



# Oceana Investimentos

Investor Letter – 1<sup>st</sup> Half 2018

Our equity investment strategy, focused on margin of safety, has proven efficient to date in reducing permanent capital losses. Although most managers prefer to talk about their investment gains and avoid discussing the losses in the portfolio, we see more value in doing just the opposite. The analysis of our losses is what helps us avoid repeating errors and contributes to the constant evolution over time of our investment process.

We are often asked what we do when there is a sudden change of fundamentals in the companies we are invested in, which potentially alters our view of the underlying asset value. The specific questions to this topic can range from: How to distinguish whether a change of fundamentals is structural or temporary? What is our course of action in these instances? How do you distinguish an isolated misstep from an error of company strategy?

We tend not to have many examples of permanent losses of capital, however in 2018 we have experienced one such case. We feel this letter is a good opportunity for us to explain our process in depth relating to the stock losses. The recent strong price drop in Ser Educacional (Ser), of approximately 50%, merits a detailed narrative about our original analysis regarding the attractiveness of this investment, what has surprised us, our course of action after the surprise and our current view on the investment.

## Original Investment Thesis in Ser Educacional

Ser Educacional began its trajectory in the higher education segment in 2003, when their Legal Bureau preparatory courses gave rise to their first collegiate-branded institution, Maurício de Nassau. Despite recent events, Ser is among the top 10 in Brazil ranked by the number of students, with approximately 150,000 enrollments. This size, however, represents only ~2.5% of market share within the private sector of higher education in the country.

In 2008 we witnessed a wave of private equity funds investing in the sector in Brazil. Ser participated in this funding period, receiving an investment from Cartesian Capital Group, which at the time valued the company at R\$425 million, acquiring 11.3% of the company. This was an important step for Ser, as it helped accelerate the growth process for the company. It also marked a period of upgrading of internal controls and processes, integrating operations, and preparing it for raising further funding from the market. In 2013 Ser was able to raise an additional ~R\$620 million via an equity IPO, with a valuation of R\$2.2 billion and allowing Cartesian Capital Group a partial exit during this offering.

Since the IPO Ser has delivered a very good history of growth. Although this growth was not free from bumps along the way, the company tripled the amount of campuses, tripled their revenues, tripled EBITDA and embarked in the distance Learning segment. Regarding distance Learning, Ser has been one of the leaders in opening learning centers since local government restrictions regarding rules of accreditation were eased, positioning itself to be one of the main players in this segment in the coming years.

The higher education sector in Brazil is heavily fragmented, with more than 2,100 institutions in the country. Of these, approximately 2,000 Institutions have less than 15,000 students, and together, these smaller providers represent around 45% market share. Most of these smaller institutions are run by local teachers, families or religious entities that usually present less sophisticated offerings, control and governance. For the most part, these institutions are not doing well, and our analysis leads us to believe that a consolidation in the sector will continue to occur in an organic way. This consolidation tends to accelerate due to difficulties brought about during times of crisis and as the need for implementing technology in the sector will not be met by these smaller players, driving students to superior competitive offerings by larger organizations.

Specifically with Ser, we see the necessary characteristics that are typical of winners during times of turbulence and sector consolidation. These features are: (i) rigorous cost control; (II) scalability and established strong brands in the regions in which it operates; and (III) a healthy balance sheet with a comfortable cash position. Below we will detail these points individually.

### i. Rigorous cost control

Ser has one of the lowest operating costs and strong margin profiles among fellow listed companies in the education sector, as can be seen in the table below.

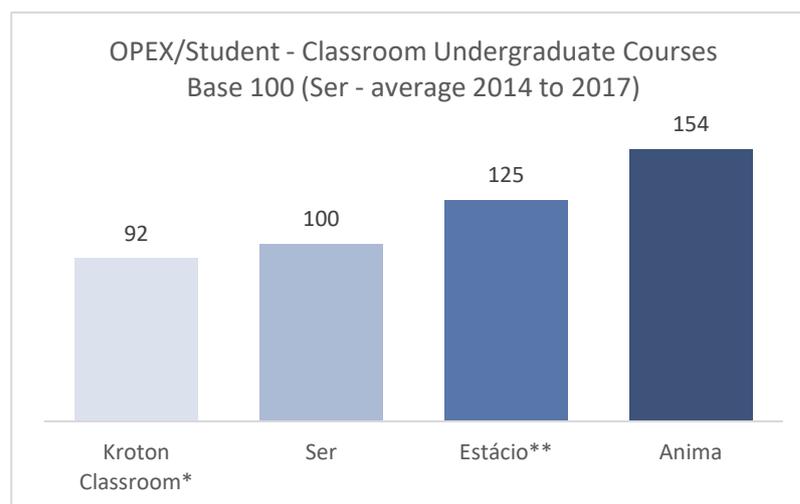
EBITDA Margin	2014	2015	2016	2017	Average
Kroton (classroom teaching)*	35%	37%	40%	40%	38%
Estácio**	22%	24%	23%	27%	24%
Ser	34%	27%	31%	27%	30%
Anima	23%	22%	16%	17%	19%

\* Corporate S,G&A prorated as a proportion of revenue for each segment.

\*\* It is not directly comparable, since the long distant learning contributes positively to the consolidated margin.

Source: companies/Oceana.

For a company that operates in the mass-market segment, in which differentiation tends to be driven by pricing, it is critical that the cost structure is superior vs. their peers. If the sector engages in a price war, the survivors tend to be those who have the highest margins, which allow them to match pricing decreases and still maintain profitability (albeit at lower levels) and positive cash generation. The following chart shows the cost and expense efficiency of the major educational companies. The OpEx per student of Ser rivals that of Kroton, a company with more scale/4x more on-campus students.



\* Corporate S,G&A prorated as a proportion of revenue from each segment.

\*\* It is not directly comparable, since the long distant learning contributes positively to the consolidated margin.

Source: companies/Oceana

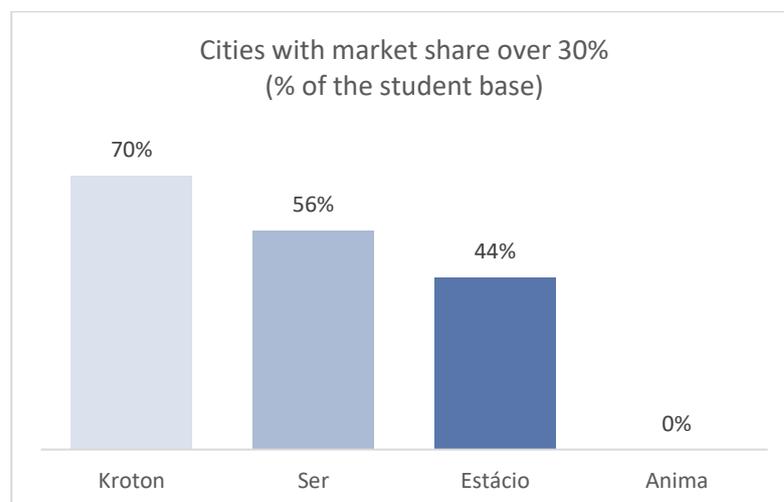
Our detailed analysis of the sector, including privately-held providers of education and consultancies, has brought us to the conclusion that most higher education institutions do not reach the 15% level of EBITDA margins. These companies would most likely exit the market if average ticket prices dropped by 10% to 15%, as margins would not maintain a level that justifies a going concern.

Clearly, there will be points in time where, due to supply and demand imbalances, prices will fall below a level of sustainable profitability. With time, the most efficient can withstand these periods and make the necessary adjustments to survive, and subsequently thrive once the industry has normalized. We believe that Ser Educacional has all of the characteristics needed to be an ultimate survivor in this scenario.

### ii. Scale and strong brands in the regions where it operates

Although Ser's market share is only ~2.5% in the higher education segment, the company overall continually ranks amongst the top 10 in the education sector broadly, and in specific regions where it operates it tends to

be one of the top three operators for that region. In more than half of the cities where it operates, Ser is actually the leading educational provider with a market share of at least 30%.

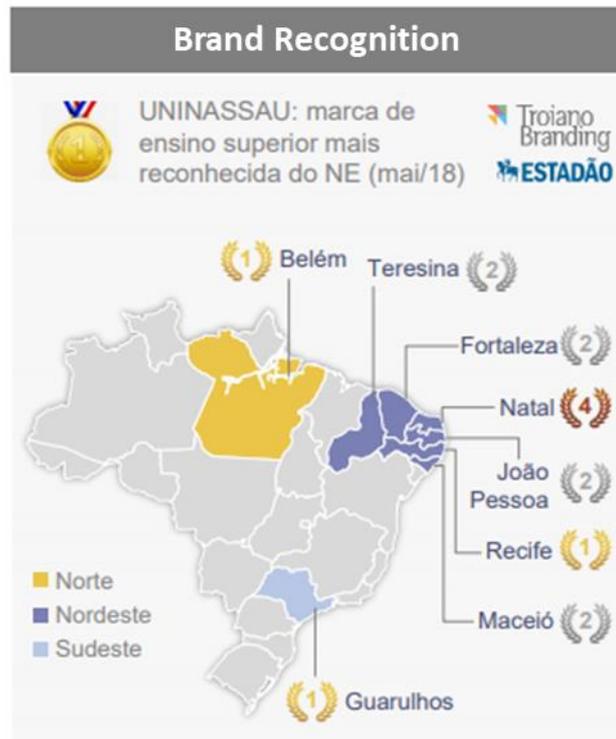


Source: companies/Oceana

Clearly scale matters as it affords more dilution of the fixed costs of the offering, a greater capacity to distribute the courses via different commercial channels and increased capacity of sharing of disciplines (e.g. a finance course is a required course of multiple degrees), thus generating greater efficiency and leverage to their cost structure. These strengths are also critical to be able to offer an effective distance Learning program, therefore the advantage that Ser holds also allows for a product offering which local peers in this fragmented industry cannot easily replicate.

The strength of their brand is another factor of great importance, which not only increases student enrollment (on campus and distance Learning), but also helps keep prices more resilient. Ser operates under 4 brand offerings: Maurício de Nassau, Joaquim Nabuco, UNAMA and UNIVERITAS. UNIVERITAS is their latest brand created to enter regions where the former brands have no local recognition.

Maurício de Nassau was considered by Folha de São Paulo (well-respected local newspaper) as the most recognized brand in the education sector in the Northeast region of Brazil. The "I want a scholarship" website, which sells scholarship and discounts in higher education courses, also releases studies on recognition and strength of the brand that corroborate the data presented by the company. Ser scores as the best known brand in the Northeast (Maurício de Nassau) and the Pará region (UNAMA).



Source: Ser Educacional

Although today Ser is more concentrated in capitals and large city-centers, Ser has the advantage of strong recognition of its brand in smaller satellite cities in the north and northeast regions, setting the base for considerable organic growth in the next few years. Concrete examples include the successful recent openings in the smaller cities of Petrolina, Cabo de Santo Agostinho and Parangaba. This same rationale is valid for their distance Learning segment, which should be able to leverage the same brand recognition.

### iii. Healthy balance sheet with a comfortable cash position

The sector has recently experienced multiple years of turbulence, starting in 2015 with the sudden and abrupt change in the FIES program (government-subsidized student loan and grant program) creating a drop in enrollment, which impacted the cash generation within the industry. The largest, most sophisticated companies endured the turmoil, and some were able to even use their balance sheet to finance part of the student enrollments, alleviating the problem of a lack of public funding (from FIES). Given these changes in funding volume, accompanied with broader economic challenges in Brazil and an increase in competition, the financial situation of most players in the sector is now stressed: some companies are terminating their activities, others are hiring banks to find buyers and others are still trying to adjust their cost structure/enrollments to the new reality of demand. All signs point to greater consolidation within the sector, which should benefit those with relatively strong balance sheets and cash on hand to be buyers of distressed assets.

Ser holds a net cash position of R\$510 million (adjusted for receiving the late portions of the FIES reimbursements), which represents approximately 25% of the current market value of the equity, or about 2x net cash/Ebitda. In addition, the company is generating strong free-cash flow. We anticipate over the next 12 months cash generation of R\$210 million. Unlike other companies in the industry, Ser turns a high level of profit into cash flow, almost 80% (their average during 2016/2017). In this challenging environment for the sector, the cash holding of Ser offers not only comfort to shareholders, but also a great opportunity to generate value via acquisitions of smaller and less efficient peers. Given the features mentioned, we characterized our investment thesis in the following manner:

- The company was well positioned to go through the turbulence of the sector due to the strong brand name.
- The robust balance sheet would allow Ser to acquire peers at attractive levels.
- The company would continue to show solid growth via traditional school offerings as well as distant learning classes.

We were seeing a very favorable asymmetry at the beginning of the year. Assuming the premise of a partial success in their organic growth plan, we calculated a real IRR of 12.5% per annum, with a profit CAGR of 22% per annum between 2018 and 2021. More importantly, as we stressed the business model and assumed zero organic growth, we still calculated a real IRR of 9.5% per annum.

## What surprised us?

Ser has demonstrated solid execution in the past, when it strengthened its internal processes, developed systems like SRS (Ser Retention System), optimized its SRC (Student Relationship Center) and integrated its backoffice tasks into the SSC (Shared Services Center). These factors enabled better control and management of the operation. Given their history of execution, we maintained confidence in their ability to continue future growth with the opening of new units and the expansion of distance Learning classes.

We were surprised by the drop in enrollments in the first half of 2018, including a strong drop in the group's biggest campuses. This frustrated our expectation of an increase in the student base. The disappointment in new enrollments of students amid the acceleration of the organic expansion also created strong negative pressure on short-term margins, creating uncertainty about the level of results for the subsequent 12-month period.

The position size of our holding in Ser has been limited given the liquidity of the stock, as well as the risk premium we demanded given the need for execution on the growth side. Even with the limited position size, the 50% decline in the stock price after disclosure of the poor Q1 results generated an impact of some relevance to the fund. To put the entire loss in perspective though, this loss during 2018 represented only about 10% of the total gains we earned in the education sector between 2012 and 2017; however, this is little comfort for 2018 performance.

## Our course of action after the surprise

At times like this, it is natural for investors to search for quick answers to what has occurred. Unfortunately, there are no shortcuts, and we needed to perform another round of due diligence/field work much deeper than a simple discussion in our office to revalidate or discredit our original thesis.

In the weeks following the earnings release, we talked with private-sector competitors from various localities such as Ceará, Pernambuco and Belém. We held meetings with specialized consultants, companies which provide sources of finance/loans to students (e.g. MEC, FNDE, Caixa Econômica), various companies/entities involved in the education sector, as well as several members of the top management of Ser.

These meetings were intended to diagnose, as accurate as possible, the recent turn in results, and understand how the company was positioning itself to recover from this deviation and ascertain whether the recovery depended more on the company or exogenous factors.

After this long period of meetings/studies we concluded there were two main reasons for the recent disappointment in earnings: (i) a competitive environment fiercer due to the lack of FIES students; (ii) Lack of focus in marketing for enrollments by Ser. Next we take a closer look at these issues.

### i. Fiercer competitive environment after FIES delays

The 1<sup>st</sup> half of 2018 was highlighted by significant "confusion" in the FIES system (government-sponsored students loan program). Typically, about 700,000 students enroll for loans via the FIES process, and of that total only 15% are pre-selected to receive the loans via FIES. The remaining percentage that does not receive

funding either choose to skip college or seek other alternatives of payment, either via discounts directly with the educational institution, or taking out loans from private lenders.

The registration period that should have ended in February was not closed until April, after classes had already started. This naturally created massive complications for both students and educational institutions. The admission of students in the institutions slowed drastically, as the students were waiting for the response of their FIES loan applications, which did not come until April. During this period a price war occurred to try to "save" student enrollment – just at the time when enrollments should be accelerating.

## ii. Lack of focus in marketing for enrollments by Ser

The "confusion" created by the delay in the FIES system came at a particularly complex time for Ser, given that the company was accelerating its organic on-campus growth and expanding their distance learning efforts. Ser failed to react to the delay in the FIES program in an appropriate way, as they did not focus on the impact this was having on their mature schools, instead trying to ensure their growth plans moved forward. This led to widespread issues across the company.

In order to understand the ability of Ser to overcome the issues from the FIES system, we need to spend time focusing on (a) quantifying the cost cutting efforts of Ser and adequacy of their realignment plans based on the new reality, (b) monitoring the process of adjustments in the FIES system and the volume of their offerings for the 2<sup>nd</sup> half of 2018 and (c) studying the economic/competitive environment of the most important competitors of Ser.

### a. Cost structure realignment reflecting the new reality

As we analyzed the company's cost-cutting plans, we walked away confident that they were realigning their growth models to reflect the new reality, adjusting costs and seeking to increase the efficiency of their mature units. This process of cost readjustment is never simple, as it included the termination/resignation of long-time employees who were part of the company's history.

Of the 32 units opened (or planned to open) during 2017 and 2018, only 13 were maintained after the expansion plan was revised, 2 campuses were merged and the rest were postponed. The majority of the postponements were of units with unknown brands which they wanted to enter with a limited offering, that is, units with lower margins and a longer wait-time needed to hit their maturation phase.

Clearly this plan of reducing their growth generated significant potential for cost adjustment in the company. The rent of postponed units, commercial staff, back office, maintenance, costs associated with accrediting the course given, all looked reversible. Looking at the models of the sell-side however, it was clear the market was extrapolating an EBITDA margin which assumed that these costs would not be adjusted, therefore creating estimates for margins well below the company's history.

The company announced cost reductions for the period between April and December 2018 of BRL 80 mm, equivalent to a margin enhancement of 650 bps throughout the year. First quarter results, coupled with all the costs of future expansion, indicated an annualized margin of between 15 and 20%, compared to a history (without expansion costs) of 30%. These cost cuts would help bring Ser closer to historical norms.

It is worth mentioning a very positive action taken by the controlling shareholder, Mr. Janguê, who owned some of the buildings leased by Ser for the expansion project. Following the revision of the expansion plan, Mr. Janguê allowed Ser to cancel the rental agreements without any fines. Although this had a fairly insignificant impact to total shareholder value, it is an admirable posture that demonstrates character and should not go unnoticed.

## b. Adjustments on FIES capacity and offering volume for 2018 2<sup>nd</sup> Half

We talked with the MEC, FNDE, Caixa Econômica and Ministry of Planning to understand whether the problem in the student funding program was circumstantial or if the FIES program was intentionally trying to issue fewer loans than their conveyed allotment target.

We ended these discussions more confident that the major adjustments of the program were carried out over 2017. These adjustments were recommended after the blatant issues which were apparent in the system during 2012-2014. It is only now that these recommendations are actually being implemented. The new rules have left all government entities involved more comfortable, maintaining at least 100,000 loan allotments under the "FIES Zero interest" program intact through the upcoming years.

This loan allotment of 100,000 also has another major change from previous rules, as it now requires students to pay for 30% of the tuition cost, compared to the FIES program covering 100% of tuition costs previously. This was done to encourage students to be price sensitive to the educational offering, as it also has derivative effects of lowering defaults in the system, a positive for the industry.

Another concern was to understand the problem that caused the delay in FIES registrations, which disrupted the enrollment timeline. Caixa Econômica (institution that assists the Federal Government in credit policy) took on the role that was formerly of the FNDE (National Fund for Education Development), being now responsible for all students' collection and for the cash reimbursement to the institutions. As Caixa Econômica didn't have systems to absorb the volume of contracts, or to make the cash disbursements to the schools, students delayed enrollments as their FIES funding was not finalized.

Between the end of May and the beginning of June the systems of Caixa were operational, lacking only the development of the enrollment feature. This missing feature should not affect greatly the issuance of new loans, since the transfer of the process from FNDE to Caixa Econômica will be done gradually, with the enrollment responsibility remaining with FNDE until the end of the year.

## c. Economic/competitive environment

With regards to the economic environment and competition, our degree of conviction is somewhat lower compared to the two previously mentioned aspects. Although we may hold strong views, these factors are impacted by a larger number of variables such as brand strength, economic environment and peers aggressiveness.

We talked with privately-held competitors in Ceará and Pernambuco to better understand the dynamics of these educators. We talked to companies in Belém and we cross-referenced the qualitative and quantitative data we obtained with what we have from INEP (National Institute of Educational Studies and Research) and IBGE (Brazilian Institute of Geography and Statistics) databases on market share, population income, capacity of payment, penetration of higher education and positioning of Ser vs. its competitors.

During our analysis, we saw signs that often pointed in opposite directions, but we were able to draw some concrete conclusions, including:

- In most capitals the publicly-owned companies gain market share vs. smaller companies
- With the reduction of FIES and worsening of the economic environment there is a movement of "trading down", where students attending more expensive colleges end up migrating to cheaper colleges, like Estácio and Ser

- The EBITDA margin of smaller competitors is usually very low (between 5% and 10%) when compared to listed companies (between 20% and 30%), which takes away the ability of smaller competitors to give high discounts persistently
- The competitive environment in capital cities tends to be more aggressive than in satellite cities. The latter is where Ser has a relevant portion of new unit growth.

Our competitive analysis not only helped to strengthen our initial investment thesis, but also indicated that the strongest competition resides in the capitals where fellow publicly-listed education companies operate most. There are, occasionally, smaller companies which might pose a threat to Ser, but the ability for these companies to sustain their businesses seem questionable. As a reminder, these smaller competitors tend to lack strong cash positions which limit their ability to discount pricing if needed, and they have not kept pace with required technological upgrades (especially within the distance learning segment). Lastly, there is a general lack sophistication of managing and pricing.

## Current Investment View

After a long period of studies, at the beginning of July we felt confident that our updated thesis merited a larger position size, and we decided to increase our investment in Ser. During the process we announced that our position exceeded 5% of the company's outstanding shares.

On the one hand, Ser should be blamed for missteps, many of which we highlighted in this letter; yet on the other hand, the company did respond rather quickly, implementing staff adjustments, reviewing their growth plan, increasing the efficiency of the teacher structure and spending more time ensuring that pricing is at optimal levels. Although it would be ideal if companies never erred, what many investors forget is that virtually all of the most admired companies in the stock market have made poor decisions at some point, and often in a very meaningful way. The way in which a company respond to its errors is a very important factor we take into consideration when analyzing management teams and the companies we invest in.

When a steep sell-off in a stock occurs, we often see that the market does not properly consider the leverage situation of a company. With regards to Ser, after the entry of receivables from the FIES payment in August, cash/liquid investments stood at R\$510 million. At the time of our updated analysis, the stock price of Ser was R\$14.80, with the cash holding representing about 25% of the market value of the equity.

If we normalize the 1st quarter excess costs and consider that the distant learning segment will reach its operational break even (EBITDA margin 0%), the adjusted P/E would be ~6.6x. In other words, even without growth and without positive contribution from the distant learning segment (which has presented good results), we would have an earnings yield of approximately 15%.

We believe that the company is on track to return to historical margin levels in their mature units, and to continue with the promising growth of new schools, after the re-evaluation of the organic growth plan. Each new school unit has the capacity to handle approximately 2,500 students, reaching a level of “maturity” in five years. This growth would translate into approximately 25% student growth over the upcoming years.

We mentioned the importance of entering smaller satellite cities, but there are also great opportunities in some capitals. The city of Fortaleza is a good example, being one of the largest markets in the Northeast region with approximately 130,000 students, where Ser has less than 7% market share. The market share of the company seems unbalanced (low) given the strength of the brand and the price (competitive) of Maurício de Nassau in the region. Historical issues of physical space constraints and product offering have limited their ability to gain market share in the past, but these issues are being addressed, and this should generate positive effects on growth in this city.

The distance learning segment is also an important opportunity for value generation. Since regulatory changes have allowed for the accreditation of satellite units which support distant learning course, the company has gone from 15

to more than 200 operational units, growing its student base from 7,700 students to 15,800 in one year. We are optimistic about these wholly-owned distance learning campuses, which tend to perform better than shared spaces which competitors tend to utilize (research has shown that wholly-owned distant learning campuses have 4-5x more students than those who utilize shared units). If we consider that the distance learning campuses will have around 1,000 students on average (as a reference, competitor Estacio had almost 2,000 students per their own distance learning campus before acquiring Uniseb), we would see 60,000 registrations in the distance learning segment, compared to their current overall enrollment of 130,000.

In short, we see the potential for significant value generation given the organic growth of their on-campus offering, the growth of the student base via the distant learning segment, and the possibility of utilizing their cash balance effectively to bolster further growth.

The allocation of excess cash over time is a matter that we have often discussed with the management of the company. Ser truly finds itself in an enviable situation, with a huge excess of cash in the midst of a rather challenging environment for the companies in the sector. We believe that several opportunities will emerge for the company in the next two years to prudently deploy their cash position. Knowing how to select "excellent opportunities" and knowing how to pass on the "mediocre" acquisitions is imperative for maximizing shareholder value. In our opinion, now is not the time to press things, rather to let the golden opportunities come their way as they sit in a position of strength. If the company acts in a disciplined manner, making only top-notch acquisitions, shareholders should see significant value accretion.

We believe that the current price level of the stock ignores the company's ability to return to its historical margins. Assuming the capital structure of the company remains the same as today, our models indicate, at current prices, a Real IRR of 17%, and a 19.5% Real IRR assuming excess cash is distributed back to shareholders. As the company delivers the expected profit growth, and responsibly allocates excess cash, we believe that part of the company's potential that we anticipated will materialize.