

Nebraska Capital - Second Investment Report - September, 2015

As said in our first Investment Report last April, this second and subsequent ones are going to focus on our main holdings and significant changes to either our portfolio or *modus operandi*. Thus, in this edition we will have some detailed comments about Itaú and Bradesco (a recent addition). Another section will cover Equatorial and its public traded subsidiary, Cemar, given the greater relevance these companies combined attained in our portfolio. Then, we will comment on our milestone decision to drastically decrease our investments in Gerdaul and ALL-Rumo. And finally we will briefly share some thoughts on Vivo and taxation changes.

*Note: We have not defined a periodicity for these Reports. We may write between two and four annually depending on having worthwhile topics.

1- Itaú (34.8%) and Bradesco (6.6%):

Itaú - financial highlights	1S14	1S15	Variation	Variation - %
NIM	26,081.00	32,198.00	6,117.00	23.5%
With clients	24,586.00	28,765.00	4,179.00	17.0%
With market operations	1,495.00	3,433.00	1,938.00	129.6%
Loss allowance expenses, net of recoveries	(6,395.00)	(8,842.00)	(2,447.00)	38.3%
Service revenues	12,395.00	13,773.00	1,378.00	11.1%
Non-interest expenses	(18,616.00)	(19,860.00)	(1,244.00)	6.7%
Net income	9,502.00	11,942.00	2,440.00	25.7%
ROE	22.7%	24.2%		

* Numbers from Itaú's management report.

Itaú's results year-to-date brought no surprise to us. In a higher interest rate environment, Net Interest Margin with clients rose 17%, even with the credit portfolio continuously gravitating towards lower risk loans. NIM in market operations rose by R\$1.94 billion, to an unsustainable level according to management. These gains, along with service revenues growing at a faster pace than non-interest expenses, were more than enough to offset the widely expected increase in loss allowances. Just for the record, even if NIM in market operations had remained flat, Itaú's profit would have risen by 11%; ROE would be 21.5%; the implied P/E multiple for us that invest through the holding company, Itaúsa, would be 6.5x (instead of 5.8x); and price-to-book would be almost the same at 1.4x (as of late August).

A lot of noise has been going around over a possible further deterioration in default rates in banks' credit portfolios. First of all, bank shareholders should not see variation in loan losses as a surprise - speculators in bank stocks maybe should. External storms come once in a

while. When that happens, what really matters is management and the economics of the business. If the bank has a high moat, a great stream of earnings before provisions, and management has not gone crazy, shareholders should be fine. Our last report went through our thoughts on Itaú's management at length; so, here we will focus on some more specific numbers and the economic moat.

To begin, some numbers: Itaú could withstand additional R\$14.40 billion in annual loss allowances (80% above last semester's run rate) without seeing its ROE going below current CDI rates (14%). Moreover, the bank has just recently passed through relevant troubles in its personal loans, when its ROE reached a "low point" level of 19.4% in 2012. As shown in the table below (allowances in Retail Bank even declining) and explained in our previous report, Itaú's personal loans have a greatly improved credit profile nowadays and should behave well even in a possibly tougher scenario.

Loss allowance expense, gross of recoveries	1S14	1S15	Variation	Variation - %
Wholesale Bank	(1,217.00)	(3,824.00)	(2,607.00)	214.2%
Retail Bank	(7,500.00)	(7,211.00)	289.00	-3.9%
Average credit balance				
Wholesale Bank		227,424.50		
loss expense as %, annualized		-3.4%		
Retail Bank		225,406.50		
loss expense as %, annualized		-6.4%		
ROE				
Wholesale Bank	12.4%	13.5%		
Retail Bank	32.0%	42.9%		

* Wholesale segment includes large and middle companies, investment banking and Latin America. Segment definition changed in 2015.

Regarding corporate loans, the recent loss allowances are really expressive, which shows a deteriorating economic environment, but also the bank's capacity to weather the storm. Itaú's exposure to loans and endorsements to companies with revenues above R\$30.00 million was R\$295.00 billion as of June, 2015, flat over six months ago, with annual inflation around 9% - the kind of scenario in which defaults really appear. If we take those R\$14.40 billion (of room for loan losses before ROE falls below 14%), Itaú can, in just two years, write-off an additional 10% of this loan portfolio - that would be a really distressed scenario as corporate loans charge-off rates have historically remained below 2% yearly. In another way, R\$28.80 billion in additional write-offs are enough to charge-off almost 100% of loans to Oil & Gas, Metallurgy/Steel, and Sugar/Ethanol segments together - and those are regarded amid the most troublesome ones.

Anyone looking from hindsight to what happened to U.S.'s greatest, and well managed banks, such as Wells-Fargo and JP Morgan, can clearly understand earning power withstanding

bad cycles. And we think Brazilian banks don't have a problem comparable (not even closely) to what American peers had with residential mortgages issued on the premise that collateral market prices were enough for a loan to be safe.

At Nebraska we have been dedicating a lot of time to study the banking industry, both in Brazil and in the U.S., just as an interested businessmen should do about his own business sector. The industry is much more fragmented in the U.S.; enabling a lot of learning about business models. One thing we have learned is that in banking superior returns come from having seemingly small advantages in some areas. For example, low cost deposits in some regional banks in the U.S., or scale gains in mass market products, such as credit-cards. In Brazil, given the state of the industry, it is easy to identify small advantages for Itaú (and Bradesco) in many areas. These advantages compound in a levered business to become huge barriers to entry. The table below clarifies our point. Fortunately (for us), economic moats are concentrated in very few banks, likely Itaú, Bradesco and the large public ones (which make bad use of it).

Banks - 2014 - Data adjusted by Nebraska	Itaú	Bradesco	Santander	HSBC
NIM after loss allowances / clients' funding (A)	9.0%	8.7%	7.4%	4.2%
Non-financial revenues + Insurance profits / clients' funding (B)	6.5%	6.7%	4.5%	3.2%
Non-financial expenses / clients' funding (C)	-8.2%	-8.7%	-7.7%	-8.2%
(A) + (B) + (C)	7.2%	6.6%	4.2%	-0.7%
(B) + (C)	-1.7%	-2.1%	-3.2%	-5.0%
ROE (NBK)	24%	21%	9%	Loss

Providing loans to large companies is not a source of economic moat. In fact, the worse Itaú's ROE on this side of the business, the tougher it gets for the weaker competitors. Think about a client that has no borrowings with Itaú, but gives it cheap funding, is highly loyal (because all works fine), uses his credit card a lot, and never visits a branch - this is a real example, and it clarifies that the less competitors can profit from loans (corporate ones especially), the higher they will need to chase returns on these clients, making Itaú's leading share in those services even more valuable and easier to defend.

For the matter, until being taken over by Itaú, Redecard, it's acquiring unit, used to have about 2/3 of Cielo's profits. Well, Cielo is worth R\$75.00 billion in public markets nowadays, about 20x earnings. Does it mean that if Redecard were public it would be worth about R\$50.00 billion? And that Itaú's valuation adjusted for that would be below book value (through Itaúsa) - with ROE still above 20%? Sincerely, we do not give much thought to that kind of "market appraisals". Anyone who understands Itaú enough to comprehend its value over the long term can make two or three mental accounts and see it is an attractive investment - even if we have three or five bad years in a row, and even if the stock price were 30% higher.

In fact, we like it so much that we wanted more at these bargain prices. But, because of CVM's rules (our fund is administered by Itaú), we cannot hold more than 36% of it. So, we bought some Bradesco's shares, a bank we follow closely and like a lot for nearly all the same reasons as we do about Itaú. We did so before the final disclosure of Bradesco's acquisition of HSBC, which we have little accretive thoughts to share beyond saying it is good for our two banks in the long term and maybe even better for Itaú.

Beyond what we see as bargain prices, Itaú and Bradesco offer something we have learned to really value in Brazil: high ROE with a great deal of protection over inflation and real interest rates; in other words, ROE that should increase in higher interest rate environments (disregarding short term movements of course). This brings us to our next topic.

2- Equatorial (14.8%) and Cemar (10.1%)

As explained in our previous report, Cemar is a subsidiary of Equatorial. We can say that the "operational machine" at Cemar has been well oiled and running smoothly for many years now. Its market still grows much above the national average and further gains in energy losses are possible, but its current level of efficiency in operating expenses is enough to bring us high returns on equity - at least for a couple of regulatory cycles as we will explain below. This and the attractive valuation to invest directly in Cemar's thinly traded shares has made us to double our position since our last report.

Earlier this year, ANEEL (the federal regulatory body) established the model for tariff revisions for the distribution sector's fourth cycle. This model came very similar to the one used in the third cycle, which was a rational evolution from the second's. That being, regulation in energy distribution seems to have gained stronger roots. And, as we explained in the prior report, this regulation is great for well run companies. ANEEL has even further supported the regulatory model by proposing that all distribution concessions maturing between 2015 and 2017 be renovated without adjustments beyond requiring concessionaires to achieve certain operational and financial metrics in a few years to the risk of losing their rights (and being reimbursed for non-depreciated assets). By the way, ANEEL has used Cemar's 2005-09 improvement as a benchmark in these proposals. For the record, Equatorial's concessions do not mature within 10 years. These renovation proposals are still under analysis by the federal government's court of accounts (TCU) that argues that some concessions are in such a bad shape that they should not be given a chance.

Given the recent regulatory developments, the investment community and energy companies overall are eager for distribution assets. To exemplify (and explain our investment), Cemar currently has operating expenses about 20%, or R\$100.00 million (conservatively), below its regulatory OPEX, which is set to increase according to inflation (IGPM) and energy

consumption, and decrease by a productivity factor below 3% annually until the end of the company's third cycle, in August 2017. And, now that the fourth cycle model is available, we can safely assume that from 2017 to 2021, regulatory OPEX will follow a similar pattern, perhaps with an even lower productivity factor given the company's good position in the benchmark study.

This means that, unless management loses the reins, this R\$100.00 million difference will much likely grow at least along with inflation and flow directly to operating earnings, representing a gain over the regulated return on invested capital before taxes (EBIT) of about 40%, bringing nominal ROE from 15-18% to 20-25% - depending on how one thinks about deferred taxes on inflation gains over regulatory assets and inflation rates, and everything else going as ANEEL's model predicts. But this is not the case as Cemar loses less energy than its regulatory goal and has huge tax incentives amid other positives. Moreover, higher inflation pass through tariffs annually and higher interest rates should mean a higher WACC used by ANEEL in cycle revisions each four years. All of that, added to growth in number of clients and energy consumption, makes Cemar a coveted asset, just as it makes almost any distribution concession in which an efficient operator can put its hands on.

It has been widely expected for some time that the federal government's electricity conglomerate, Eletrobrás, will sell out its controlling stake in many distribution companies - all of which are in a very bad shape. The first auction is expected to be held for Celg, which has the concession for Goiás, a large state with a growing economy. Recent news account that players could be willing to pay up to R\$8.00 billion in enterprise value for this company, which has less than R\$2.00 billion in invested capital - you can argue that this could double in a few years because of the need for investments, but even so, after these years, this hypothetical buyer would end-up paying a multiple of 2.5x (enterprise value to regulatory invested capital), or 3.5x (market value to regulatory equity). This chasing for assets could seem good for us, it has certainly contributed for Equatorial's stock price recently; but, we see it to the contrary: Equatorial's chance of making accretive acquisitions are diminished if those reported interests are confirmed.

As for our recent Cemar purchases, those were done at an enterprise value multiple of 1.7x (as of today, not five years from now), and a market to regulatory equity multiple of 2.2x adjusting (upwards) for excess cash, or around 1.9x considering working capital on which the company makes money from late payments by customers.

Equatorial's multiple on a consolidated basis is about 2.2x (with working capital) of market to regulatory equity, of which Cemar represents about 1/3. The other 2/3 comes from Celpa, Equatorial's acquisition of 2012 which has yet to deliver good results. Thereby, the conventional expectation (or assumption?) amid Equatorial investors is that not only a huge

turnaround is about to happen at Celpa, but also accretive M&A are right there, next corner. We view both points skeptically.

First, Celpa's environment is considered the toughest in Brazil (by ANEEL inclusively). We acknowledge our lack of understanding of daily difficulties in this environment, and even though we like the managerial and meritocracy systems in place, we do not take for granted that relevant gains in energy losses beyond regulatory metrics will happen - just see what came in last quarter's results, with energy losses rising to 31.8% (4.7p.p. above regulatory levels). Second, besides the desire for Celg, when we look at Eletrobrás' other distribution assets we have difficulties finding much possible value. Even if other players are not as eager to bid for tougher markets like Piauí, Alagoas, and Amazonas, we don't see relevant value creation coming easily for Equatorial (with its R\$7.00 billion market cap), by buying companies with less than R\$400.00 million in regulatory assets earning a return. These companies are in such a bad shape that they have barely had own resources to invest, depending heavily on subsidies to sustain more than 50% of their assets (over which there is no return); moreover, they usually have more net debt than regulatory assets earning a return.

Hence, we look at Equatorial from a more conservative standpoint. Celpa's fourth cycle revision has already happened, its regulatory assets came better than we expected and its regulatory OPEX even more so. This means that, even without a miraculous turnaround, Celpa, by controlling its OPEX and gaining efficiencies in a market with much to invest and grow, should be able to beat regulatory returns - if not as much as Cemar currently does, at least to some small extent. In that light, we believe Equatorial's combined multiple of price to regulatory equity around 2.2x, along with inflation protection and good returns on retained capital (that is likely high for many years within the company's current concessions), offers a low downside risk (against CDI rates). On the bright side, we are exposed to both accretive acquisitions (and bad ones as well), and a rosier future at Celpa, in which lower energy losses, leading to a larger market for regulatory purposes and higher efficiency gains, could create much economic value. As Peter Bernstein, the "philosopher of risk" said: *"risk means more things can happen that will happen"*. Our mission is to think about as many things that can happen as possible and look for superior odds in risk exposure, which is inevitable.

Finally, we have not acquired more Equatorial stock this year - its share in our portfolio grew by merit (and demerit of other holdings' shares), bringing the overall position to a point at least very close to our comfort level.

3- Gerdau (3.4%) and ALL-Rumo (2.2%)

Between 2012 and 2014 we have likely dedicated as much time to Gerdau as we did to Equatorial since 2013. The results were strikingly different though. Not because of our return

with these investments, but rather both because of how much we understand each business nowadays (a good deal about Equatorial and little about Gerdau), and because the odds we are going to make good businesses around energy distribution are greatly superior than those in the steel sector. This is not to say that had we made money with Gerdau we would recognize all of this as clearly as we do today.

Besides our natural lack of capacity to understand many businesses (as explained in the previous report), we have learned to give much more value to returns on marginal invested capital, in other words, to run away from investments in which time plays against us. Therefore, after months of internal ruminations we have decided to drastically cut our ties with past decisions, time dedicated, etc., and make what feels right: keep investments in companies that we understand little and don't offer great returns on retained capital very low - less than 5% of capital allocated in each case, and below 20% in aggregate. More about this will be explored in our next Annual Letter.

In June this year, we took action, reducing ALL below 3% of our fund, and Gerdau below 5% - for the record, this was before recent concerns over Gerdau's corporate governance, about which he have nothing to add. This year we have made other two investments in small companies that belong to this basket (which we deemed group 2 in our last report). All together, group 2 now accounts for 17% of our fund. This discipline is to be followed regardless of how much asymmetric we thinks risk/returns are at any given case - and we do think we have a few quite positively misbalanced cases nowadays, both in and out of our portfolio.

After all, if we are to act according to our words and writings, we must focus on making money from our core businesses, dedicate the vast majority of our time there, and only make these other small ventures when they scream at us - and without incurring risks of harming our overall returns in any meaningful way. To conclude, good businessmen need not to try to profit from every single opportunity in his country, he just needs to do well in his core activities and be alert for opportunities in his comfort zone.

4- Vivo (7.6%) and taxation:

Recently it seems to have become common sense amid some investors that Vivo is a nice investment - many are talking about the company's superior competitive position in wireless, GVT's bright future, and Amos Genish's managerial capabilities. We have invested in Vivo even before GVT's acquisition, which we saw almost as a necessity for a company willing to hold its competitive position (because of the last mile assets), but at a hefty price and with tough challenges (such as GVT's still dependence on voice for 47% of revenues). Our confidence has neither increased nor decreased because of recent happenings. We do agree with much of what has been said lately, but cannot forget that even if the company beat its competitors

relatively, our eventual results can be pushed back significantly by aggressive competition, about which we have no strong conclusions yet.

With our country's fiscal troubles, many new proposals for taxation changes are coming up. We don't think most businessmen lose their sleep because of this. Neither we think shareholders should - at least until totally unreasonable circumstances come up. When some of our companies suffer a tax hike, we analyze it with many tools (not only a spreadsheet to calculate the immediate effect *ceteris paribus*). For example, increased tax on profits for banks are obviously going to affect every profitable bank; but the effects of that are not precisely (not even closely) quantifiable. When a tax change comes upon every player, the industry reacts - we have seen this history with Brazilian banks, not long ago.

In another example, if the government totally eliminates (as news speculates) tax deductions from capital paid out to shareholders as "interest on equity", Vivo would face a much heavier burden than its peers, which are either very leveraged or don't produce free cash flows. On the other side, Vivo has an almost debt-free balance sheet, which could be used to offset part of this burden. Should we really go crazy with every new piece of news? Of course we think about potential impacts, but not trying to be precise and seeing things within their order of magnitude - after all, if we are either right or wrong in Vivo, it is not by 10 or 15%.

We appreciate your attention,

Nebraska Capital

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