normandia INVESTIMENTOS

Letter to Investors | Number 04 | September 2017

Investments in Power Transmission

"Num sei, só sei que foi assim"[1]
Chicó, from Auto da Compadecida

The Agenda-setting theory, formalized by Maxwell McCombs and Donald Shaw in 1972[2], describes the ability of the news media, by selection, layout, and occurrence of news, to influence themes discussed on the public agenda[3]. This perception will make some say that, for example, a candidate seen by the electorate as the one with the best positioning about an important theme on the media's agenda has the greatest odds of winning an election.

The parallel with our activity is undeniable. Reports, panels and even the company's speech can sometimes make us focus on agendas which are not the most relevant.

The main objective of this letter is to share the aspects we understand are the most relevant to evaluate when investing in electric power transmission companies, a segment that we invest in for years, even before Normandia's inception. Since 2016, we began having a bigger exposure in the sector, due to the opportunities that were presented in the primary market (auctions) and the entry of a new participant, already listed in the stock exchange, in transmission.

First, we will make a general overview of our perceptions, focusing in the recent past, so that we can later share our vision about the main variables that should be evaluated in these companies[4].

We are tempted to say that few businesses are so simple to grasp as electric power transmission companies. Transmission lines work like a road through which electrons flow by, carrying energy from the generation unit (hydropower, wind power, solar, etc.) to the electricity distribution centers, responsible for redistributing this energy to the final consumer. Since these energy transmission centers do not have any interference in the flow of electrons that go through them[5], they are paid on availability, not by volume.

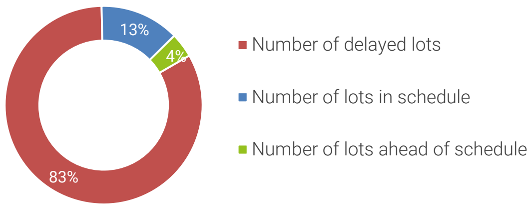
Once in operation, the concessionaire is entitled to the fixed revenue defined in the auction, inflation-adjusted for the entire 30-year period of the concession contract. Margins are high and don't vary much, since most of the revenue is intended to pay the invested capital. It's a relatively simple operation and has not been subject to major technological revolutions in recent decades.

However, when it comes to Brazil, even what seems simple sometimes ends up revealing many nuances. For almost 10 years, the transmission segment was a combination of low returns offered by the government, bitter competition for the lots, and tight deadlines for project implementation, which further aggravated the risks of implementation due to the trouble in obtaining environmental licenses and land issues. Partnerships between contractors and state-owned companies were not uncommon, placing competition at a level we considered to be somewhat artificial.

But even so, in the BM&F Bovespa pit where auctions are held, euphoria dominated the environment when a lot was sold out to a group of entrepreneurs. Few were the groups that kept the discipline and accepted the "defeat" by those of greater appetite.

Sometime later, reality came knocking on the door. Delays due to consecutive frustrations in the execution process were the norm, and there were no excess returns to accommodate them. Some companies ended up getting behind, unable to attract capital to finance projects that were becoming less and less profitable. Out of the 163 transmission projects analyzed by the TCU (Court of Auditors) in the period of 2005 to 2012, about 83% were off schedule. This fact was incompatible with the euphoria we witnessed in the BM&F Bovespa auctions.

Transmission Line Actions (2005 - 2012)



Source: Court of Auditors

This system generated serious problems in the national electricity system. To illustrate this, we can mention the delay in the implementation of lots A, B and C of Transmission Auction No.

[1] *"Dunno, I just know it was so" [sic] ("I don't know, I just know it was so"), a popular quote from A Dog's Will, a classic Brazilian comedy movie.*
[2] *The Agenda-Setting Function of Mass Media.*
[3] The decentralization of content creation, due to the popularity of social media, shifted the focus away from traditional media in regards of agenda setting. Our objective here is not to discuss the root of agenda creation, but to be aware that others can influence our focus.
[4] To keep this letter concise, we are not diving into regulation and regulator, although we believe this is a crucial starting point to invest in any regulated firm.
[5] Brazil's electrical sector has its operation centered by ONS (National System Operator). They decide when, how much, and which power plant will generate electricity, as well as through where and how this energy will be transported.

03/2012, sold off to Chesf[6]. These projects aim to meet the North Region system expansion, especially in the flow of energy from wind farms in the States of Ceará, Rio Grande do Norte and Bahia. The delivery of transmission lines was originally planned for January 2014, together with the inauguration of the wind power plants. It was delayed by 2 years. Wind power plants went into operation, but they could not send out their energy.

Constraints on power distribution due to transmission delays have become such a relevant problem that there was a rule change in generation auctions. Now they need to prove that they have access to the transmission system. Not only the delay was an issue, the TCU audit pointed out that the costs of lot A had exceeded by more than 400% than those initially estimated by the state-owned firm[7].

From 2013, this dynamic began to give signs of exhaustion. State-owned companies, mainly those associated with Eletrobras, had been heavily impacted by the fateful MP 579[8], which drastically reduced the investment capacity (but not necessarily the appetite) of these companies. The construction companies also left because of financial difficulties.

From 2013 to 2015, 87 lots were offered, of which 39 did not attract interested parties[9]. In both auctions held in 2015, disinterest peaked. Only 8 out of 24 lots were sold. The chronic scenario of delays and low interest in new auctions placed the system's security at risk. As a large part of Brazil's generation structure is far from the centers of consumption, the transmission system plays an important role in the stability and optimization of the electrical system.

The situation in 2016 was as follows: a country with delayed projects, some companies in financial difficulties, frustrated investors, high interest rates and volatile exchange rates. To attract investors and get the transmission lines needed for the system in operation, the government had to be pragmatic. Failure to achieve a structural solution to the issue regarding environmental licenses, deadlines were extended for up to 60 months[10] and rules related to the delivery of the projects were loosened. In addition, more return had to be offered to investors[11].

After decades of low attractiveness, few were the companies that kept the discipline and were organized for this opportunity. At the auction held October 2016, even with the new conditions offered, competition kept low. In this event, 21 of the 24 lots with discounts close to 12% were bought. Of these lots, 6 were sold without any discount in revenue. It was not long before the improved return and regulatory flexibilities offered began to attract competitors. In the auction held April 2017, for example, the average discount was 36.5%.

We disagree with the opinion that it is not possible to get good returns through auctions. By the cyclical nature of the agents, periods of low returns and reckless capital allocation take turns with periods where much wealth can be created. This point brings us to our first great focus.

Capital Allocation

> *"The point is that decision makers, incentives and the structure must be prepared to allow the right moment to allocate capital"*

The revenue, after winning the auction, is fixed. In addition to taxes and charges, any periods of unavailability get deducted from the revenue stream (a penalty that usually does not vary beyond the range of 0.5% and 2.0% of the revenue). Costs and expenses often present a small, predictable and not very manageable fraction of revenues. The same applies to the essential investments to maintain the operation: marginal and not very representative.

We also understand that there is no relevant competitive differential in the construction process of these projects, although it is a critical step and demands great execution capacity. Synergy, whose statistical baseline indicates that it should always be questioned in most industries and situations, is less relevant in the power transmission sector.

At the end of the day, **you must interfere through revenue (and the only time to do so is on auction day) and financial expenses**. The other variables are small and unmanageable when compared to these. In other words, it is a question of **focusing on capital allocation and capital structure**, with all the complexities that these two variables have.

Regarding **capital allocation**, the advantage is in having a culture, people and incentives that favor good decision-making in such allocations. What makes the difference is probabilistic analysis of the variables and risks, coupled with discipline and serenity to let go of what others call opportunity, when proprietary analysis indicates otherwise.

The complexity is that the traditional corporate environment does not favor this kind of attitude. The time pattern of transmission industries operates at a different frequency from that of most executives, incentive plans, and the market. Between taking a lot at an auction and starting to generate revenue, it takes at least 4 years. So, it's usually easier to 'go with the flow'. Few companies have the culture that being a winner at an auction is not presenting a winning envelope during the event, but rather presenting the correct one.

Creating a culture is a complex process and different cultures fit better in different businesses. In that sense, we had an interesting

[6] Chesf (Francisco's Hydroelectric Company), one of Eletrobras' subsidiary. Generates and transmits electric power from hydroelectric plants to all the cities in northeast of Brazil.
[7] Chesf has 9 infraction notices and an average delay of more than 1,800 days in transmission line construction. Prior to the Auction in April 2017, Aneel published a decree vetoing the participation of Chesf, Furnas and Eletronorte in the auction.
[8] Provisional measure, announced by the government in September 2012.

[9] In the previous 10 years only 4 auctions had unattended lots. The success rate in these 4 auctions was 96%.
[10] Until then, the deadlines for implementation were 18 to 36 months on average.
[11] In the October 2016 auction, for example, the regulatory real WACC was raised to 9.67%, above the 8.06% level of the distribution, historically higher than the transmission. By mid-2013, perhaps the most critical period in terms of return offer, the regulatory real WACC was set at levels below 5.0%.

experience worth sharing. Prior to the founding of Normandia, part of our team was responsible for managing a fund that controlled one of the largest companies in the industry. At auctions, we saw the frustration of engineers, lawyers, and executives when they did not have the winning bid, after months of studying all the details of the project, participating in supplier negotiations, analyzing competition, and debating risks and opportunities with the board. All those sleepless nights seemed to have been in vain.

We were concerned with the consequences of this attitude and felt it was important to use that moment of emotional intensity to try to make a positive mark on the company's culture. The solution was developing a celebration ritual after the auction, especially when lots were "won" by competitors. Instead of heading to the office with our heads down after the auction, a commemorative lunch was set up to reinforce the message that the winner of an auction is not the one who presents a winning bid but rather the one who properly evaluated the risks and potential returns of that lot, regardless of whether we took the lot or not.

We are not advocating inactiveness, nor that trying is enough. Seeking acquisitions, confirming that there are no mistakes in the valuation process, and looking at related segments are possible and desirable paths. The point is that decision-makers, incentives and the structure must be prepared to allow the right moment to allocate capital. And when that time comes, some audacity is essential to seize the opportunity at the right size.

Capital Structure

> *"An important part of the value is to think about the corporate and fiscal structure that maximizes the level of debt and minimizes its cost, both in terms of funding rates and in the greater fiscal utilization of financial expenses"*

Once exposed the issue of capital allocation, we can move to the second point of great influence for the value of companies in the industry: **capital structure**. This is one of the angles in which we see greater detachment between the real relevance and the perceived importance by analysts and executives of the sector.

Transmission companies, due to their cash flow stability, can carry relatively high levels of debt at a low cost. An important part is to think about a corporate and fiscal structure that maximizes the level of debt and minimizes its cost, both in terms of funding rates and in the greater fiscal utilization of financial expenses.

In the electrical sector, structures of non-operating holdings are common, that hold non-integral corporate interests in several transmission SPEs[12]. This is a structure that presents a series of inefficiencies. To enter a new project, companies that are organized with this structure need to raise funds from the non-operating holding company and then contribute to this new subsidiary, which, in turn, has BNDES (Brazilian Development Bank) financing for the rest of the investment needed.

Two inefficiencies emerge. One is related to the perception of risk. The flow of this holding company depends on the flow of dividends from subsidiaries, which is lower than the cash generation of the subsidiaries and often subject to the resolution of members. The consequence of this is a more restricted and expensive credit offer. The second and most relevant inefficiency is the non-use of the debt tax shield taken at the holding[13].

To shed some light on the issue of the tax shield, it is worth mentioning an example. Let's imagine two companies with the same level of consolidated leverage and interested in entering a new project, which would require R$ 1.0 billion in investments. One of them is operating with an operational holding company ("Company X") and the other one is not ("Company Y"). Of these R$ 1.0 billion in investments, R$ 600 million would be directly financed by the SPE, which would be set up for this purpose. The other R$ 400 million should be contributed to the SPE by the holding company, which would issue another debt.

In the financing of R$ 600 million taken directly from the SPE, there is no great competitive advantage in any of the structures, mainly because BNDES is still a provider of resources for this type of project. It is in the cost of the holding's debt that there is a difference in capital structures. Given that the objective is to demonstrate the advantage of a fiscally efficient vehicle, we will consider the premise that the two companies would have the ability to raise in the holding company IPCA[14] + 6% the remaining R$ 400 million. Considering a hypothetical inflation (IPCA) of 4%, this debt would cost something like 10% nominally.

In Company Y case, which does not benefit from the tax shield, this debt in fact would cost 10%. Company X, structured as an operating holding company, would not pay approximately 34% of taxes on financial expenses, which would result in a nominal cost of 6.6%, equivalent to IPCA + 2.5% per year. This 3.4% savings in the cost of the debt generated by the holding's tax shield is equivalent in BRL to a reduction of 50% to 80% of all costs and operating expenses of a transmission concession[15]. It's a competition of two very disciplined and hard-working swimmers, but one with the physique of Michael Phelps and the other with the physique of the writers of this letter.

It is not impossible to create a fiscally efficient vehicle as the operating holding of the example above, but it does require some attention. The first is not to enter auctions through corporations, but via wholly-owned subsidiaries, since only assets held wholly by a holding company may subsequently be incorporated. The second is to be cautious about winning lots that will operate under the actual profit regime, since it is not economically feasible to abandon the presumed profit regime for the creation

[12] The definition of operating and holding activities by the transmission companies is handled by RN Aneel nº 709/2016.

[13] This is the tax benefit of the deductibility of financial expenses for tax purposes. As non-operating holdings do not have taxable income, since their income is usually only dividends, their financial expenses does not generate rebates on taxable income. This is possible in operating holdings, since these consolidate the revenue from the concession contracts in the same CNPJ (Employer Identification Number – EIN) in which the debt is hosted.

[14] Consumer price index (CPI).

[15] Our simulations considered EBITDA margin projects between 80% and 90% and a RAP/ Investment ratio of 20%.

of this fiscally efficient vehicle. The third is time. Since the BNDES has financed projects with subsidized rates and longer maturities than the traditional credit market, in many cases it is more profitable to wait for the SPE to repay this debt, only then to prepay the remaining financing and incorporate the SPE into the holding company.

Obviously, there are other ways to take advantage of tax shield benefits, even if the vehicle is not an operating holding company, but we understand that they are sub optimal and have their side effects. Just to mention one, it is possible to participate in new projects through their own SPEs, that is, creating an SPE under another SPE, using the leverage and lever ability of the SPE "mother" tax shield. Some problems exist with this solution, such as the need for approval of its partner in the "mother" SPE and the growing distancing of the shareholder from the group's cash flow generation. When dividends are raised to shareholders, the bill arrives.

To finish the reflection on capital structure, the best decision for shareholder return is not to necessarily have the best possible credit risk. There is a certain natural tendency to seek the AAA, but in our view the best thing for the shareholder is to avoid being dogmatic. Yes, it’s important to have a good credit risk. Have the best existing credit risk, not necessarily. Transmission companies carry higher debt levels without necessarily implying an excessive increase in shareholder risk. Depending on the opportunities, it is better for the shareholder to take advantage of an acquisition, even if their credit rating is not AAA and results in marginally higher funding costs.

The Platform’s Value

We understand that the value of a transmission company is greater than just the present value of the shareholder's cash flows discounted to a cost of equity without re-leveraging and reinvestment. Since the difference between the cash flow and the accounting profit used to distribute dividends is relevant in this sector, the deleveraging process is accelerated, and there is room for debt collection as it materializes. There are rare scenarios in which re-leveraging will not generate return to shareholders, especially in those companies that capture a very low effective cost of debt (IPCA + 2.5% per annum in our example) and have the basic conditions for good capital allocation decisions.

We are not advocating that, in this case, acquisitions should be made at any return above the marginal effective cost of debt, only by considering that it seems unlikely that the full deleveraging scenario will take place. One way to address this point is to add the present value of the cash flows discussed at the beginning of the paragraph to the value of the capital allocation optionality at extremely low costs throughout the deleveraging process.

Still in 2017, an auction of around R$ 8.8 billion should be carried out and, according to data from the last Transmission Expansion Program published recently by EPE[16], the investments planned for the coming years are in the order of R$ 30 billion. If competition will increase to the point of taking returns to lower levels in the next few years, we believe so. At what speed, it's hard to say. But it’s worth mentioning a change in the dynamics of the auctions: state-contractor partnerships, one of the factors responsible for driving potential returns in auctions to extremely low levels, may not come back anytime soon.

Some companies anticipated themselves in the last two auctions, but few have or are following a step-by-step process to have a fiscally efficient vehicle that minimizes the cost of third-party capital, essential in this industry. Few also pay attention to the issue of capital structure, by dosing dividend distributions (and capital increases or spin offs) without dogma and based on a dynamic comparison of available opportunities. But these are the few companies that are likely to deliver long-term returns to their shareholders, a matter that was not always present at the BM&F Bovespa pit.

We appreciate your trust,

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[16] Energy Research Company, a public company linked to the Ministry of Mines and Energy, whose objective is to carry out studies and research aimed at subsidizing the electrical sector planning.

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Normandia FIA September 2017

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	ACCUM.[1]	IBOV YEAR	IBOV ACCUM.[1]
2014	-	-	-	-	-	-	-	-	0.89%	1.01%	1.22%	0.14%	3.33%	3.33%	-17.06%	-17.06%
2015	1.30%	0.73%	0.50%	1.18%	0.55%	1.21%	0.91%	-0.24%	-0.44%	1.06%	0.36%	0.12%	7.45%	11.03%	-13.31%	-28.10%
2016	1.31%	1.67%	1.67%	2.06%	-1.22%	3.58%	3.55%	-0.36%	0.05%	1.90%	-6.69%	0.57%	7.94%	19.85%	38.93%	-0.11%
2017	2.58%	2.10%	1.42%	1.50%	-1.26%	2.87%	3.21%	2.62%	4.46%	-	-	-	21.16%	45.21%	23.36%	21.89%

NAV: R$43.870.950,92

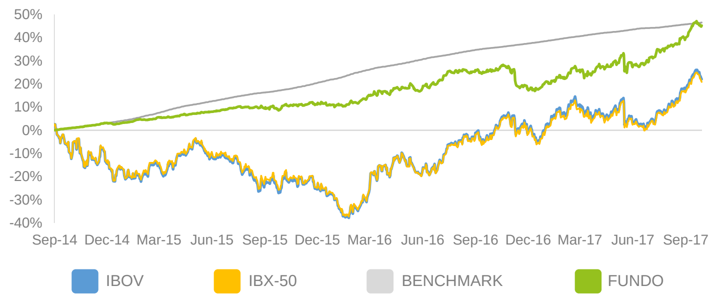
Average NAV (12m): R$36.797.909,49

NAV per Share: R$1,45214010

	Since Inception[1]	Last 24 Months	Last 12 Months	Year	Month
FUND	45.21%	33.77%	15.00%	21.16%	4.46%
BENCHMARK [2]	46.51%	25.01%	8.12%	5.87%	0.56%
IBOV	21.89%	57.19%	27.97%	23.36%	4.88%
IBX-50	20.78%	53.36%	27.62%	23.38%	4.95%

1 August 28, 2014

2 Benchmark: IPCA + Yield IMA-B (IMA-B is an index calculated by Anbima that represents the average cupom of brazilian government bonds indexed to IPCA)

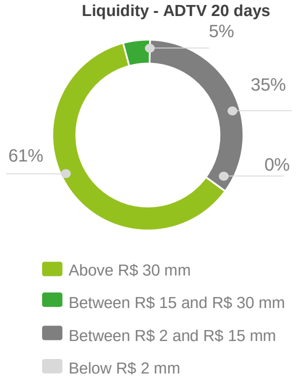


Portfolio

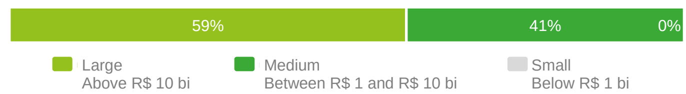
Sectoral Exposure %

Utilities	25,37%
Consumer Cyclical	19,03%
Finantials	8,20%
Oil & Gas	5,11%
Healthcare	4,48%
Food & Beverage	3,59%
Real Estate	3,43%
Logistics	3,14%
Education	1,47%
Tecnology and Telecom.	0.00%
Consumer non Cyclical	0.00%
Capital Goods	0.00%

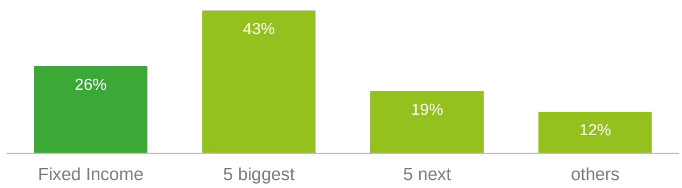
Liquidity - ADTV 20 days



Market Cap. Exposure %



Portfolio Concentration %



Other Information

Start Date:	August 28, 2014
Eligible Investors:	Qualified Investors
Min. Subscription Amount:	BRL 20,000.00
Min. Subscription Orders:	BRL 10,000.00
Minimum Balance:	BRL 10,000.00
Subscription Day:	T + 0
Payment Proceeds:	T + 3 business days after redemption
Redemption Day:	T + 30 calendar days or T + 0 with 10% exit fee reverting to the fund

Management Fee:	2.0% (down to 1.5% when NAV above BRL 100 mm)
Performance Fee:	20.0% over IPCA + Yield IMA-B p.a., annually
Tax Fee:	15.0% tax over nominal returns
Manager:	Normandia Investimentos Ltda.
Administrator:	BEM DTVM (Bradesco)
Custodian:	Banco Bradesco S.A.
Auditor:	Ernest Young
CNPJ (Fundo):	20.331.359/0001-59

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