan growth we want because we know it's \$100 billion of good loans off of us. But it's not -- and it's not this specific thing. And loan growth competition, if you look at -- I mentioned private capital, they're getting tougher. Some of these international banks, when it comes to certain leverage loans, they're 50 basis points cheaper than we are today and we tell our clients, take the loan. And there was a while that Fannie or Freddie was doing multifamily much cheaper than we thought they should. Let them take the loan. We are perfectly willing to walk away from credit that we think is completely mispriced.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Marty and then John.

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## Marty Mosby

*Analyst, Vining Sparks IBG LP*

**Q**

I just want to follow up on the net interest income question. As long-term rates were coming down, our deposit betas lagged initially at around 20%, but then in the 2018, they went up to 75%. So you've got that tail end pick. And then as rates came back down, we have a pooled deposit rates down that we've only been coming down at around 15%. Is this last leg down in rates going to be a chance for us to recalibrate some of those deposits to catch up with the deposit beta that we left on the table because of the head-fake we went through from 2018 to 2019?

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

I believe that the long-term rate doesn't affect that nearly as much. And so the 10-year today was like 1.37% or something like that, more shockingly the 30 years like 180 [bps]. But I think the short rate is it has more of that beta effect. And betas got gamma and we've said this over and over is that when it came below zero percent, there was no adjustment. So it went back up to 1%. There was no adjustment. And

then I think it started to kick in a little bit. And, so yeah, I think my view is it's going to behave exactly the same on the way down that it did on the way up and vice versa. And you see more loan growth now because of it – I mean, more deposit growth because of that too.

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## Jason R. Scott

*Head of Investor Relations, JPMorgan Chase & Co.*

# A

John.

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## John Eamon McDonald

*Analyst, Autonomous Research*

# Q

Yeah. Jamie, wanted to follow up on ESG and sustainability. Jenn mentioned new commitments this morning, both Daniel and Marianne, and Mary mentioned how important it is becoming as part of their businesses and Daniel mentioned incorporating it into the every day. So how has your thinking evolve around this and how are you incorporating it to JPMorgan. There's a bunch of people protesting this morning, like what are they missing? I'm not sure exactly what they're protesting specifically, but what are people missing?

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

Yeah. So if you go around the world, this is part of like every conversation in most parts of the world. It's part of every conversation in -- I'm talking about climate, in particular - every conversation in Davos, in Europe, more and more here, more and more asset managers, obviously Larry Fink wrote in his letter, we've got demands from virtually every central bank about stress testing and sustainability and you're going to have I think as Moody's and Standard & Poor's, Sustainalytics and Just Capital all valuing companies on all these various things, which is fine. We all get judged and we're going to be judged in a different way. We just were taking it very seriously. These are the climate -- if you're talking about people, they want no more fracking, no more financial oil, but not every loan is made the same. There are companies who are doing a very good job reducing CO2, making a transition and it's \$100 million loan and other people \$100 million loan, and they're doing a terrible job. So, setting standards, our clients meet the highest standards. And so obviously we made a bunch of announcements about Arctic drilling and coal power plants, et cetera, but more to come. I think we need a mature conversation.

So it's not -- if you're going to try to -- and we do think it's a problem, we are not, I mean, I've always thought it was a problem. I think it's a risk management problem for society and we should acknowledge the problem and start working on it. There are very smart ways to do it. There are actually cost-free ways to do it. And I was in Calgary recently and one of the companies said they reduced their CO2 output by 80% just by doing a whole bunch of things differently. And so what we need to do is -- and the BRT is publishing an energy thing soon. If you can go industry-by-industry and to our smart ways to do it, et cetera, the smartest thing to do, you need companies but without international government action you aren't going to solve the problem, okay, you are simply moving dirty coal to other countries, and then buying the energy here a different way.

And so you need -- and that's why we support the Climate Leadership Council which has that carbon tax, carbon dividend thing. And there are agricultural things you can fix, there are sequestration that you can fix there, policy rule that can fix it, but it needs a mature conversation and it can't be just beating on fossil fuel companies and banks and that is going to solve the problem. It will not. Even if you stop banks from financing some of it, it will be financed by other people, who don't care about pollution that is by making the asset cheaper and make a better return. And so you're going to have to be very careful to have good policy here and not just yelling and screaming at each other. But I respect their concern. They have the right to be concerned. So we're not pointing fingers at people protesting outside. They have a right to be concerned and now we should come up with policies that are actually going to work for mankind.

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## Timothy P. Piechowski

*Analyst, ACR Alpine Capital Research LLC*

# Q

Jamie, Tim Piechowski from ACR Alpine Capital Research. And two quick questions. One is, basically the moves that you guys have made from loans to securitization throughout 2019. How much more opportunity is there available to do that to keep RWAs down in the coming years? And a second, this is just joining it, but in your prepared remarks, you've made some kind of one-off comments on negative rates and the potential for inflation, so if you could expound on those?

## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

Yeah. So I'm just pointing out that -- I'm putting on the table two potential fat tails. Some people are concerned about negative rates. It's quite clear that the policymakers here don't want to do it, okay, of course policymakers change too over time. So you can't say never and as to me, I'm going to write about this in my chairman's letter, I think there's a huge negative downside and adverse consequence to negative rates. I think you're seeing some of that today. And I don't think they had to do it for the short run, but they've been doing that for seven years in Europe, okay, and that's the drug. And most of that, people buying those -- any of you bought a negative rate bond, anyone? Why not? Who buys them?

Well, central banks as a matter of policy and in certain cases banks, insurance companies for collateral, for cash managed, for new regulations, and then obviously certain ETFs and passives, and they automatically buy it, but no one in my view, and I'm trying to do some research, I got some research people, no one in my view has bought them voluntarily. I've never seen a market that's manipulated, not have a problem.

So I look at that. It just makes me very cautious about the effects. So I'm simply saying it's a fat tail, which, of course, JPMorgan handled that too, that will have huge adverse consequences, and we did a lot of work going through literally piece-by-piece. It's a lot of -- we take a lot of actions to protect this company that would not be good for economic growth. And I hate to say that because I want to help society, but we're not going to sacrifice our shareholder over you know negative rates something like that.

And then the inflation the home prices, I mean, I'm not going to go through how they calculate inflation. Okay, but backing out of gas and food, backing out how they calculate rental payments it's inaccurate.

Wages are going up 5% or 6%, low and minimum prices are going up. Food prices are going up. Apparel is not; shoe wear is not; a bunch of things aren't, but a bunch of things are, and housing is one of them. Remember that's like 30% of the average budget, something like that. So just be prepared for it -- I don't think you should take it off the table, that rates couldn't surprise you. People think that central banks can decide everything and let me tell you they cannot. They have to react to higher inflation and they will. It may not be at 2.1% or 2.25%, but at 2.25% you will have already reacted to higher inflation. And that will have effects on the economy or something like that. And obviously a little inflation is not bad if you have good growth it's stagflation which is bad. And your first question is what again?

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## Timothy P. Piechowski

*Analyst, ACR Alpine Capital Research LLC*

# Q

RWA and...

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## Jamie Dimon

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

# A

Oh, that's just we -- obviously all these banks operate under all these constraints and there are tons of them and they're not all calibrated to each other, they all work across purposes sometimes. But one of them is standardized capital, which we're constrained by, and advanced. Advanced is a better way to run the company because that's an economic base. Standardized looks at almost everything almost the same with exception, but it's just -- it's simply separate a loan which is a portfolio decision and a loan to a client. So a loan to client we look at it differently. But if you simply decide to keep a whole loan, you go buy whole loans, or buy a security, it just will give us the highest ROE, that's all. Like what difference does it make if you -- I mean, I'd sell the whole \$100 billion of mortgages that weren't client-related and by \$100 billion of securities that'd give us the highest standardized ROE.

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## Timothy P. Piechowski

*Analyst, ACR Alpine Capital Research LLC*

# Q

I'm just getting at I think there's still incremental opportunity to [indiscernible].

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

No. But surprisingly, these guys look at this like almost every day. That number went from being a huge positive to go to securities and now it's a negative. We do the pricing every week. It bounces around. And so you're always trying to optimize between the two. Yeah.

**Marianne Lake**

*Chief Executive Officer of Consumer Lending, JPMorgan Chase & Co.*

**A**

Jamie, so with this better execution all of the time and right now with margins where they are the portfolio bids great and it's been great for a while and so we will always look at it, and the secondary market is constructive, even the seasoned loans we might see more that it won't look like it did over the last two years, but we are looking at other risk transfer schemes. And so you saw us do a little CLN, and we're going to continue to work hard to optimize the balance sheet and capital. But I wouldn't say you'd see sales like you've seen over the last two years.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

And the other thing which we are doing a better job at is measuring the value of that mortgage with a customer who stays a customer of the bank as opposed to just another mortgage generated to put on the balance sheet.

**Timothy P. Piechowski**

*Analyst, ACR Alpine Capital Research LLC*

**Q**

So we talked a little bit already about the net interest income outlook in rates. The 2021 guidance does imply a pretty material ramp-up from 2020, I think it's just about a \$3 billion delta. I don't know if, Jenn, if you can just give us a little bit of color as to what the underlying assumptions are there in terms of deposit growth mix – asset growth, loan growth, just any color that helps us bridge the gap between 2020 ...

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

Sure.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

That was the implied curve.

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

It's the implied curve.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Plus growth, that's all that was.



**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

That's right. So for 2020 and 2021 and based on the latest implied and it's growth then...

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

It's just balancing...

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

...more than offsetting the impact of the latest implieds.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

So it's simply balance sheet growth and mix. That's...

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

Balance sheet growth and mix, both deposits and loans, card in particular, because the mix on loans is also improving because of the growth in card.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

I just want to point a quick little thing. That is assuming we do everything less next year the way we did it this year and the year before which may not be true one day. We may take a very different position in interest rates and we can skew that number any which way to protect the company or just to make more money.

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

And then just on deposit growth, as I had said, we saw deposit growth accelerate at the end of 2019 with each rate cut, and so again market dependent, but we think that that should hold -- that trend at the end of 2019 should hold in 2020.

**Timothy P. Piechowski**

*Analyst, ACR Alpine Capital Research LLC*

**Q**

And if I can just squeeze in a sort of related question because obviously if you look at your loan growth, the lion's share is coming from cards. And I know you manage the business on an economic basis, not an accounting basis. But based on your previous disclosures, I think you're reserving probably 6% to 7% of your card book right now under CECL. So if you can just give us -- so it will take some time for that growth to actually translate into GAAP earnings. But if you could just give us a little bit of color in terms of reserve builds and how we should think about provisioning relative to charge-offs going forward given the pretty pronounced mix shift.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

I think you said loan – charge-offs will be up \$0.5 billion next year, something like that.

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

Well, probably more than that, but we're not going to guess that at this point...

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

The loan loss reserves could be \$1 billion or more, right?

**Jennifer A. Piepszak**

*Chief Financial Officer, JPMorgan Chase & Co.*

**A**

Yeah, importantly because the year-over-year comparison, 2019 we obviously benefited from some reserve releases in mortgage that we don't expect to recur. And then under CECL, it is true as you say that in a period of growth, all else equal cards will be higher but we don't think that it's necessarily relative to the incurred model, a meaningful number for us but it will be higher.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

So card is a perfect example of why we make economic decisions and not accounting decisions. So I gave the example -- in card you expense the marketing costs over year and even more ridiculous than that, it's a contra revenue against NII, right? Where does that come from? What happened to matching revenue expenses, and not only do you do that, you upfront basically all the loan losses too. So when we do card, we are not going to look at that. We're going to look at NPV.

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Jim, and then we'll come to you, Chris.

**James Mitchell**

*Analyst, The Buckingham Research Group, Inc*

**Q**

Yeah. Thanks. Good morning. Maybe talk a little bit about international consumer expansion in line of sort of the discussion - the reports of you opening a digital bank in the UK, are technology lower barriers to entry changing the way you think about entering international consumer markets because I think historically that's been something you haven't wanted to do.

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah, and that's true. So I think I said very clearly last year that it does – why it doesn't make sense to do normal retail banking overseas and obviously and in the cards go here and if digital may make it different. And so like I said, always we've got skunk works thinking about a bunch of stuff, that's the only thing I'm going to say about that one.

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Yeah, Chris.

**Christopher Lafayette**

*Analyst, The Clarke Estates, Inc.*

**Q**

Yeah. I understand that you've always been willing to do acquisitions and I just sense a little change in tone today as far as willingness to get into adjacent markets. I think if I go back a couple of years ago, you talked about doing equity investments in those companies. I'm just wondering what's caused -- like Fintech companies -- what's caused the change in tone or...

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah. First of all, we still do a lot of investing in tech companies and cyber companies and Fintechs and partners and strategic things for us for the company, and they're not of a size and substance in total, we didn't talk about them here, but they make us smarter, plus we can help them grow a lot and something like that. So that hasn't changed at all. And it was quite clear that regulators didn't really they want growth years ago, and it wasn't worth fighting with regulators over whether you wanted to grow or not grow. And now there's a little bit more of a green light. And I'm not talking about us by the way, but we've got the green light to do retail at one point. You've seen a whole bunch of M&A deals done. It's clear that people -- Morgan Stanley buys E-Trade. The door is open for people to be a little more ambitious and aggressive in how they deploy capital with acquisitions. And I think it makes sense. Plus a lot of these -- the new world has changed a lot of how you can look at the competition in terms of adjacencies. You can do different types of things for clients and look at these products and services in a different way you've heard everyone here talk about it. Every single person has talked about things they can do for their clients that we simply couldn't do before and by just adding data and services and so it's making clients happier and that's a good thing.

**Christopher Lafayette**

*Analyst, The Clarke Estates, Inc.*

**Q**

And I guess in relation to that, you talked about the green light perhaps being on now, but how do you think about that in a potentially different regulatory environment, does that come into your thinking at all as we have different political debates being held?

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Yeah. JPMorgan every year for the next 50 years I hope we'll do fine. We're going to have different political regulatory environments that's completely obvious. And so if and when we get there, we'll deal with it. We'll be prepared for it, we study all the policies, all the rules and regulations and whoever is President of the United States, they are going to get a phone call from me saying what can I do to help the country. And whether they like banks don't like banks that's going to be the attitude of JPMorgan Chase, what can we do to help the United States of America and its citizens. And so obviously if certain rules are going to be changed, it will have an effect on what we can do. It's possible acquisitions will be closed down for us for years and then you just focus on organic growth. I always remind the management team whatever happens in rules and regulations, as long as it applies to you as much as me, we'll be fine.

**Jason R. Scott**

*Head of Investor Relations, JPMorgan Chase & Co.*

**A**

Anything else?

**Jamie Dimon**

*Chairman & Chief Executive Officer, JPMorgan Chase & Co.*

**A**

Folks, let me thank you, all, for coming and spending some time with us, and let me thank the folks who worked so hard to get these presentations done for you, and so we'll see some of you guys upstairs. Thank you.

**Disclaimer**

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