Nu Holdings Q2'22 Conference Call

Operator: Good evening, ladies and gentlemen. Welcome to Nu Holdings conference call to discuss the results for the **second quarter 2022**. A slide presentation accompanies today's webcast, which is available on Nu's Investors Relations website: www.investors.nu in English and in Portuguese. This conference is being recorded and the replay can also be accessed on the company's IR website.

This call is also available in Portuguese. To access it, you can press the icon on the lower right side of your Zoom screen, and then choose to enter the "Portuguese room". After that, select "mute original audio".

Para acessar nossa conferência em português, clique no ícone ao lado inferior direito da sua tela Zoom e selecione a opção "Portuguese room". Ao acessar a nova sala, certifique-se de mutar o áudio original.

Please be advised that all participants will be in listen-only mode. You may submit online questions at any time today, using the Q&A box on the webcast.

I would now like to turn the call over to **Mr. Jörg Friedemann, Investor Relations Officer** at Nu Holdings. You may proceed.

Jörg Friedemann: Thank you very much operator. Good evening everyone and thank you for joining our earnings call today. If you have not seen our earnings release, a copy is posted in the Results Center section of our Investor Relations website. With me on today's call are **David Velez, our Founder, Chief Executive Officer and Chairman, Youssef Lahrech, our President and Chief Operating Officer, and Guilherme Lago, our Chief Financial Officer. Additionally, Jag Duggal, our Chief Product Officer**, will join us for the Q&A session of the call.

Throughout this conference call the Company will be presenting non-IFRS financial information, including adjusted net income. These are important financial measures for the Company but are not financial measures as defined by IFRS. Reconciliations of the Company's non-IFRS financial information to the IFRS financial information are available in our earnings press release.

Unless noted otherwise, all growth rates are on a year-over-year and FX neutral basis.

I would also like to remind everyone that today's discussion might include forward-looking statements, which are not guarantees of future performance and therefore you should not put undue reliance on them. These statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from the Company's expectations. Please refer to the forward-looking statements disclosure in the Company's earnings press release.

Today our Founder and CEO, David Velez will discuss the main highlights of our second quarter 2022 results and some of the opportunities ahead. Subsequently, Guilherme Lago, our CFO, and Youssef Lahrech, our President and COO, will take you through our financial performance for the quarter, after which time we'll be happy to take your questions.

I would now like to turn the call over to David, please go ahead.

David Velez; Thank you, Jörg.

Hello everyone- thank you for being with us today. Happy to announce that we had another very strong quarter, combining growth, efficiency and significant progress towards building the largest digital finance platform in Latin America.

On the customer acquisition front, we attracted another 5.7 million customers, reaching more than 65 million customers at the end of the quarter. This growth continued to be primarily fueled by organic channels, with very low customer acquisition costs. Notably, our monthly activity rate improved even further to 80%, a new historical-high mark. Our customers now account for 36% of the adult population of Brazil.

The growing number of active customers, coupled with the continuous maturation of our earlier cohorts, resulted in new historical highs of purchase volume, credit portfolio and revenue:

- Our purchase volumes reached US$20.0 billion, up 94% year-on-year. We became the #4 cards player in Brazil this quarter, surpassing century-old incumbent institutions. And we continue to gain market share, quarter after quarter

- Our consumer finance credit portfolio grew significantly above market, up 107% year-on-year, to a total of US$9.1 billion, while maintaining very strong unit economics. And our credit portfolio remains concentrated in credit cards and unsecured personal loans; we have not even started our journey into secured credit products.

- Our revenue more than tripled year-on-year to about US$1.2 billion this quarter, driven by both product upsell and cross-sell, and resulting in a historical-high average revenue per active customer, or ARPAC.

While we have discussed our ecosystem in the past, in today's presentation, we wanted to spend a bit more time highlighting the significant progress we have have made to-date in cross-sell, a key piece of our strategy, going from a mono-product to a multi-product platform and from a mono-country to a multi-country platform, while improving profitability as we scale.

First, moving from a mono-product to a multi-product platform.

We started in 2013 with a strategy of building the future of financial services in Latin America with a credit card as our first product. We chose credit card as it addressed a large consumer pain in Brazil, had very attractive unit economics, and enabled us to start building the credit underwriting capabilities from Day 1. We were very successful in using credit cards to build a large consumer base and one of the strongest consumer brands in the region. In about 9 years we became one of the largest credit card issuers and one of the top 10 most loved brands in Brazil. And we continue to expand this core product at a very significant pace. It remains one of the highest-rated credit cards in the Brazilian market, while already generating hundreds of millions of reais in earnings, which we then are able to use to finance the growth of new verticals.

Most fintechs globally have had a very hard time going from being a successful mono-liner, to then being able to build a multi-product platform. And here is where we think Nu is a significant exception in having been able to successfully introduce products across many verticals in financial services:

- Our second product, our savings account NuConta, has now surpassed our first product, credit cards, and today counts with over 45 million active customers. It has displayed exceptional levels of engagement and deposits growth. NuConta has allowed us to become one of the largest payment platforms in Brazil - around 23% of the PIX transactions in the country pass through our pipes. NuConta has also allowed us to develop a unique deposit franchise. Today, our retail deposits exceed our Interest Earning Portfolio by more than 4x. We do not need to rely on portfolio securitization or wholesale funding - we own our destiny with respect to funding, a rare feat for a consumer fintech.

- Our third product, Personal loans, currently has 4 million customers and is generating meaningful earnings for our business. Here, our growth bottleneck is our own willingness to underwrite credit and enable this feature for our customers, as we tend to go slowly and conservatively with any credit product. Our growth bottleneck is certainly not distribution. As of April 2022, our almost 59M Brazilian customers accounted for approximately 32% of the entire personal loans market in Brazil, so we do not need to go outside our existing ecosystem to tap into approximately one third of the Brazilian consumer finance industry.

- Our fourth product, our savings account for SMEs, has brought us access to the SME segment, whose profit pool is estimated at approximately 25% of the consumer profit pool. In less than 3 years and with a particular focus on micro-entrepreneurs and small enterprises, we became one of the top 5 SME players in Brazil, in terms of number of active customers, with 12% market share of corporate checking accounts in Brazil. As of the end of this past quarter, we had 2M SME customers, up 150% year-on-year.

- Beyond these four core products, we launched Insurance last year, where our first product, Nu Vida, a life insurance product, became the fastest growing insurance product in the history of Brazil. Today, Nu Vida has over 700k policies and maintains the highest NPS of the sector.

- Then we entered the investment space through the acquisition of the largest independent Direct-to-Consumer platform in Brazil, Easynvest, rebranded NuInvest, which was a key part in allowing us to reach over 5 million active customers in our investment business, already likely the market leader in the Latin American Direct-to-Consumer investment space.

- And, even more recently, we announced that we reached more than 1 million customers in our Crypto product, Nucripto, three weeks after launching it to our entire customer base.

So in just a few years we were able to go from a credit card monoliner to achieving leadership positions in the verticals we entered - Deposit Accounts, Personal Loans, SMEs, Life Insurance and Investments - while reaching over one third of the adult population in Brazil. This, to us, represents significant progress in advancing a product diversification and cross-sell strategy.

Second, moving from a mono-country to a multi-country platform.

On the international expansion front, we reached 2.7 million customers in Mexico, consolidating our position as the #1 issuer of new cards in the country. In Colombia, we grew our customer base to over 300 thousand customers, and have received over 1.5 million applications to date demonstrating a combination of the significant pent up demand as well as our selectivity. Likely we are the #1 credit card issuer in Colombia as well by now. All of this was achieved while sustaining an NPS in the 90s and high levels of customer virality in both geographies.

It's worth highlighting that, one week ago, Nu Colombia received approval for its requested license to establish a financing company in the country. With this approval, we now have banking licenses in the three countries we operate, transposing an important barrier to entry and enabling us in the future to intermediate financial products and offer deposit products to our customers.

Together, Mexico and Colombia are largely the size of Brazil in terms of both GDP and population. We are excited with the prospects of these two countries and confident that they can be as relevant to us in the future as Brazil has become.

Finally, all of this growth has required tremendous investment, and we realize that it might be hard for investors to assess whether all of this growth is profitable. Therefore, we thought it would be useful to share a few KPIs of our operations in Brazil, our core market, which we do here for the first time.

In the first half of 2022, Nu Brazil generated an accounting profit of US$13.0M up from a loss of US$19.7M in the full year 2021, while continuing to provision significantly as a result of the continued fast growth of our credit portfolios as well as expensing large investments of new products and features, such as Crypto, NuTap, NuPay, PIX financing, etc. Our core products - credit cards, personal loans and NuConta - are by now very profitable and, therefore, we are able to reinvest all those profits into the expansion and improvement of our operations. And even with all that investment, Brazil is now profitable and generates profits, which we now expect to reinvest into the growth of Mexico and Colombia.

We acknowledge investors' increasing focus on the importance of profitability. And while we continue to make our decisions based on long-term value creation, we are not disconnected from our investors in the need to sanity-check the profitability engine of the entire model as we invest for the future. The current context of macro volatility reinforces our focus on cost diligence on different fronts. This should contribute not only for us to achieve our goal of becoming the lowest cost manufacturer in our markets, but also shorten the path to high profitability.

With that, I turn the call to our CFO, Guilherme Lago, who will discuss the operating trends for the second quarter.

Guilherme Lago: Thank you, David.

Now, before moving on to the quarterly results, let's recap our simple, yet powerful, value generating formula:

- First, growing our customer base across Brazil, Mexico and Colombia and turning customers into active customers;

- Second, expanding the average revenue per active customer, or ARPAC, through both product upsell and product cross-sell; and

- Third, delivering all this growth while maintaining one of the lowest-cost operating platforms in the industry, through best-in-class cost to acquire, to serve, of risk and of funding.

Now, let’s take a deep dive into the quarterly results of our business.

We added 5.7 million customers during the second quarter, in line with the net adds of the first quarter and mainly through organic channels. This brought total customers to 65.3 million by quarter-end – a 57% year-on-year increase, making us likely the fifth largest financial institution in Brazil in terms of number of customers.

We are also pleased with Mexico and Colombia continuing to grow at faster rates compared to Brazil, and having contributed together with over 700k unique customer additions this quarter.

Importantly, we continued to drive customer acquisition while increasing the monthly activity rate to 80%, up from 72% a year ago and 78% in the prior quarter. That marked the ninth consecutive quarter of higher monthly activity, another testament to our ability to continue to grow our ecosystem while driving customer engagement.

Now moving to an analysis of our customer cohorts. These three charts show how increasing engagement of our customer base and a higher number of products per active customer continue to drive up our ARPAC.

When looking at ARPAC in the chart on the far right, one can see that while we reached a monthly ARPAC of 7.8 dollars in the quarter, mature cohorts are already at 21 dollars. One can also see that all cohorts maintain healthy growth trends.

This combination of higher engagement and more products per customer has proven powerful in terms of customer monetization. ARPAC expansion has helped fuel our triple-digit revenue growth.

We also saw another quarter of exceptional revenue growth: 230% year-on-year on an FX neutral basis, reaching a record-high quarterly revenue of nearly 1.2 billion dollars. This growth is the result of the compounding effect in two areas:

(i) First, a growing number of monthly active customers - not only customers, but monthly active customers.
(ii) Second, higher levels of product upsell and product cross-sell, which continue to expand our monthly ARPAC.

Although our monthly ARPAC has expanded strongly over the past quarters, as you can see on the left-hand side, we believe we are very far from our ARPAC potential. The ARPACs of incumbent banks are still far above ours, at $40 dollars. Notwithstanding our ARPAC potential, it is important to note that with the advantages in our cost pillars we can afford to serve customers with lower ARPACs and still post healthy unit economics.

Moving on to the progress of our cards business. Purchase volumes increased to US$20 billion dollars, up 94% Year-on-Year on an FX Neutral basis. Again, this is the result of more product upsell, cross-sell and the continued engagement of our customers. The slide on the right-hand side shows how purchase volumes grow with the maturation of the cohorts.

In the second quarter, as David mentioned, we estimate that we became the #4 cards player in Brazil, continuing to surpass some of the most traditional incumbent financial institutions in the country.

In our consumer finance portfolio, composed of credit cards and personal loans, we continued to grow at a healthy pace on a FX neutral basis, albeit slower than in prior quarters. The lower level of growth stems mostly from personal loans.

This quarter, we decided to reprice and moderate the growth of our personal loan portfolio aimed at strengthening its credit resilience in the context of a more uncertain short-term outlook for the Brazilian economy.

I also make two other observations to contextualize this trend:

- First, FX negatively impacted the balance figures. If we adjust the portfolio figures on a FX neutral basis, our portfolio would have grown by around 300 million dollars in personal loans and over 1 billion dollars in credit cards.

- Second, originations in personal loans remained largely unchanged in FX constant terms, quarter-over-quarter. In the context of a short-duration portfolio, similar origination levels yield lower growth rates simply because part of the originated volume replenishes the amortizations in the period.

Let's now look into two things in more detail:

(i) the evolution of our credit card interest-earning portfolio and (ii) the evolution of our personal loan origination.

With regards to the evolution of our credit card interest-earning assets in Brazil, or "IEP" it is important to contextualize that we have been consistently expanding our credit card "IEP" mainly as a result of launching new features that allow our customers to use their credit cards as financing means. These features include the ability to finance: 1) bank slips; 2) individual purchases into installments; and 3) PIX transfers, in all cases using credit card limits.

As you can appreciate, IEP arising from installments, including those arising from these new financing features, have outpaced the growth of IEP from Revolving. And they are still way below the industry average. This has been a change in behavior we have incentivized rather than a change in the behavior suggesting credit degradation.

Finally, it is worth highlighting that these IEP figures capture the entirety of our CC asset class. We do not commingle IEPs of CC and Personal Loans. If you are late in CC, you are ineligible for a Personal Loan.

Now moving to the originations of personal loans.

The graph in this slide shows the evolution of our personal loan origination, along with the respective monthly interest we charge on them. One can note two things in the second quarter of 2022:

- First, we continued to reprice our personal loan origination aimed at increasing our credit resilience and offsetting the impact of higher interest rates.

- Second, originations for our personal loan book remained largely stable on an FX-neutral basis.

Going forward, the pace of origination in personal loans will hinge on the short-term outlook for the Brazilian economy and the credit performance of our cohorts. As of today, we are assuming, for the third and fourth quarters of this year, levels of origination similar to that of the second quarter on a FX neutral basis.

We continued to advance on our strategy of building a robust local currency deposit franchise, which we use to fund most of our operations. We ended the quarter with a loan-to-deposit ratio of only 24%.

Deposits continued to grow at a fast pace during the second quarter – up 87% year-on-year on an FX neutral basis, with an average funding cost below CDI, Brazil's risk-free rate. We added nearly 700 million dollars in deposits over the last three months, closing the quarter with a total deposit balance of US$13.3 billion dollars. On a quarterly FX neutral basis, deposits would have grown US$ 1.9 billion dollars quarter-over-quarter.

In addition, we recently introduced changes on the yield remuneration for short-term deposits within the NuAccount. At the same time, we launched other features in our ecosystem, such as the Money Boxes, which we expect will help optimize our deposit franchise, foster cross and upsell in our investment platform, and mitigate potential attrition. These changes combined can contribute to a reduction in our cost of funding over time.

Since we touched again on the topic of costs, in this slide we remind you that one of the key competitive advantages of our platform rests on its very low cost to serve. This quarter, our average monthly cost to serve was US$0.8, remaining below US$1.00 dollar, while our monthly ARPAC reached US$7.8 dollars. I remind you that our cost to serve continues to be 85% lower than those of traditional banks.

Going forward, we expect our cost to serve to remain at the dollar level.

Moving down the P&L, we delivered another quarter of record-high gross profit, up 109% year-on-year on an FX neutral basis to US$364 million dollars.

Note that our gross profit margin has decreased in the quarter as a result of the following factors, as discussed in our prior earnings call:

- First, Growth driving Credit Loss Provisioning. Under IFRS, we have to front-load the recognition of our credit loss provisioning whenever a loan is booked. So the faster we grow our credit book, the more short-term pressure it brings to our gross profit margin.

- Second, Interest On Cash Balance. As interest rates go up, we earn more money on our large pool of cash balance, even if it is partially or fully offset by higher funding expenses. In other words, higher rates drive our revenues up, but leave our gross profit largely unchanged. This pushes down our gross profit margin as it increases the denominator of the gross profit formula.

As our credit portfolio matures and interest rates stabilize, the gross profit margin is expected to converge to those of the more mature cohorts.

Operating leverage is a key component of our platform and can be observed in two fronts:

1. First, as we expand our credit portfolio, we optimize the use of our large and low-cost deposit base and expand our net interest margin, or NIM, as can be seen on the chart on the left-hand side;

2. Second, as our overall revenue level increases we further dilute our low-cost operating platform and improve our efficiency levels, as can be seen on the chart on the right-hand side.

We expect both trends to continue and compound over time, allowing the company to achieve high NIMs and best-in-class efficiency ratios.

Moving on to the bottom line, our recurring profitability confirms again that we are on the right path with our earnings formula. We reported Adjusted Net Income of US$17 million dollars.

To sum up this section it is important to emphasize that despite our undeniable growth orientation, we will never leave behind our cost discipline as we believe that the long-term winners in the Latin American financial services industry will be the lowest-cost manufacturers. So we aim at being the lowest cost manufacturer across the four cost-pillars of retail banking: Cost to Acquire, Cost to Serve, Cost of Risk, and Cost of Funding.

I would like to highlight two important operating trends that exemplify our cost discipline:

- First, we expect slower personnel growth in the second half of the year, after advancing in the staffing of our new geographies during the first half of 2022.

- Second, we expect a reduction in our cost of funding over the coming quarters as a result of the change to the NuAccount remuneration.

Now, I'd like to turn the call over to Youssef, our President and Chief Operating Officer, who will walk you through our asset quality performance and credit underwriting approach.

Youssef Lahrech: Thank you, Lago. Let me now walk you through a few key indicators that track the asset quality and overall health of our credit portfolio in the second quarter of 2022.

As a reminder, we make underwriting decisions to optimize the return, resilience, and payback of our credit originations.

Let me start by reinforcing two key features of our credit business:

- First, we underwrite mostly unsecured credit, through credit cards and personal loans. These products are expected to have higher loss rates and shorter durations than secured credit products, and they are priced accordingly. We seek to optimize **return** for the amount of risk we take, not minimize risk.

- Second, as Lago mentioned, we have taken management actions to reprice our products and bolster the resilience of our credit underwriting. As a result, we expect risk adjusted margins of 50 to 60%. These actions have resulted in even more resilient portfolios.

These charts illustrate the unit economics of each of our core credit products, credit cards and personal loans, expressed as an annualized percentage of receivables.

On the left-hand side you can see the unit economics of our credit card product: Our revenue consists of non-interest and interest revenues, which together amount to 27%. Deducting expected losses of 11%, we end up with a net lending margin of 16%. This results in a post-tax return on assets of around 7%, and an ROE in excess of 80%.

On the right-hand side of the slide, you have the unit economics of our personal loan product. The interest revenue yield is about 58% annualized, with a cost of funds of approximately 11%. The expected annualized losses for the portfolio are about 22%, yielding a net lending margin of 25%. This results in a return on assets of about 14%, and return on equity in excess of 120%.

Not only are the returns of these products attractive, but their resilience is also strong: They can withstand more than a doubling of losses and still be profitable. We are, of course, in the business of taking credit risk, and always with an eye on earning commensurate returns and always ensuring the resilience of those returns in the face of uncertainty.

With this, let's now turn our attention to asset quality trends.

Overall, leading indicators, namely NPL 15-90, have remained stable, and asset quality has followed its post-pandemic normalization course, as discussed in prior calls.

Now, before I discuss the specific trends, let me make a few observations on the metrics themselves:

- First, it is important to note that NPL 90+ is both a lagged metric and also more of a stock than a flow metric, given that assets continue to accumulate in that bucket until write-off. Hence, to get a sense for the latest trends in credit performance we find early delinquency metrics like NPL 15-90 - the chart on the left - to be more informative. In the appendix of the presentation, we provide an illustration of how this lag and this stock-vs-flow dynamic result in different behaviors of 90+ delinquency ratios compared to 15-90 ratios.

- Second, in Q2 2022, we made a change in the write-off methodology for personal loans to better align it with recovery expectations, as per IFRS guidelines. This resulted in anticipating write-offs for non-performing personal loans from 360 days to 120 days of delinquency. This change has two distinct impacts to NPL metrics: > First, it reduces 90+ NPL ratios by virtue of eliminating 121-360 days delinquent loans from both the numerator and the denominator of that calculation. Second, it increases NPL 15-90 as it reduces the denominator of that ratio.

The charts on this slide incorporate these changes as if they had been implemented since the fourth quarter of 2017 for ease of comparability across the whole time series. For credit cards, write-off timing remained unchanged at 360 days.

For both products we apply a partial write-off methodology, which means that only the "expected recovery" part of written-off loans is kept on balance sheet, under Stage 3.

Lastly, I want to emphasize that this change does not affect the P&L income statement as these write-offs had already been fully provisioned for under our ECL methodology.

Let us now move into the actual NPL trends.

NPL 15-90, as a leading indicator, is showing a stable picture, suggesting that the post-Covid normalization cycle may have run its course.

90+ NPL ratio increased from 3.5% to 4.1%, and in line with our expectations. The normalization cycle is still working its way through the 90+ ratio as the delinquency inventories continue to flow through later-stage buckets.

Our baseline expectation for the rest of 2022 is that our early delinquency ratio of 15-90 will remain largely stable, absent any substantial changes in either our underwriting strategy or the environment. As 90+ is a lagging indicator and more of a stock than a flow metric, it will mechanically take more time for it to stabilize, so we expect it to continue to rise over the coming quarters.

However, under IFRS9, this expected, mechanical increase in 90+ rates does not represent a P&L overhang, as we have already provisioned for the expected delinquency flow-throughs under our ECL methodology. We provide more information about this in the following slide.

Let me recap the impact that Expected Credit Loss (or ECL) as a loan loss provisioning methodology, has on a consumer finance business with high growth rates, as is the case for Nu.

Per IFRS 9, loan loss provisions must be recognized when a loan is granted, even before any revenue associated with that loan is accrued. This results in an intentional timing mismatch between revenues and costs.

For this reason, the higher our consumer credit growth rate, the more provisions we have to book upfront. And as Lago mentioned earlier, this negatively impacts gross profit and gross profit margins during periods of high growth.

As growth rates normalize, vertical gross profit margins are expected to converge over time to those of mature cohorts.

With that context, let us turn our attention to NPL provision formation in the quarter and its drivers.

Our provision balance grew by US$129M on an FX neutral basis, or 15% QoQ, after taking into consideration the change in write-off methodology.

Excluding the impact of the change in write-off methodology, around 85% of the provision built in the quarter, or US$207M, was driven by the growth of the portfolio. The remainder, about 15% or US$39M, was driven by risk worsening.

In the context of IFRS 9 and given the short duration of our portfolio, risk add-on provisions tend to be far more sensitive to changes in 15-90s delinquency rather than in 90+ delinquency rates, and as discussed earlier, early delinquency - our leading indicator - has remained largely stable.

In summary, the growth of our portfolio has remained the dominant driver of provision charges.

To wrap-up, I want to reinforce that we are confident in our credit strategy, both in terms of our ability to underwrite, and our ability to price adequately for risk. Our models are continuously enhanced, and our credit framework is designed to be resilient to the ups and downs of macro cycles.

Having shared these data and perspectives on credit and asset quality, let me now turn the call back to our Founder and CEO, David Velez, for his concluding remarks.

David Velez: Thanks, Youssef. To summarize, our performance in the second quarter illustrated the distinctive strengths of our platform, which we believe provides a unique combination of (1) exceptional **growth** with (2) compelling **unit economics**, and operating in one of the **largest and most profitable banking markets globally**.

1. First, exceptional **growth**:

    - Our customer base grew to over 65M customers, a nearly 60% YoY growth, driven by organic channels. Our monthly active customer base grew even more, reaching 52M customers, a 75% YoY growth.
    - Mexico and Colombia are already moving the needle. They have contributed with over 700K customers, and we believe we have already become the #1 issuer of new credit cards in both markets.
    - Our ARPAC grew to $7.8 dollars, an 105% YoY FX Neutral growth, driven by continuous product cross-sell and upsell.
    - Our purchase volume grew to $20 billion dollars, a 94% YoY FX Neutral growth, making us already the 4th largest player in Brazil.
    - Our revenue grew to $1.2 billion dollars in the quarter, a 230% YoY FX Neutral growth, driven by both customer adds and ARPAC expansion.

    It is hard to find a company that is compounding this level of growth at our scale.

2. Second, compelling **unit economics**:

    - We believe we have become the lowest-cost manufacturer of our industry, combining best-in-class cost to acquire, cost to serve, cost of risk and cost of funding.
    - While our ARPAC more than doubled over the past year, our cost to serve remained flat in the same period, exhibiting the very high operating leverage potential of our platform.
    - Our core consumer finance products, Credit Cards and Personal Loans, presented above industry average profitability with ROEs in excess of 80% and 120%, respectively, even in this more uncertain environment, proving robust levels of credit resilience.
    - Our core market, Brazil, generated positive earnings, which is expected to compound over time and allow us to continue to invest into new products and geographies.

    It is hard to find a fintech of our scale with such a compelling profitability structure.

We are very proud of what we achieved this past quarter and even more excited with what lies ahead of us in the coming quarters.

We would like to take your questions now.

Operator: We will now start the Q&A session for investors and analysts. If you wish to ask a question, please press the "Reaction" button and then click on "Raise your hand". If your question is answered, you can exit the queue by clicking on "put your hand down". Please limit yourself to one question and a follow-up. If you have further questions, please re-enter the queue. You may submit online questions at any time today, using the Q&A box on the webcast.

I would like to turn the call over to **Mr. Jörg Friedemann** at Nu Holdings.

Jorg Friedemann: Thanks operator. Could you please open the line for Jorg Kuri of Morgan Stanley

Jorge Kuri: Congrats on the great results. Could I ask you about the growth in the portfolio? You've made some comments about the slowdown, particularly on personal loans, being driven by the environment that you're seeing in Brazil now. Maybe we can just double-click on that. Brazil is actually growing more than what consensus expected. The economy will probably grow almost 2.5%. Unemployment is now at a 7-year low. The consumer is getting more handouts from the government. And your early delinquency kind of like points to a risk on scenario, if you will. I mean, there's evidently nothing that's going wrong with the portfolio, probably maybe because you're slowing down.

But given that your personal loans, particularly, are in such early stages of growth where the cross-sell vis-a-vis your total clients, your credit card clients is still small, it is a bit surprising in the context of everything that I said, that the slowdown is so sharp versus the previous quarter. And I am looking at FX-neutral numbers. And according to my calculations, on a quarter-on-quarter basis, the growth really slowed down, basically was cut in half. And so just wondering if you can provide a little bit more color on all of these. And again, congrats on the numbers.

Guilherme Marques do Lago: Jorge, thank you so much for the question. Look, I would start by referring you to Slide 35 of the earnings deck because you will note that a material portion of the decrease in the velocity of our growth in our credit book actually stems from the FX devaluation. If you look at our portfolio growth on an FX-neutral basis, you will see that the growth remains quite healthy. You see that our credit portfolio went on an FX-neutral basis from about $7.9 billion to $9.2 billion.

Now we are certainly cautious about the environment. Now being cautious does not mean stopping to grow. In the second quarter, we grew personal loans originations by about 7% quarter-on-quarter on an FX-neutral basis and almost 2.5x year-on-year also on an FX-neutral basis. So we believe we are remaining growing at paces that are materially higher than the market.

The second thing is that the growth in personal loans and the growth in credit card is by no means constrained by demand. Like our customers account for about 1/3 of the consumer finance profile in the country. The growth is also not constrained by product. We believe that our credit card and personal loan products have the best NPS in the markets and some of the best conversion ratios in the market. It is also not constrained by capital and liquidity, Jorge.

Now we have plenty of capital and liquidity available in our balance sheet. So it is only constrained by our credit underwriting appetite, which is 100% under our control. And we have chosen to be slightly more selective in the second quarter, but we've chosen to actually be also repricing our products more aggressively, as you may note in the presentation that we have shared with you.

Going forward, we do expect that we will remain to grow at levels that are much higher than the average growth pace of the market but we will continue to be quite selective and conservative as we have been over the past 7 to 8 years. I would say that irrespective of a potential decrease in the velocity of growth in the second quarter, we continue to grow our customer base very aggressively. Our customer base already accounts for about 35%, 36% of the entire adult population of Brazil. It accounts for about 1/3 of the entire consumer finance pool in Brazil, so we have plenty of room to cross sell in the future when the market proves itself.

Jorge Kuri: Lago, that was very clear. And if I may follow up on the point you made about increasing rates for the personal loans business, which is your Slide 16 of the presentation. With an average rate of 4.6% in this quarter, up from 4%, how much of this is a mark-to-market of the increase in funding costs? And how much is actually going to increase the net NII of the product? And is -- more has been done in the third quarter, so we should expect sort of like the NII of the product to go up over time?

Guilherme Marques do Lago: Yes. So just a small correction. It's 5.6% in the second quarter. But I think the growth in pricing that we did in the second quarter of the year more than offset the increase in funding cost and should therefore help us expand our risk-adjusted margin. I think for the first time, we are providing disclosure, if you take a look on Slide 20, of the expansion of the -- of our net interest margin. So notwithstanding a scenario in which interest rates are going up, we have proven that we can put to work our very large low-cost deposit base and actually expand by taking our net interest margin from about 5.2% to almost 10%. We expect this trend to continue and compound over time, not only as we lower our cost of funding, but also as we increase our interest-earning portfolio, IEP, and therefore, increase the carry of our positions.

Jorg Friedemann: And our next question comes from the line of Thiago Batista from UBS.

Thiago Bovolenta Batista: Very good top line, not so good asset quality. I have a question on the asset quality. Trying to understand why Nu has changed the write-off methodology for personal loans this quarter, if there's any strong motivation to do this right now.

Youssef Lahrech: Thiago, this is Youssef. Thank you for the question. So a couple of things on the write-off methodology change. First of all, it is -- it has nothing to do with asset quality in the quarter. It is basically us following IFRS 9 guidelines. So IFRS 9 doesn't specify exactly the timing of write-off for a particular asset class or type of loan. However, it provides that you must write off a loan when there's no more reasonable expectation of partial or full recovery of that asset. So when we started the personal loans business a couple of years ago, we didn't have any actual experience with recovery rates. So as a default, we started with write-off timing that was similar to credit cards, i.e., 360 days.

Now two years later, we actually have actual recovery rate data to base our write-off methodology on, and we find that 120 days is a more appropriate reflection of the IFRS guideline. The other thing to note is writing personal loans at 120 days is generally best practice amongst fintechs and financial institutions globally, and we're following that practice.

Now as I mentioned earlier, it's also important to know that these write-off methodology changes have no bearing whatsoever on our P&L or income statement because the assets written off had been already fully provisioned for in earlier periods.

Thiago Bovolenta Batista: No, very clear. And just one very small follow up. If I'm not wrong, you mentioned during the call that you guys are expecting a more stable asset quality going forward. Is this the right message on what you guys are expecting for the [legacy ratio] going forward?

Youssef Lahrech: Yes, Thiago. So I think it's -- as I said earlier, it's important to distinguish two things. One is lead indicators of asset quality, which is you can look at 15 to 90 delinquency rates, as we disclosed. Those have been stable now for a couple of quarters. So you can -- this suggests that the so-called normalization to pre pandemic risk levels may have run its course when you look at early delinquency indicators.

Now on the -- in contrast, when you look at 90+ NPL, that's a lag metric, and that metric is still in the process of catching up to what early delinquencies are showing. So I expect that, that just mechanically will continue to rise for the next couple of quarters as it cates up to what early delinquencies have already reached.

Jorg Friedemann: And our next question comes from the line of Mario Pierry from Bank of America.

Mario Lucio Pierry: Let me ask you the question on deposits, right? You showed that you continue to grow your deposit base at a healthy pace. But we saw a meaningful slowdown. I think it rose above $3 billion in the previous quarter and this quarter, it was less than $1 billion. At the same time, you changed the remuneration of your deposits. So I was wondering, has that impacted your ability to grow your deposit base? Clearly, we do see the benefits, right, of lower funding costs. But do you have any data that you can share with us what has been your -- the impact on your ability to grow your deposit base since you changed the remuneration of the accounts?

Guilherme Marques do Lago: Sure, Mario. Thanks for your question. So I think if you -- you're probably referring to Slide 17. And if you take a look at the slide, the apparent decrease in the velocity of our deposits from $12.6 billion to $13.3 billion stems mostly from the FX devaluation in the quarter. On a quarterly FX-neutral basis, so same FX, deposits would have grown $1.9 billion quarter-over-quarter, right? So it would have grown largely at the same pace as the prior quarter. So just wanted to flag that FX devaluation plays a role in the way that we present those numbers. So that's one thing.

The second thing is that, no, I think the changes to the NuConta remuneration to which you alluded has not had any impact so far in the velocity with which we are -- we continue to accumulate deposits. We have now done the rollout of the NuConta remuneration for a relatively small portion of our customer base, and we are doing no massive AB testing. We have not observed as of today any difference in any of the relevant KPIs, including the amount of deposits, including engagement, including NPS. We will continue to monitor this very closely going forward. And the speed at which we roll it out to the entire base will largely depend on those observations. But so far, we are quite encouraged by what we have seen.

David Velez-Osomo Just wanted to add very quickly on the deposit product. One thing that's important to consider is this was a project that we worked on over a year that had us a goal to ultimately create a better deposit product at lower cost. And part of the challenge was to redesign the product so that customers could have access to investment products that have higher than 100% CDI as we got to integrate a new investment product.

And so ultimately, what we're looking for is we should see an increase in deposit flow at a lower cost. That's at least our goal. The deposit product today is much better than two months ago as customers have access to a number of different functionalities. And so ultimately, we're -- it's very early days. We're still trying to monitor basically daily all those different metrics. But if things play out, that's where we're ultimately going.

Mario Lucio Pierry: Okay. No, that's clear. And let me ask a follow-up question, right? It has been asked already, about the NPLs and your risk appetite, you're diminishing the growth of personal loans. But I was wondering if you're making any adjustments on your credit cards. Are you reducing credit card limits? Is there anything that you're doing? Clearly, you're seeing -- even though you showed the NPLs are fairly stable, do you think it's more prudent to be a little bit more cautious on personal loans? Are you also going to be a little more cautious on credit cards? Are you seeing anything that worries you on the credit card book?

Youssef Lahrech: Yes. So just to address the question on our current stance in both credit cards and personal loans, I would say we're consistent across both. We're not reducing credit card limits at the moment. What we're doing is we're erring a little bit more on the side of building resilience. If you look at the unit economics chart for both credit cards and personal loans in the earnings presentation, that's basically what we're targeting at the moment in terms of returns, ROA, ROE, margins and resilience. So it's resulting in growth that is -- that has not increased as much, if you will, compared to prior time periods but is absolute levels of growth that are fairly stable, about $5 billion in personal loans we've added in the quarter, which has been consistent with the prior couple of quarters and about 5 million new customers, which is also consistent with prior time periods.

So we're basically taking a slightly more cautious approach in terms of resilience, but not really taking any drastic approach. We're not seeing any worrisome signs. And if you look at the delinquency metrics we went over, if anything, they show signs of stability in the early delinquency metrics. So it's more of an abundance of caution given the uncertainty in the environment looking forward, not necessarily based on anything worrisome that we've seen in the data so far.

Jorg Friedeman: And the next question comes from the line of Ashwin Shirvaikar from Citi.

Ashwin Vassant Shirvaikar: Congratulations from me as well. My first question is, obviously, your front-loading loan loss provisions is required. But your early delinquency indicators show stability, as you pointed out, in the 15, 90 range. And while the mathematical impact as it relates to NPL 90+ is there to see, I was trying to think ahead if you were to see continued stability in delinquency indicators, could you provide a framework for how to think of gross margins heading into next year?

Guilherme Marques do Lago: Ashwin, it's a good question. We believe, in general, even though we don't guide for next year or the next year, that there are two things that affect largely our gross profit margin. Number one is the velocity at which we grow our credit portfolio. Number two is interest rate moves. As interest rates go up, it somehow increases the -- both the numerator and the denominator of the formula and therefore, decreases the gross profit margin.

If you take a look at our cohort basis, the unit economics to which Youssef pointed out, we believe that once both of those things stabilize, we should get to gross profit margins around 60%, 6-0. But I'm not saying that this is something that we will attain in 2023 or 2024. It's basically that is the steady state gross profit margin of a mature cohort.

Ashwin Vassant Shirvaikar: Understood. And just staying on the topic of scaling. As I'm looking at the various operating expense lines, should we look at G&A as a primary source of operating leverage? Or are there opportunities in customer support and ops using automation and other techniques? Or I would imagine you probably want to continue increase marketing at a robust pace.
Guilherme Marques do Lago

Yes. No, that's a great question. And I think for the first time, we are providing one metric that we track very closely within Nubank with the evolution of our efficiency ratio with and without share-based compensation. I would draw your attention to Slide #20. You can see that since the beginning of last year, we have driven our efficiency ratios from about 90% to 58% if you include share-based compensation, or from about 70% to 50% if you exclude share-based compensation. We believe we are only at the beginning of this journey to get more efficiency. From where this efficiency will come from, I think it will largely come from two places.

First, our cost to serve is expected to remain flat at the dollar level, whereas our average revenue per active customer is expected to continue to expand as we have seen in the prior quarters. And secondly, our G&A will grow at materially lower pace than the growth that we will have in our gross profit and our revenues. In fact, if you take a look and you know -- dissect our G&A, you're going to see that between 50% and 60% of our G&A is driven by our head count and the velocity at which we're going to grow head count over the course of the next two years should be materially lower than the velocity at which we grew head count over the past two years. That should also be a fairly relevant boost to operating leverage going forward.

Jorg Friedemann: And our next question comes from Tito Labarta from Goldman Sachs.

Tito Labarta: My question is on the revenue side, showing very healthy ARPAC trends. Looking at the chart on Page 11, right, your more mature cohorts are around the $20 level, although it does seem to maybe beginning to peak. Do you think for the more mature cohorts, there's still more upside on that ARPAC?And then thinking overall on that chart, it looks like most -- in about another 30 months, a lot of your cohorts would be closer to that $20. Is that a fair way to think of it, that maybe 3 years or so, a lot of your cohorts should be close to $20 or even higher?

Guilherme Marques do Lago: Tito, we don't think that our mature cohorts have plateaued. We think there is still quite a lot of room for them to continue to expand. If you take a look at both -- what drives our -- the expansion of ARPAC, two things drive the expansion of ARPAC, product cross-sell and product upsell. And if you take a look, we are driving both upsell and cross-sell up quarter after quarter, including in our more mature cohorts.

The more mature cohort that you see on Slide 11, they show primarily the penetration of credit card and NuConta. The penetration of personal loans, investments, insurance and the large number of additional products that we will launch has not -- is not even close to where we think it will be. So there's a lot of cross-sell and upsell still to come. Just to give you an order of magnitude, the ARPAC of incumbent banks, the ARPAC of the retail operations of incumbent banks is estimated to be at $40, 4-0. We don't expect that we will get to $40 because a substantial amount of this ARPAC of incumbent banks comes from no fees that we will not charge. But there is still plenty of gap for us to close between our current average of $7.8 and the $40 of incumbent banks.

Tito Labarta: Great. That's very clear, Lago. And on the terms of the sort of total cohorts. Is like another 3 years a reasonable assumption for when those kind of begin to mature and get to the same level as your current mature cohorts?

Guilherme Marques do Lago: think in general, we expect to see the maturation of our cohorts to happen slightly faster of that of our older cohorts simply because if you are a customer of Nu today, you join an ecosystem with plenty of products that you didn't have if you had joined Nu five years ago. So the ability for you to consume more products is much higher and greater today than it was three, four, five years ago. And therefore, the speed with which, the monetization happens over the next two years should be slightly faster than the speed with which we saw over the past three years.

Tito Labarta: That's great. That's very clear, Lago. And can you say the same thing, I guess, about the primary banking accounts that are around 55% and keep the newer cohorts getting there much faster? Would that be upside as you introduce these additional products as well?

Guilherme Marques do Lago: think the upside, the primary banking relationship, we do expect that it will continue to go up. I personally believe, however, that the upside from product to cross-sell and upsell is even more pronounced than our getting marginally more primary banking relationship, even though both trends should continue to grow and compound.

Jorg Friedemann: And our next question comes from the line of Neha Agarwala at HSBC.

Neha Agarwala: Congratulations on the results. Thank you for the additional disclosures. I think it's very helpful.I was looking at your chart which you showed the NPL metrics under the previous methodology. And in that, we see that the NPL ratio was up 120 basis points quarter-on-quarter, of which product mix explains about 60 basis points. So there seems to be some worsening in terms of asset quality. Is that one of the reasons why you're kind of being more conservative and cautious in terms of asset quality? If we keep the previous methodology, was the deterioration in line with what you had anticipated?

Further on this, you mentioned that the change in methodology is more in line with the other global fintechs and what they follow. What do you see the other players in Brazil, what kind of methodology do they follow for personal loans? And what is -- what do you think would be the average for the system if you want to compare your numbers with that for the system as a whole? What would be the right way to do that?

Youssef Lahrech: Neha, thanks for the question. So let me try to address your questions in turn. So in terms of the trend and the quarter-on-quarter movement in the NPLs. You are correct in that if you look at 90+ under the previous write-off methodology, which was provided in the appendix section, there was an increase of about 120 basis points nominally and it would have been around 60 basis points in a constant product mix scenario. The reality, as I think you were alluding to, is that's pretty much expected. If you look at the left part of that slide, you look at 15 to 90 in -- a quarter ago, that metric actually went up by a similar -- around 110 basis points nominally and around 80 basis points mix adjusted. So basically, what the 90+ movement reflects this quarter is just the mechanical impact of what already happened a quarter or so ago in 15 to 90. So it's not unexpected by any stretch of the imagination.

Now you were also asking about the write-off methodology and how it compares to other players in Brazil. I can't personally comment on any specific methodology of other FIs or fintechs in Brazil. I think there are some players that I know follow Brazilian GAAP rules, which is distinct from IFRS 9, which is the regime that we follow. Some of them have 360-day write-offs. But you have to put that in the context of the kind of portfolios that they run that generally tend to be longer maturities, more secured. So it's not necessarily an apples-to-apples comparison.

Neha Agarwala: Perfect. And if I can follow up on the credit card receivables. I think the interest-bearing portion of the credit card is now higher, as you showed in one of your slides. Should we expect that to continue rising further? Or should we expect some sort of stability there? And I think you mentioned previously that this is mostly being incentivized, it's driven by you, and you are not seeing any worsening in terms of people not paying or more people being late in the credit card payments. Could you confirm the trend?

Guilherme Marques do Lago: Thanks, Neha. Yes, I think you were referring to Slide #15, in which we showed the interest-earning portfolio of our credit card against the market. And yes, I think both of your assertions are correct. We have increased our interest-earning portfolio over the past 4, 5 quarters mostly as a result of actions that we have taken and things that we have incentivized, more specifically the launching of new financing products and new financing features. With our credit cards, you can basically finance specific purchase. You can finance boletos, which are called now bank slips. You can now also finance fixed transactions. So we have been adding those features that allow our customers to basically finance a greater number of their transactions and hence, foster the increase in IEP.

Now even by doing so, we are still quite behind the average of the Brazilian market. We started, I believe, a year ago being about 50% of the market. Now we are around 60% of the market. We expect to continue going up. We don't guide, and it's very hard for us to be more precise on if and when we're going to catch up with the market. But we do expect this to go up over the course of the coming years; not necessarily coming quarters, but coming years.

To your second question, which is, is the increase in IEP a sign of credit degradation. Our observation, given the AB testing that we have done, and we've done a few control groups, is no, is that most of the increase in IEP comes from our launching new financing products, not necessarily as a signal of overall credit degradation in our books.

Jorg Friedemann: And our next question comes from the line of Eduardo Rosman from BTG Pactual.

Eduardo Rosman: Congrats on the numbers. My question here is just trying to think about your potential future profitability, right? You showed two very interesting graphs in your presentation that show the potential or the expected ROE for your credit card and personal credit at around 80% and 100%. When we look to Itaú's results, right, naturally, Itaú is very different from Nu, right. But Itaú's perceived as the premium retail bank in Brazil. They break it down, the retail and the wholesale units. And the retail units used to deliver a 30% ROE in the past, then that went down to 20% and now it's at 16% because it has been suffering, let's say, from higher provisions.

So just trying to think about here is do you think trying to look to that metric, it's a good one? Not as such the 16%, but trying to look how much, let's say, a leading kind of a retail bank is delivering in retail is a good metric for us to follow. I know that you mentioned that your ARPAC is going to be smaller than the big banks, but you're going to be more efficient as well. So just trying to think here about how you think about the business and that comparison.

Guilherme Marques do Lago: [Rosman], thank you for the question. Look, it's very hard for us to provide you with a specific number or reference. However, I would discourage you from eventually anchoring the profitability of our business in the profitability of an incumbent bank. However well run this incumbent bank may be, we just believe that we have been, with digital banking, redefining a new category in which we will have a completely different cost base of an incumbent bank and also a completely different revenue stream of an incumbent bank to a large extent. Of course, we still believe that we will have consumer finance as our core.

But if you take a look at our four cost pillars, cost to acquire, cost to serve, cost of risk and cost of funding, and we see the examples of other digital banks around the globe that have also started with consumer credit, they have been able to obtain levels of profitability and returns materially higher than those of incumbent banks in the markets in which they operate, even in markets that have substantially lower NIMs than Brazil

So I wouldn't necessarily compare our target profitability with those of a local incumbent bank. And of course, we will try to gain the game or win this game on the cost base. We believe that the winners in the long term in Latin America will be the lowest cost producers. And we will -- we want to be, as David mentioned, the lowest cost manufacturer in the banking industry in Latin America.

David Velez: David here. Just to add one point here to Lago's answer. The way we think about our balance sheet and our capital is -- at scale, has been a generally small balance sheet that dedicates its capital to extremely high return on equity operations. And so when there are financial products that we think are below a certain narrow threshold, we'd rather be a distributor that a manufacturerSo for example, we have some partners -- we have a partnership with Creditas where we do secure lending and secure lending for auto and for home. In those type of situations, we rather become a distributor that maintains that high ROE on capital versus being a manufacturer ourselves, which is different, I think, that the model that a lot of the banks in Brazil follow where you -- in that ROE for retail that you look, you see a weighted average of a number of different retail businesses that have different types of ROE. So I think it's important to mention that we want to continue to maintain a strategy of capital efficiency, where we'll be very disciplined on how that capital gets allocated and have the possibility to be both a distributor as well as a manufacturer.

Jorg Friedemann And our next question comes from Jamie Friedman from SIG.

James Eric Friedman: Lago, in your answer to, I think, Thiago's previous question on Slide 11, I think you inferred that the number of products per active customer is, in your opinion, more important than the primary banking account anchor. I'm just curious why you view it that way and -- well, if you view it that way. And if you didn't say that, I apologize. But if you do, why you think that's the way to look at it.

Guilherme Marques do Lago: Jamie, I think from where I was coming is if you take a look at the product penetration that we have across our customer base, you largely see that we have, I want to say, about slightly more than 60% of our customers with credit card, slightly more than 80% of our customers with bank account, but about 5% of our customers with personal loans. We have no -- an even smaller portion of our customers with crypto, with marketplace, with insurance. So the potential that we have to claim what we call to be our fair market share in each of the product verticals we operate is largely going to bring a materially bigger gap in value creation than eventually our ability to take the primary banking relationship from 55 to 65. That is what we want to -- that is more of the magnitude that I wanted to convey.

However, there is, in fact, a very strong correlation between you being a primary banking customer and the ability that we have to cross-sell more and more products to you. So I'm not saying that primary banking relationship customers is not a fairly critical KPI. I was more drawn into the material product penetration that we still have to acquire across each of the verticals that we already have, not to mention the new verticals that we will be launching in the coming quarters and years.

James Eric Friedman: Okay. That makes sense. I follow now. And then also, Lago, I think in your prepared remarks, you said, and I may have written this down wrong, that similar levels of origination lead to slower growth rates because of replenishing the amortized loans. I was just wondering if you -- if that's right, if you could be more explicit about what you meant there. Do you mean the growth in percentage terms?

Guilherme Marques do Lago: Yes, growth in percentage terms. And I would draw, Jamie, your attention to Slide 35, which basically shows the evolution of our credit portfolio on an FX-neutral basis. And the underlying thesis there is that our credit portfolio has a very low duration. The weighted average life of our personal loan business has -- is about 6 to 7 months. So there is a volume that we need to originate every month just to replenish the personal loan that is being repaid or prepaid every month. That is what I meant when I made that remark.

Jorg Friedemann: And our next question comes from the line of Geoffrey Elliott from Autonomous.
Geoffrey Elliott

You touched on the benefit to funding from the change in deposit pricing that you announced. Can you elaborate a little bit on that? How significant do you think the benefit can be?
Guilherme Marques do Lago

Geoff, it's very hard for us to provide any indication. We are in the very early days of deploying this in our base. We have deployed this to about 5, 7 -- 5%, 6% of our customer base as of today. We will probably have to track this over the course of the next coming quarters to be able to provide with a more well-grounded estimate for you.

Geoffrey Elliott: that change and assume there were no changes in customer behavior, so customers didn't use the money box option, for example, can you give us a sense, without changes in customer behavior, what the impact would have been if you had used this new pricing, say, in the second quarter?

Guilherme Marques do Lago: We don't have that information, Geoff, as we believe that it's very hard for us not to foster a change in customer behavior with the money box. In fact, we've already seen customers using money box quite extensively even for the relatively small number of customers that we have today in our base. We believe that, as David mentioned, that it will be perceived by customers as being an all-in combo of offering that it's even stronger and more compelling than the one that we had before. We will offer, on one hand, a money box through which you can have access to investments that will have targets above 100% of CDI.

On the other hand, you will have kind of your NuConta account that will yield 100% of CDI for the money that you leave there for more than 30 days. So the combination will ideally be perceived by customers as much stronger than what we have today. So really hard for us to come up with an estimate at this point in time as to what is going to be the decrease in funding. We do expect to see a decrease in funding costs the magnitude of which remains quite uncertain. We will come back to the market with our observations over the coming quarters.

Jorg Friedemann: And our next question comes from the line of Alexander Markgraff from KeyBanc. Alexander Wexler Markgraff

I wanted to first follow up on the question around portfolio growth. Just curious what you need to see to kind of remove some of the caution that you've recently introduced in the underwriting practice. Either on the macro front or customer specific, just what would cause you to remove some of that caution that's been introduced?

Youssef Lahrech: So I would say there's several things that we would -- we're looking at day in and day out. One category of things is certainly the performance of our cohorts in terms of returns, in terms of delinquencies, some of those metrics you see in the earnings presentation. But I would say there's also a qualitative consideration in terms of how much uncertainty we have in the environment going forward, both on the sort of macroeconomic but also political landscape and so forth.
And so it's hard to give you a sort of formula. If we see X,Y and Z, then we'll step on the gas more. And if we don't, we'll step on the gas less. So it's a little bit of a preponderance of evidence that we're looking at, both backward-looking and forward-looking.

Alexander Wexler Markgraff: Okay. That's helpful. And then just one question around the activity rate. Just curious how you all think about the upper bound of this metric. There's obviously been some really nice progress and imagine that continues as customers take on more products. Just kind of curious what you see as kind of the upper bound of that metric here.

Jagpreet Singh Dugga: This is Jag Duggal, Chief Product Officer at Nu. I think there are a few things to say about that. As Lago mentioned during some of his remarks, we see great momentum in customer adoption. We don't see that plateauing in the short term, and we have newer cohorts that are adopting at a much faster rate.

At the same time, we have really focused over the last couple of years on building the infrastructure to allow us to launch products at a greater velocity. So in H1, we launched several high potential products to extend our franchise. David mentioned crypto investing. We launched a credit card product for our (inaudible) or small, medium enterprises. We launched mobile phone insurance. We launched NuPay, so buy now, pay later products and fixed rails. We launched the money boxes, which Lago and David have talked about. We expect that product momentum to continue.

So we're not at the point where there's a fixed number of products for customers of Nu to continue to adopt, and then we run out. We're continuing to expand that frontier of new products. And so even as customers adopt the products we've already launched, we're going to continue to push that out. So we see a lot of potential and momentum as we continue to deepen.

David spoke in his opening remarks about the success we've had in the 4 new verticals in the 2 new countries that we've been launching over the last 2 to 3 years. We are now -- we're now working very hard on deepening the number of insurance products, the breadth of investment products, the number of lending products, the full suite of small and we're sort of working on both fronts, the adoption of what we've launched and the continuing acceleration of launches over the next 6, 12, 18 months.

Jorg Friedemann: And our last question comes from in Eugene Simuni from MoffettNathanson.

Eugene M. Simuni: I wanted to ask about user growth. Obviously, an impressive number again this quarter with 5.7 million added and in Brazil, you said 36% of the adult population. So I'm just wondering where your incremental users, especially in Brazil where you're getting quite saturated, coming from, how much success are you seeing in the cohorts that maybe you have not addressed before. Maybe you can talk a little bit about your success in penetrating kind of older, more excellent cohorts and where do you go from here to sustain this kind of user growth.

David Velez-Osomo: Sure. Thank you for the question. So the way we like to think about the addressable market for Brazil specifically is starting with the addressable market for the most popular financial services product that exists in the country, which is payments. So that really is PIX. And the way PIX is developing, we've effectively seen a few years, everybody from, let's say, 7, 8 years old to 90-plus will have an app with smartphone users in PIX. And we think that ultimately means it's an addressable market of something like 170 million Brazilians that will be connected with a smartphone paying for absolutely everything, paying people, paying businesses and being a really integral part of their life.

So we have 45 million active NuContas, and the addressable market there is 170 million. And by the way, a lot of times, customers don't necessarily only have 1 app, they might have 2 or 3. So you actually end up seeing something like 600 million or 700 million accounts, which means there is still a lot of growth ahead, even for us in Brazil. We have this proportionate market share on PIX. What we're focused on, usability, on transactionality, on really providing the best user experience has allowed us to gain a very significant market share on PIX and that continues to grow.

Part of that, also to some previous question, is what explains the increasing activity rate that you're seeing around increases. They also explain the increasing primary bank accounts. So a lot of these metrics end up being very much correlated with each other. And so we think we could literally double or even more our customer base in Brazil, starting with a payment product. And that is the first product eventually, we really diversify across the entire financial services space.

So it's still a very large addressable market to grow into, that's Brazil. And really Mexico, Colombia, we're in the early stages. And while we've said we are hyper focused on these 3 countries over the next few years, over a longer period of time, we might go beyond. So from a customer perspective, still a lot of growth.

Eugene M. Simuni: Got it. Got it. And I actually wanted to follow up on PIX with my other question. There were some headlines that recently the Head of the Central Bank kind of making this -- the prediction that PIX will eventually lead to elimination of credit cards, I'm sure that's a longer goal in the future. But was curious to hear your guys' thoughts on that sort of competitive dynamic between PIX and your card business, how you're seeing that evolving and how much of a threat do you see that to your card business.

David Velez-Osomo: Yes. So we very much agree actually with that statement. That's something we've been saying for a long time. I even compare the physical credit card to Netflix sending physical DVDs to people's homes and eventually a migration towards a full streaming that's effectively digital payments in Brazil. So we think that's true.

We've started our strategy to use payments in a number of different payment rails like PIX to start diversifying away through credit cards. So while you see, for example, in some of the products that w have a BNPL through a company we bought called Spin Pay, we are now enabling a number of merchants to pay via BNPL or PIX at checkout. Then we announced this quarter credit on top of PIX. So eventually, this is becoming an alternative to the credit card rails. We think that there might be some potential cannibalization of, first, probably debit then eventually credit, but the addressable market size increases significantly. So ultimately, we are happy to cannibalize ourselves. We're happy to skate to where the puck is going. And we think that, ultimately, a lot of it is digital payments. But it's probably going to take a number of years to get there, just specifically on credit card. As credit card itself has other usability like international payments, like payment in installments that PIX still hasn't really enabled. So we'll be working on a number of different scenarios, but we absolutely think that the puck is going in that direction.

Operator: The Nu Holdings conference call has now concluded. Thank you for attending today's presentation. You may now disconnect