# Nebraska Capital - Third Investment Report - March, 2016

Our recently issued annual letter to shareholders has covered in depth Nebraska`s results to date and our mindset for the future. Thus, in these reports, we will keep focused on our investments. Because of our large commitment to banks, this edition will focus solely on them. Given the economic turmoil, we believe the theme requires some pages so that our readers can understand our thoughts. Still within this semester we will issue another report covering our other largest holdings (Equatorial 15.3%, Cemar 8.5%, and Vivo 7.8%), which have not changed.

**Itaúsa (36.3%) and Bradesco (6.9%):**

Note: We invest in Itaú through Itaúsa because of the holding discount. Itaú's numbers are used here as it is our major investment, but most of what is valid to Itaú is also applicable to Bradesco (in some cases to a minor, others higher, extent). We did not want to overextend this letter, but, upon request, we can send you an additional text and some tables covering our studies about Brazil's banking system - it begins with a historical background, passes through loan portfolios for the major banks and market shares since the early 2000's, and hopefully, by the end, gives the reader a nice view of the current state of the system and the role played by each major bank.

The same initial phrase from our investment report for 2015's first half still applies: Itaú's results have brought us no surprises. Defaults are rising all across the loan portfolio and management has given a guidance for net earnings to fall a good deal in 2016. The table below shows the major numbers.

| Itaú - financial highlights (R$ million) | 2014 | 2015 | 2016 - Mngt guidance |
|---|---|---|---|
| Credit portfolio (with guarantees) | 559,694.00 | 585,504.00 | |
| growth | | 5% | -0.5 to 4.5% |
| Allowance for loan losses* | (26,948.00) | (34,078.00) | |
| % of credit risk | -4.8% | -5.8% | |
| Equity | 95,848.00 | 106,462.00 | |
| Core capital Basel III fully loaded | | 13.6% | |

* Includes 2015's nun-recurring provision of R$4.6bi charged against a gain in Deferred Taxes.

| | 2014 | 2015 | 2016 - Mngt guidance |
|---|---|---|---|
| NIM | 55,155.00 | 66,557.00 | |
| With clients | 51,560.00 | 59,580.00 | |
| spread | 10.3% | 10.9% | |
| growth | | 16% | 2 to 5% |
| With market operations | 3,595.00 | 6,977.00 | |
| Loss allowance expenses, net of recoveries | (13,023.00) | (18,129.00) | (22) to (25)bi |
| growth | | 39% | 21 to 38% |
| NIM After credit losses | 42,132.00 | 48,428.00 | |
| With clients | 38,537.00 | 41,451.00 | |
| spread | 7.3% | 6.9% | |
| growth | | 8% | - 2 to - 14% |
| Service revenues + insurance | 31,562.00 | 34,696.00 | |
| growth | | 10% | 6 to 9% |
| Non-interest expenses | (38,483.00) | (41,886.00) | |
| growth | | 9% | 5 to 7.5% |
| Taxes on revenues | (4,856.00) | (6,056.00) | |
| EBT | 30,355.00 | 35,182.00 | |
| growth | | 16% | |
| Net income | 20,619.00 | 23,832.00 | -10 to -25% |
| ROE | 24.0% | 23.9% | 16 to 19% |

At Nebraska, we waste little time (usually none) trying to forecast short-term results; but the 2016-column is here for four reasons: (1) 2015's results and our favorable long-term views for the bank would fail to support the paragraphs below that address the prospects of the bank in a challenging economy; (2) the numbers highlighted in stronger gray, along with the next table, help us understand the actions management is taking; (3) the short-term ROE forecast is a basis for our ending paragraphs; and (4) we have spent no brain cells doing that, as it came from management's guidance.

We are not surprised by our banks' profits to fall significantly in an economic environment as Brazil's current one. But this does not mean we overlook the fact; to the opposite, our energy is mostly dedicated to understand what is happening with our companies and, thereby, gain insights over their long-term prospects. Brazil's banking system has faced hard times before, but, with its current penetration (as % of population and SMEs served) and leverage (debt to GDP) levels, it has not yet passed through a serious crisis, and, even if it had, the outcome of a new one would be far from certain - we do acknowledge the risks. Nonetheless, by deeply studying our banks and their competitors, we can visualize outcomes in a range that is not so wide as to take our sleep.

Specifically at Itaú, we shall first look at its credit portfolio evolution:

| Average loans in Billions R$- IFRS data | 2011 | 2012 | 2013 | 2014 | 2015 | cagr 2011-15* |
|---|---|---|---|---|---|---|
| Corporate (Revenues > R$300.00 million) | 83.27 | 97.85 | 115.07 | 135.66 | 137.96 | **15%** |
| % provision for loan loss before recoveries | 0.3% | 1.2% | 0.8% | 1.3% | 5.5% | |
| SMEs | 82.80 | 85.42 | 83.39 | 80.76 | 79.24 | **-1%** |
| % provision for loan loss before recoveries | 10.0% | 10.7% | 5.5% | 5.3% | 4.7% | |
| Payroll and mortgages to individuals | 20.28 | 28.04 | 39.53 | 58.35 | 74.93 | **39%** |
| % provision for loan loss before recoveries | 2.5% | 2.9% | 2.0% | 0.8% | 1.2% | |
| Credit cards and unsecured loans to individuals | 57.51 | 66.06 | 73.53 | 83.53 | 87.11 | **11%** |
| % provision for loan loss before recoveries | 14.0% | 15.1% | 12.9% | 12.3% | 12.6% | |
| Auto loans to individuals | 60.31 | 56.05 | 46.12 | 34.82 | 24.55 | **-20%** |
| % provision for loan loss before recoveries | 4.5% | 4.7% | 4.9% | 4.2% | 2.8% | |
| Latin America | 16.39 | 23.20 | 31.70 | 38.96 | 59.55 | **33%** |
| % provision for loan loss before recoveries | 1.8% | 0.8% | 0.9% | 1.4% | 1.1% | |

*In 2015 management moved R$8.00 billion from Corporate segment to Latin Am. CAGR is adjusted for that.

1- Corporate:

For more than ten years until 2015, this group had charge-off ratios below 1%. In 2011-12, when (as discussed in our previous letters) government controlled banks brought powered competitive pressures and Itaú began to see signals of weaknesses in the economy, management decided to go for the safer loans; and, with such a 10-year record, the ones to large companies fit perfectly. Researching the industry, we also find that credit spreads on these loans had been falling. And it is no secret that Itaú's management had been given more and more attention to its investment banking arm (BBA), in which fee based revenues often come along with large credit commitments - and aggressive bankers.

Surely, the exposure to large conglomerates (some involved in corruption scandals and some simply overleveraged), has finally translated into much higher credit losses. After this year's charge-offs of R$4.30 billion, the segment still has a 4% allowance to loans, besides part of the R$10.00 billion Itaú carries as "surplus-allowance". 2015's loss ratio does not make these loans riskier - it just shows that their risk was higher than previously thought. Nonetheless, over the long-term, this portfolio is still amid the ones with lowest loss ratios for the bank; after all, corrupt or overleveraged companies won't dominate a diversified R$140.00 billion portfolio written by a bank whose managers and controllers have much skin in the game - and these loans are usually secured by business assets. No one, especially from outside the bank, can know the ultimate size of charge-offs in this crisis; it may be relevant indeed. But we don't think Itaú's problem (in relative terms) will differ much from that of its peers, because of the right incentives and the industry's concentration.

2- Small and middle market companies:

Itaú, as its peers, grew strongly in this segment until 2011, but since then the strategy has changed dramatically. These are short-term loans. Charge-off rates here are really high and recurring (which we see as a good fact, as long as the bank has discipline and pricing power). In real terms, this portfolio has fallen about 30% since 2011, and has gravitated towards larger and safer clients. Loss ratios confirm this movement; although, with the current economic crisis, we think they are likely to rise in the short-term.

3- Loans to individuals:

We have discussed Itaú's strategic choices regarding loans to individuals in our first investment report. The table shows that, in the last years, the bank has focused on payroll credit and mortgages, which are secured by wages (public employees or pensioners) and homes/apartments (average LTV of 44%). In addition, auto loans are now constrained to clients with much less risk and similar changes have recently occurred in policies for credit cards.

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Coming back to the first table (we hope so many numbers will now begin to make sense), we can see that NIM with clients, after provisions declined from 7.3% to 6.9% in 2015; NIM grew 16%, whereas provisions rose 39%. From the second table we get that the discrepancy came from a surge in losses with large companies. For the near future, management shows that the discrepancy should augment, in other words: the bank is likely to see loan losses spike again (probably across the board this time) without an accompanying rise in net interest margins. If you are a reader of our letters, you may be wondering how is that possible? Isn't Brazil's banking system so concentrated and aren't the public banks facing so much trouble that competition would become lighter?

Competition is indeed getting lighter; according to the Central Bank, spreads in free-funded commercial loans have risen from 11% to more than 15% between 2013 and 2015, and from 25% to more than 45% for personal loans in the same period. In addition, non-interest revenues are rising at a good pace while banks are cutting the number of clients and credit cards they serve in order to push risk back.

The explanation for compressing margins (after loss provisions) is in the second table: Itaú's credit portfolio is moving towards loans with structurally lower loss ratios. But that does not mean loss ratios will necessarily fall in the short-term - this depends on macro-economic factors that managers cannot control. We, as long-term shareholders, appreciate what they are doing over what they can control: instead of rolling over the problem, keep charging high interest rates and booking profits from clients in trouble, they are reshaping the portfolio, strengthening the balance sheet, and living with a short-term misbalance between a lower-risk-lower-NIM portfolio and loss ratios still reflecting both part of the older loans and the crisis.

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Credit losses behave with widely different degrees of variance amid different loan portfolios. Usually, the lower the average losses over a very long period, the wider the spread between the lowest and the highest loss ratios that we will see over the long-run. Take commercial real estate loans in American banks for example: long-term average losses are likely between 1% and 2% for most banks as they lend against buildings with tenants, cash flows and excess collateral value. In many banks, losses are actually zero for most years. But when losses come, they don't rise by 50% or 100%, they usually jump from almost zero to 3%, 5%, or even 10%, as happened during the last crisis. Moreover, these are mostly long-term loans with amortization schedules that leave little room for adjustments (either upwards in spreads or by stretching maturities), through which banks could protect themselves. No wonder why many American regional banks, with little alternatives besides real estate loans, failed in 2009.

On the other side, even during the turmoil in 2009, credit card losses for companies like Capital One and American Express "just" doubled. The industry pushed spreads and net-non-interest-income higher, and most players (like these two) still made good profits. After all, losses were already running at about 3-4% annually and the business is structured to generate profits before taxes and losses high enough to pay for elevated credit losses every year.

Neither a portfolio with a high, nor one with a low variance is intrinsically better than the other. Profitability over the long-term depends on specific competitive forces that vary across regions, time, etc. But, banks must be ready to survive surprises, just as Berkshire Hathaway should eventually survive high losses in its reinsurance business. As owners of Itaú and Bradesco, we must think about drastic scenarios for loan losses and whether those could rise high enough as to cut into our banks' regulatory capital, forcing them to raise equity at discounted prices; after all, apart from large frauds and derivative bombs, the just mentioned situation is what leads retail banks to fail. (At least regarding their common stock shareholders.)

We now look at some fundamentals that in our opinion give Itaú a very high chance of passing through most severe crises without major wounds.

1- Liquidity is abundant: the following table speaks for itself. Assets Under Management in Brazil are mostly comprised of clients' cash which usually the bank, rather than the client, opts to direct to out-of-balance funds in which it charges good fees. Needless to mention, equity capital is also abundant as shown in the first table (page 1).

| **Funding from clients** | **2014** | **2015** |
|---|---|---|
| On balance (R$ billion) | 447.22 | 480.68 |
| AUM | 480.00 | 570.00 |
| Total | 927.22 | 1,050.68 |
| growth | | 13% |

2- Profit before taxes and provision for loan losses (PTPP) is ample and supported by "non-risk" businesses.

| **Itaú - Segments Net income R$billion** | **2014** | **2015** |
|---|---|---|
| Services and insurance* | 10.50 | 12.90 |
| ROE | 40.5% | 43.2% |
| Credit and trading | 10.00 | 10.20 |
| Excess capital | 0.10 | 0.80 |

* Largest contributors are insurance (R$2.8bi), acquiring (R$3.2bi) and funding/cash management.

| **In R$ billion - 2015** | **Itaú** | **BB*** |
|---|---|---|
| A - PTPP | 53.31 | 37.00 |
| B - Provision for loan losses | (18.13) | (20.95) |
| A/B | 2.94 | 1.77 |
| ROE | 23.9% | 13.0% |
| Basel III Core capital** | 13.6% | 8.2% |

* Banco do Brasil (government controlled)
* PTPP Adjusted for minorities` share in subsidiaries.
** Itaú is fully loaded, BB is not.

Itaú's credit portfolio is diversified and geared towards low-loss-variance loans enough as to give us peace of mind regarding the bank's PTPP-power to surpass drastic scenarios (much worse than what management draws for 2016). But don't get us wrong, losses occasionally rising by a factor of 2, or even 3, times is still a possible scenario in this discussion.

All that said, we move to the next question: given all the uncertainty, Brazil's issues, etc., is Itaú a good investment at current market prices?

Itaú's market capitalization (through the holding company we own) is 1,5x book value. Listening to last quarter's earnings call (when the market cap was around 1,2x), the discussion over ROE and "cost of capital" has really amazed us. It seems analysts have a consensus that Itaú's ROE will be about the same as its "cost of capital" in 2016 - and from that it seems to follow that the bank is worth about the same (or just a little more) than its book value. All of this hits so hard in our minds that we have to make a few comments.

First of all, we are not here to forecast near-term stock prices, but rather to have our money in companies that will deliver superior long-term results. Thus, we need to take a step back and think over what makes a company deliver those results. Well, it is simple, it is in the textbooks: competitive advantages. If a company has them, it should deliver returns on employed capital above those commonly available in the economy in which it operates. Given that our job is to allocate our clients' (and our) money to deliver good returns in real terms in Brazilian Reais, it follows that, especially for businesses in which tangible equity plays a major whole, we need not worry about trying to pinpoint numbers for ROE or "cost of capital"; we just need to identify the superior companies, and to avoid overpaying for them. This conclusion is not valid just in case the playing field (the country's economy) is severely impaired for decades (like Venezuela's) - in which case having assets in the country (either in fixed or variable income) is a lost battle.

We will not spend much time arguing over Itau's strengths, just saying that its clients are no less captive today than in the past 20 years, that would-be entrants face no lower barriers, and that present competitors are no stronger (perhaps the opposite as BB's numbers above show) should suffice. Since 1997, Itaúsa, through dividends and equity growth, has delivered an annual return of 25.2%, versus 14.7% for the CDI (risk free interest rates). In real terms those numbers would be 17.5% and 7.7% respectively. Each R$100 invested in Itaúsa in 1997 would have would have become R$5,732 in 2015, whereas the CDI would have grown to R$1,185. Even if Itaú's relative superiority falls a lot, it is certainly still worth much more than book value - regardless of whether its short-term ROE will be higher or lower than a theoretical "cost of capital", which we cannot even understand.

In fact, if you calmly ask a "market analyst" and somehow gets him to think slowly before answering, we believe he or she would agree that, over the long-term, Itaú is worth much more than book value. It is just the way the financial industry forces them to do their jobs that disturbs the outcome.

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Finally, to close on Itaú we must mention a particular source of risk. The bank is controlled by two entrepreneurial families and managed accordingly. When its mangers see a strategic path they go for it decisively - this is clear in the reshaped focus towards lower-risk operations since 2012, such as the R$11.75 billion acquisition of 50% of Redecard (which brought us nice results), and in the advance towards corporate loans through Itaú-BBA (perhaps with misleading premises). Overall we like both this alignment with controllers and managers' willingness to do what is needed -  they are also decisive to acknowledge mistakes and act to correct them.

The bank, nonetheless, is now flirting with more relevant ventures outside of Brazil. Financial analysts (usually a bad source of tips) argue that one possible solution for Itaú's "troubles" (as if a low market capitalization were a trouble) would be to have more exposure to some Latin America countries, like Chile, in which ROE is higher than "cost of capital" and growth is strong. To begin with, we think advancing abroad is quite different from making sharp movements within Brazil where both the competitive position and the management team's expertise are very strong.

Itaú already has about 10% of its equity in Latin America, the most relevant country by asset size being Chile, where a merger with the local CorpBanca is about to get completed. Itaú will put an additional US$650.00 million in the merged company and will have slightly more than 1/3 of the business, with controlling power because of an agreement with CorpGroup, which will also own 1/3 of the shares. The new CorpBanca will have about 1/4 of its loans and slightly more of its profits in Colombia (in case it succeeds in buying all the local's 1/3 minority shareholders for the same price it is paying for CorpGroup's minority interest in that subsidiary). Itaú has likely paid a high price to get scale into those markets - Latin America will comprise 20% to 25% of the banks consolidated credit portfolio after the merger. So far the additional equity exposure is relatively small, but CorpGroup has *put options* that may lead Itaú to deploy more capital into Chile in coming years. In addition, consolidating a more levered bank will be detrimental to Itaú's Basel III ratios.

Banking in Chile is quite different from banking in Brazil. Retail banking there is far less developed and private pension fund entities are strong competitors. Both Itaú-Chile and CorpBanca are relatively new entrants to the retail market - most of their assets are still in loans to large companies, funding comes mostly from large clients/institutions, loans surpass deposits, credit losses have been very low for more than a decade, and ROA cannot get much beyond 1%. In summary, a really different bank from what we have as shareholders in Brazil.

Someone could steal 10% of Itaú's equity tomorrow that we would still be happy with its stock price, but we would not be fine about management making bad decisions in sequence (especially for non-sense motivations). We still don't have a settled opinion over whether the advance in Chile is good or bad, and we have not seen Itaú's management act because of short-term pushes from financial markets so far. Nevertheless, it is our job as shareholders to understand all developments in the company, and to keep an open mind. This necessity reflects our businesslike approach, and, the more we think through it, the clearer we see that we must only commit capital to companies which we will be eager to follow closely for decades; after all, things can change.

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Just as we were finishing this report, Berkshire Hathaway released its 2015 Annual Report. Buffett's letter has a few words about risk worth sharing:

*"It's understandable that the sponsor of the proxy proposal believes Berkshire is especially threatened by climate change because we are a huge insurer, covering all sorts of risks. The sponsor may worry that property losses will skyrocket because of weather changes. And such worries might, in fact, be warranted if we wrote ten- or twenty-year policies at fixed prices. But insurance policies are customarily written for one year and repriced annually to reflect changing exposures. Increased possibilities of loss translate promptly into increased premiums.*

*Think back to 1951 when I first became enthused about GEICO. The company's average loss-per-policy was then about $30 annually. Imagine your reaction if I had predicted then that in 2015 the loss costs would increase to about $1,000 per policy. Wouldn't such skyrocketing losses prove disastrous, you might ask? Well, no.*

*Over the years, inflation has caused a huge increase in the cost of repairing both the cars and the humans involved in accidents. But these increased costs have been promptly matched by increased premiums. So, paradoxically, the upward march in loss costs has made insurance companies far more valuable. If costs had remained unchanged, Berkshire would now own an auto insurer doing $600 million of business annually rather than one doing $23 billion.*

<u>*Up to now, climate change has not produced more frequent nor more costly hurricanes nor other weather-related events covered by insurance. As a consequence, U.S. super-cat rates have fallen steadily in recent years, which is why we have backed away from that business. If super-cats become costlier and more frequent, the likely – though far from certain – effect on Berkshire's insurance business would be to make it larger and more profitable."*</u>

Just as insurance companies, banks manage risk for society. And just as for insurers, the higher the perceived risks, the better for banks' profitability - as long as their balance-sheets are managed to withstand steep changes in default levels. In fact, we, at Nebraska, fear more calm waters, when credit policies and pricing assume ever-lowering risks, than troublesome storms, when risks are exposed. By the underlined phrases, Buffett seems to do the same.

We appreciate your attention,

Nebraska Capital — March 2016