2018 Letter

Introduction

The year of 2018 was a very important one for Brazil. After the severe errors of the "new economic matrix" of Lula's administration and, in particular, Dilma's administration, as from 2016, right after the President's impeachment, fortunately there was a change in direction. With an agenda that was designed to curb the uncontrolled public spending and restore the economy's productivity, Brazil came out of the recession and paved the way toward a more virtuous trajectory. 2018 promised to be a watershed: the country would have its first general elections since the change in the direction of Brazil's economic policy. There was a risk of back-tracking and a return to the path of economic backwardness. Luckily this was not what happened. President Bolsonaro's election, despite the fact that there are many unknowns, keeps the country on the pro-development trajectory and should bring greater political legitimacy for Brazil to move forward with the necessary reforms. It will not be an easy task, but with a precise diagnosis of the country's problems and some crucial issues already having been the subject of significant debate and having been well assimilated by society, we are optimistic about the prospects. An agenda of reforms, starting off with Social Security, is essential to change the prospect of growth in public spending over the medium to long term and, therefore, to reestablish the conditions for a resumption of sustainable growth. Once the social security reform has been successfully implemented, the Brazilian economy should resume a cycle of growth and development. In this scenario, the likelihood is that it will be easier to get Congress to approve the reforms that will come afterwards. In a scenario in which economic conditions are improving, the government will become more popular and consequently it will become easier to get new measures approved.

In relation to Studio, last November we were very pleased to celebrate nine years of existence resiliently navigating our way through different economic cycles seen during the period. We always make every effort to improve the processes, enhance our analysis and encourage the team's interaction. It is a daily endeavor in terms of improving the machinery of the complex process of investment analysis and management, which we view as a continuous learning process that needs to be improved with each passing year, both at the individual and team levels.

In the following paragraphs we will talk about the two main positive impacts in the year - Bradesco and Cemig - together with other investments in the Banking and Utilities sectors, which accounted for 70% of the fund's performance during the period. We will also comment on the year's worst investment, our position in Qualicorp which, although small, resulted in significant losses.

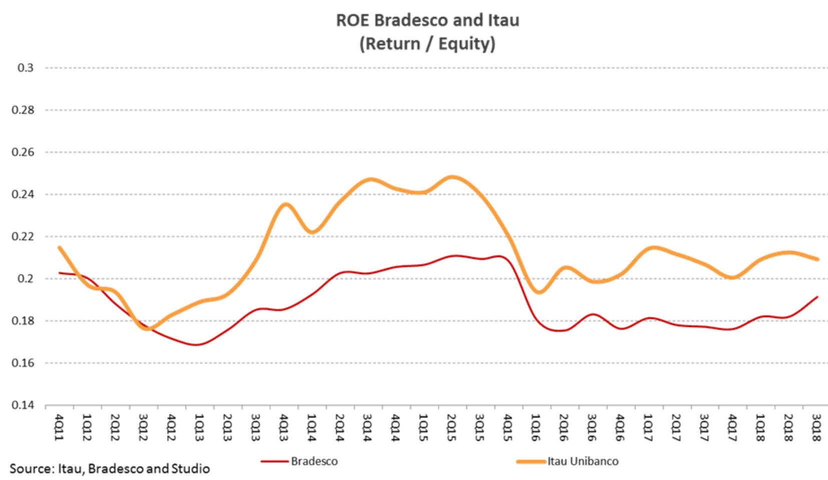
Banks

Once again, we are using this space in our letter to highlight the positive contribution of our investment in banks. At the end of 2017, we felt that it was not necessary to set out the reasoning for our position in detail, as we were of the opinion that the 2016 letter had already provided a sufficient explanation and there was no need to repeat the arguments, notwithstanding the fact that the position was once again the greatest contribution for that year´s performance.

Now, in 2018, we believe that it is appropriate to, once again, talk a bit about our investments and to highlight the fact that during the second half of the year we added Banco do Brasil to our traditional Itaú and Bradesco positions.

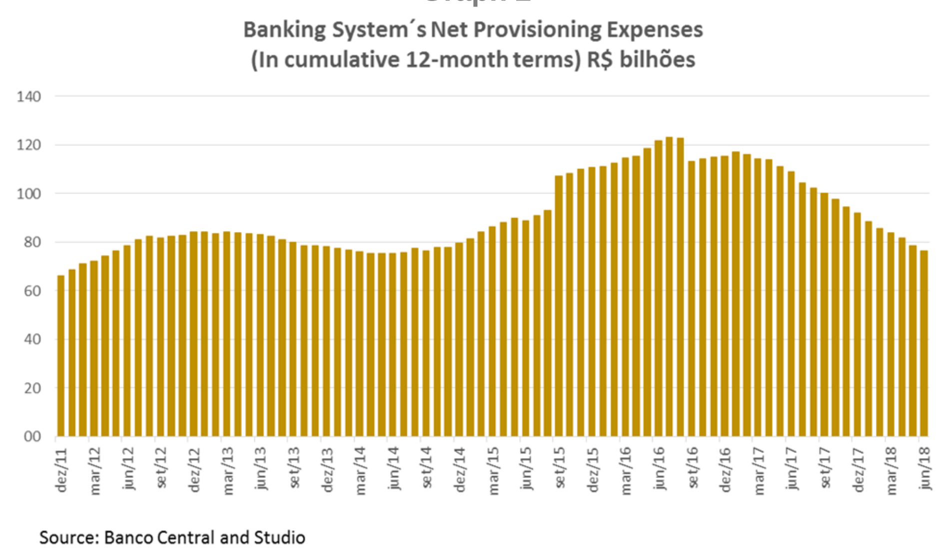
As we mentioned on previous occasions, the main premise that underpinned our investment thesis in both Itaú and Bradesco over the last 3 years, even after being aware that the Brazilian economic scenario would be a very challenging one, was the high resilience that we believed would be proven with future companies' results (Graph 1).

Graph 1



There seemed to be a broad consensus that the non-state controlled banks' credit portfolios would not show growth during that period, nevertheless the worst point of the crisis began with such a high level of portfolio coverage and provisioning that any decrease in the quarterly provisioning expenses would guarantee a very high level of return. As can be seen in Graph 2, in 2016, provisioning expenses came out to a figure of BRL 123 billion. More recently, the latest figures provided by the Central Bank showed a significant reduction of almost BRL 50 billion, totaling BRL76 billion in June 2018.

Graph 2



After 2016, a government turnover movement started in Brazil, which gradually increased the awareness among the main political agents as well as among society in general, regarding the need for a radical change in the principles that underpinned the economic policy practiced during the last presidential terms.

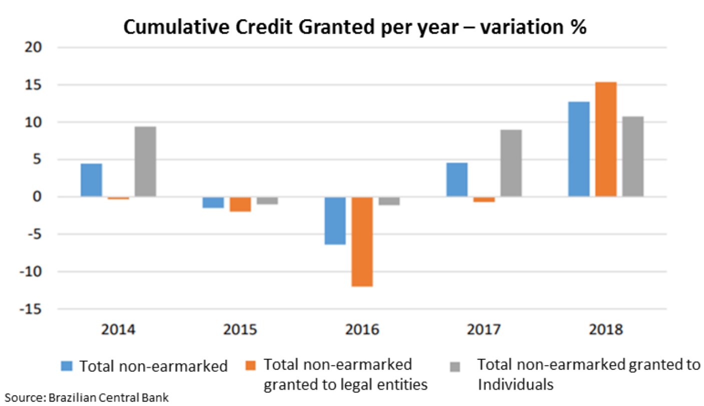
It was in this new political and economic scenario that we began to evaluate a new opportunity. The investment case that had justified a significant position, firstly in Itaú and then in Bradesco, and which was heavily influenced by the resilience of their results and the decrease in provisioning expenses, did not seem enough to justify the new valuation levels that began to be observed in the Brazilian market. We ended up selling off almost the entirety of our position during the early months of 2018, when we perceived a combination of higher multiples coupled with a still very high level of uncertainty regarding the outcome of the election that would be held in October.

During the second half of the year, we assessed that some prices already offered a margin of safety to once again attract investments, even without any hint in relation to the final result of the presidential race. Our main addition at that time was a position in Banco do Brasil. Even though it was trading at 70% of its Book Value at the time, our conservative approach ended up limiting the size of the position as we consider this asset of a riskier nature.

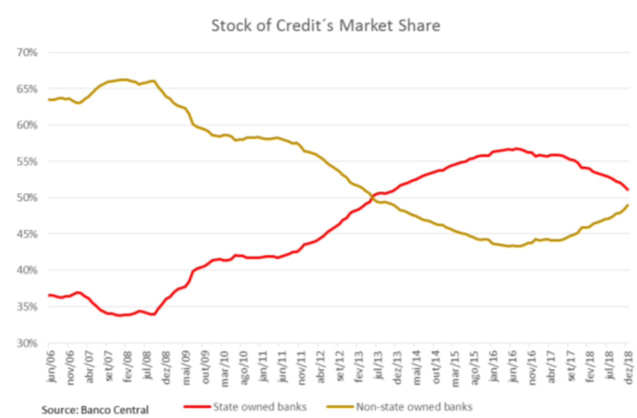
Still in the second half of the year, we once again bought a significant position in non-state controlled banks, with the main emphasis being on an investment in Bradesco. Although we no longer find the attractive multiples that could be seen at the end of 2015 and in early 2016, the current scenario seems to offer a much healthier opportunity for growth in the credit portfolio and consequently in the profits of the companies.

In addition to the fact that we can already see the increase in credit granted as per Graph 3, we stress that following the orientations of the current economic team, the room for growth of the non-state owned banks' portfolios may come as a positive surprise, since it is not limited to the consolidated growth of the credit market. We assess that over the next few years there will be a very significant recovery of the market share that was seized by the state owned banks, particularly in the wake of the 2008 crisis (Graph 4), and this should be the main lever for generating value for these companies.

Graph 3



Graph 4



Cemig and Utilities

Since Studio’s inception, the current investment in Cemig is the longest and most constructive bet we have made on the company. In the past, we had long positions in 2012 and 2014 that only lasted a few months, since they were not submitted to the usual process of more in-depth analysis of the business case following the initial investment. Over the course of 2014 and 2015 we shorted Cemig’s shares, as the company’s capital structure was highly leveraged to cope with a probable economic downturn, as well as our skepticism regarding the merits of the legal dispute that the company was waging against the Federal Government in relation to the term of the concession agreements for 3 of its main hydroelectric power plants. Actually, the company lost the power plants and came very close to a severe liquidity crisis during the years 2015 and 2016.

Before we get on to 2018's investment, it is important to give a bit of the background of the last few years in order to put our difficulty into context with regard to having a more positive view of the company that was, for much of Studio's existence, the sector's most covered and most liquid stock.

During the Brazilian Social Democrat Party (PSDB) administration of the State of Minas Gerais, more precisely between 2007 and 2013, the company's strategy was marked by a huge appetite for new investments, most of the time with questionable returns, together with a very aggressive dividend policy, encouraged by a major shareholder that always pushed for a high pay out.

To cite the worst deals that were done during the period, we can list the interest in the Santo Antônio Power Plant in 2007 (during Aécio Neves' administration), the acquisition of an interest in Light in 2010 and 2011 (during Anastasia's administration) and a billionaire capital injection made in Renova in 2014 (during Anastasia's administration). Each of these investments wiped out roughly 3 billion Reais[1] totaling a loss of almost 10 billion Reais. The company's current market value is 20 billion Reais.

The capital allocation strategy coupled with the irresponsible dividend policy, the low efficiency in terms of managing the business' costs and the biggest economic crisis in the country's history almost destroyed the company. The Labor Party (PT) administration, which took over the company in 2015, was not responsible to any meaningful degree for the company's collapse, nor is it entitled to take any major credit for its recovery, as it was unable to implement any significant measures of the divestment plan and improvements in operating cost that were outlined at the start of the its administration. The years of administration under Governor Pimentel were marked by constant hesitations in relation to the sale of assets and a heavy focus on debt rollover, given that the company had a lot of debts maturing and faced major liquidity challenges.

The numbers for this period are superlative. Between 2006 and 2016, the company had an operating cash flow of 32 billion Reais and invested 22 billion, more than double the figure for depreciation. It distributed 21 billion Reais in dividends, leading to an 11 billion Reais increase in debt (debt increase = 21+22-32), while the EBITDA in 2016 was the same in nominal terms as it was in 2006. These figures give a further idea of the scale of the destruction of value during the period.

[1] The loss represents the difference between the capital injections made in these investments, brought to present value by the cost of capital, and the current market value of Renova and Light and Santo Antonio's equity value

We finally come to 2018, the election year, period usually characterized by high volatility in the market, especially in state owned companies' stocks. Between the end of 2017 and the start of 2018, Cemig managed to rollover most of its debts, which was a major cause of concern for us at the time. During the space of just a few months, 7 billion Reais of debt was rolled over (almost twice the value of EBITDA) and the average term rose from 2 to 4 years. In May, the distribution company had its tariff review, which reflected the decline in volume seen in 2015 and 2016 along with all the investments made during the previous 4-year tariff cycle. Therefore, the EBITDA from the distribution company would rise from a figure of 400 mm Reais in 2016 and 800 MM Reais in 2017 to roughly 1.7 billion Reais, which would bring greater financial balance.

Our current investment was made in June, when the share hit 6.5 Reais, which was roughly the lowest it went before Dilma Rousseff's impeachment in 2016. At that time, the company was experiencing a massive problem in terms of liquidity and the economic outlook for the country was particularly bleak.

Although the prospects for the Government elections of the State of Minas Gerais was that the PT party would be out, the stress in the market in the months of May and June could cause problems for Cemig. Even after the positive tariff review in terms of distribution, the company was still very highly leveraged and, therefore, excessively sensitive to market crashes. In addition, most of the debt rollovers made in the last year were in US Dollar terms, hedged up to 5 Reais: any significant devaluation in the currency could bring new imbalances in the capital structure.

The internal rate of return we saw on our investment was of approximately 18% in real terms, without any major premise of disruption in the volume of energy or in the exchange rate, no sale of assets and little improvement in terms of costs, in addition to the expectation that the PSDB would regain control of the State, which, despite its track record, would probably be viewed as a positive thing by the market.

With this scenario, we assessed that there was good asymmetry in the investment; even so, the potential losses in the case of any new economic downturn or devaluation in the currency would be significant. Because of these factors, we started off the investment with a small position, since we tend to be conservative in terms of positions in highly leveraged, state-run companies. We always work under the assumption that the number of things we do not know about companies, people, and the world is much greater than what we do know, and the problem with leveraged companies is that the impact of what we do not know is much greater.

In the following months, the stock price experienced a great deal of volatility, fluctuating around 7 Reais until, in the week of the first round of the election, an event that was totally unpredictable began to dominate the stock performance. The Novo Party candidate for the government of the State of Minas Gerais surged ahead in the polls and at the end of the first round of the election was in first place.

A stroke of luck - which is an extremely important element both in the investment profession (we are not dentists[2] after all) as well as in life - as a result of which in the space of a single week we saw the stock rise to the value that we were expecting in the initial base scenario.

[2]Taleb likes to use the profession of dentist as a counterpoint to that of investment manager. Investment Manager is a profession with extreme (extremistan) standards, similar to those seen among artists and entrepreneurs, there are just a few who are very successful and there are a lot who do not achieve much success, the middle ground is fairly empty. Dentist is a profession with an average (mediocristan) standard, similar to that observed among teachers and psychologists, where the

Up until the first round, the possibility of privatization was not included in the base scenario, but insofar as it became clear that Novo Party candidate would win the elections, we began to incorporate this scenario, when we exchanged half of the position for voting shares, given that we believe this will be a more efficient way of acquiring a possible premium control.

We are now of the opinion that much of the gain from a possible privatization is already built into the price, our investment doubled in value between June and December, and the political challenges for the possible sale of the company are substantial.

In the expectations front, as it can be seen now, expectations may become unrealistic, and we need to be aware of this. The model for the sale of the assets has not yet been defined, much less which of the assets will be sold, but we believe that there will be a relevant change in the company and that, if the distribution is sold, there will be a high level of interest in the asset due to its significance. Also, the competition for Eletropaulo during the year 2018 support our thesis, Therefore, we remain positive.

We chose to talk about Cemig because it accounted for the second largest contribution to the fund during the year, but other investments in the utilities sector, which was the one that had the greatest impact on the portfolio in the last year are also worth mentioning, albeit much more briefly.

The second most important investment in the Utilities sector was Energisa. Our current investment was initiated at the time of the company's IPO in July 2016. Since then, and particularly in 2018, Energisa has benefited from the evolution of the effective turnaround of the concessions that were purchased in 2014 from Grupo Rede and the sound growth of the markets in which the company operates, which have been posting higher levels of growth than the average for Brazil. In 2018, two new concessions were purchased (Rondônia and Acre) and these should ensure strong growth with profitability over the next few years. All this led to a 40% appreciation in the share price over the course of the year.

The third biggest contribution in the utilities sector was CPFL Energia, which is a slightly different case. We were shareholders of the company in 2016 when the Chinese company State Grid purchased a controlling stake from the Camargo Corrêa group. We sold our position following the stock's appreciation that was generated by the Tag Along expectation. The offer was expected to occur more than a year later, in November 2017. At the Tender Offer, a greater number of shareholders than usual ended up not subscribing to the offer for reasons that we do not know and were apparently forced to sell their shares in the following days. This selling pressure caused the stock to drop from a price of BRL 27.7 (the Tender Offer's Tag Along price) to BRL 18, which is the point at which we began our investment.

The thesis was based on our belief that the new controlling shareholder would return with an offer to take the company private, given that the offer which was made at the end of 2017 was related to the exchange of control. The Bovespa's *Novo Mercado*'s rules establish that companies are required to comply with the free-float and liquidity limits within the space of 18 months, therefore, CPFL has to make a decision by May 2019, when it will have to choose one of the two paths, an offer to delist from the *Novo Mercado* or an offer of shares that leads to a free-float of at least 15% (at present the free-float is close to 5%).

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dispersion of income/success is a great deal smaller. The importance of luck in these two types of professions is extremely different, those with an extreme pattern are much more dependent on it than those with an average pattern.

In the scenario that we regarded as being the most likely there would be a new offer to take the company private at a higher price than that observed in the last offer, adjusted by the CDI (approximately BRL 31), taking into account that the company had an excellent year, with a quick turnaround of results in relation to the most recent concession acquired (AES Sul), excellent tariff reviews for the two most important concessions and good market growth in recent quarters. This expectation was updated more recently by the strong performance exhibited by the sector in the stock market following the presidential elections, which would lead to prices closer to BRL 40/share. It should be borne in mind that in the case of a possible exit process from the *Novo Mercado*, it is the minority shareholder's prerogative to choose the company that will carry out the valuation report that the Tender Offer will be based on.

In the less likely scenario, the company would have to make a secondary stock offering, given that there is no need for further resources. This scenario seemed an extremely unlikely one as it would cause a drop in the share price, with the final price probably coming out at a level below that which was paid by the controlling shareholder in 2017. It did not seem reasonable to us that the controlling shareholder would sell shares for a lower price than that which it paid when it purchased them a year ago, given that the company has posted surprisingly positive results in the interim period. State Grid would have to make an investment of just 1.5 billion Reais to take the company private; the total cost of acquisition was 30 billion Reais.

The appreciation seen in the sector's shares coupled with the benign scenario for investment led to a rebalancing of the scenarios that we had envisaged. It is possible that the chance of a new IPO is similar to the current option to exit the *Novo Mercado*. It is our assessment that investors will demand a greater return in the case of a possible offer from CPFL than they would demand from "premium" companies. The difference now is that even at a discount, the offer is likely to come out at a price above that which was paid by State Grid when it acquired its interest. It is important to stress that the great motivation for the new controlling shareholder to keep the company public is to have better standards of corporate governance and transparency.

The stock is trading with an actual return of approximately 10% at current market prices, after having appreciated by 50% over the course of 2018. This is currently one of the portfolio's highest returns and is the second highest return among our utilities investments.

Qualicorp

The fund's main loss in 2018 came from our position in Qualicorp. Although our average exposure for the year was 2.6%, the company's shares dropped by 56% during this period and the impact on the fund's performance attribution was significant.

We built the position in Qualicorp in February. The stock posted a strong performance in 2017 with operating results (measured by EBITDA), up by 21% in YoY terms on account of internal efforts to optimize selling expenses and the administrative structure, despite the deterioration in the number of lives managed by the company.

We invested in the company after the stock had dropped 25% from its highest point, in September 2017.

Notwithstanding the improvement in the financial results, the operational dynamics had already begun to deteriorate in 2015. But in 2017 there was a clearer loss of the company's share in relation to the segment in which it operates (affinity plans) and vis-à-vis the total supplementary health care segment in Brazil (Table 1).

Table 1

Number of beneficiaries of Health Plans ('000 of lives)	2014	2015	2016	2017	9M18
Qualicorp (Affinity Plans)	1,467	1,365	1,370	1,212	1,186
Affinity Plans Market	6,814	6,670	6,507	6,419	6,430
Total Health Plans	50,433	49,208	47,623	47,198	47,293
Qualicorp's % of the Affinity Plans Market	21.5%	20.5%	21.1%	18.9%	18.5%
Qualicorp's % of the Total Market	2.9%	2.8%	2.9%	2.6%	2.5%

Source: Qualicorp and the Brazilian Regulatory Agency for Private Health Insurance and Plans - ANS

In addition, over the course of 2018, there was also an increase in the gap between the effective average readjustment of Qualicorp's affinity plans portfolio and the annual adjustment granted by the company (table 2). This discrepancy is a result of three movements that occurred at the same time: i) greater sales of more affordable plans and the cancellation (churn) of plans with a higher ticket, ii) the downgrading by the beneficiaries to more affordable plans, to a certain degree fueled by the company at the time of the annual readjustment, iii) the decrease in the management and brokerage fee that Qualicorp charges the plans and the beneficiaries on account of the tougher competitive dynamic and the increase in the relative strength of the health operators.

Table 2

Annual Readjustments in the Affinity Plans Portfolio	2014	2015	2016	2017	3Q18YoY
Average Readjustment in Qualicorp's Portfolio	17.0%	17.8%	22.1%	20.7%	17.7%
Qualicorp's* Average Affinity Plans Ticket	17.0%	14.9%	19.6%	13.4%	6.1%

* Takes into account Management and Brokerage Fees

Source: Qualicorp and Studio

Even so, the financial result attested to the resilience of its business model. Even with 2018's challenging scenario, with the number of average lives in the affinity segment dropping by 8.5%, and with the decrease in the fee charged as described in table 3, the company's EBITDA result should remain virtually stable vis-à-vis 2017, which was a year of marked growth in income, as has already been commented/presented. During the period from 2016 to mid-2018, the company paid out over BRL 1 billion in dividends and buybacks of shares (30% of its current market value).

Table 3

% Management Fee + Brokerage Charge	3Q16	3Q17	3Q18
% Management Fee + Brokerage	17.6%	17.7%	16.4%

Source: Qualicorp and Studio

To round off this already challenging scenario, at the start of October, the company announced the approval of a retention package by its Board of Directors for the founder and CEO. In our opinion, the case should have been put to a vote at the Shareholders' Meeting and what occurred looked to us like an increase in executive compensation wrapped up to look like a non-compete agreement.

Under the agreement, Qualicorp undertook to pay José Seripieri, “Júnior”, BRL 150 million net of taxes to stay on with the company for a period of 6 years, in addition to an increase in his annual executive compensation of up to an additional BRL 20 million from 2019 onward. In the week following the announcement, a key minority shareholder announced an agreement with José Seripieri, improving the terms of the agreement: Junior undertook to acquire the BRL 150 million received in the company's shares by the end of 2018 (the aforesaid purchase was completed in November). In addition, this shareholder would immediately elect a representative to the Board of Directors and all new operations involving related parties would henceforth be submitted to the Shareholders' Meeting. They also agreed to improve the studies so that, from 2019 onward, Junior's annual compensation would be more in alignment with the company's results.

As a result of all this, the shares plummeted nearly 30% on the day of the announcement and have hardly recovered at all since then. Reputations are built over the course of many years and are flushed away in a few minutes. The path to reconstruct such reputations will always be more difficult.

Clearly, the dynamics of Qualicorp's segment was already looking more negative, particularly since 2017, and the agreement announced in October was unacceptable on account of the obvious conflict of interest and the way it was done.

But, looking at the situation right now, the company's valuation seems to predict the breakdown of its business model in a near future. Its shares are currently being traded at 7x P/E 19 adjusted[3], a dividend yield of 12% and an FCFE (Free Cash Flow Yield[4]) of 15%. Therefore, unless there is a drastic change in the company's business model, Qualicorp will return its market value in cash over a period of 6 years.

There are also internal studies that are at an advanced stage to reduce the company's share capital and returning cash to its shareholders more quickly. If we imagine a scenario with an extraordinary dividend distribution of BRL 800 MM, the company would be trading at a P/E ratio of 6x and its market cap could be returned in the form of dividends in just 5 years.

Nonetheless, the outlook for the business remains negative despite the probable recovery of the Brazilian economy. It is quite possible that the gross additions may not exceed the cancellations (churn) in 2019. It should be pointed out that the average price of a Qualicorp plan is BRL 794/month/life, which is high by the standards of an average Brazilian. New products from more affordable healthcare partners are important in order for the company to grow its stock of managed lives in a more recurring way.

Either way, it seems to us that the years of sharp decrease in the stock of lives administered by the company are already behind it. With the improvement in the macroeconomic environment, the availability of more affordable plans in its sales channel and the realignment of the incentives of its sales platforms, the dynamic of net sales of churn is likely to be reversed at some point during the two-year period of 2019-2020.

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[3] P/E adjusted for amortization of portfolio acquisition (net of tax effects) and relationship with customers
[4] Cash flow to the shareholder over the company's market value

Although many uncertainties remain, we assess that the company has a strong enough position in the segment of benefits manager for collective membership plans to remain dominant in this segment and profitable for its shareholders. The sector's dynamic impose a lot of challenges: it is not known how high medical inflation will be balanced with the population's low income and the public service shortage. The company's governance has been severely discredited, but the price is hard to ignore. The company is currently the cheapest one in our portfolio.

Conclusion

We are starting 2019 with a very optimistic outlook. We have a president-elect with a more liberal platform and an economic team with a precise diagnosis of our fiscal vulnerabilities. In addition to the adjustment in the public accounts, the agenda in terms of improvement in productivity is extensive. In the wake of the period of a marked downturn in the level of the country's economic activity, there is ample space to initiate a cyclical recovery, as the country has a high level ofidleness of labor and of capital. In addition, there is a need for a series of microeconomic reforms that will increase competition and reduce bureaucracy. We believe that the new government team is equipped with individuals with the technical capacity to implement these policies. In order to achieve this, we do not have to invent the wheel, all we need to do is to copy the models that worked in other parts of the world and adapt them to the Brazilian reality.

In a scenario in which operating margins are still in the early stages of recovery following the severe squeeze that they had undergone since the start of the crisis in 2015, the space for increasing Brazilian companies' operating profits within a context of sustainable economic growth is very high. It should be stressed that companies that are listed on the stock exchange are generally the leaders in their respective sectors and have emerged stronger and leaner from the recent recession.

There is an opportunity for the country to obtain (i) a significant drop in real long-term interest rates, (ii) a recovery in corporate profit margins and (iii) higher revenue growth in a recurring way. These are drivers that come together and indicate excellent prospects for the stock market over the next few years.

We will continue to carry out our work of diligently selecting companies that have the best risk-return ratios. To this end, our nine years of experience together with the constant adjustments to the machinery of our investment process mean that we are better prepared for the future and have renewed motivation.