CASE STUDY

Breaking New Ground by Addressing an Underserved Market

Ser Educacional: Efficiencies Help Expand Affordable Higher Education with Positive Financial Returns in Brazil

October 2017
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IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on leveraging the power of the private sector to tackle the world’s most pressing development challenges. Working with private enterprises in more than 100 countries, IFC uses its capital, expertise, and influence to help eliminate extreme poverty and promote shared prosperity.

ABOUT THE CASE STUDY
Expanding access to quality and affordable education is a central element to eliminating extreme poverty and promoting shared prosperity. In developing countries, private education providers play a critical role in the delivery of education, skills, and training that is affordable and relevant to the needs of the labor markets. The IFC education practice is developing several case studies that showcase success stories in the IFC education portfolio around scale, skills, and affordability. The case studies highlight how IFC clients have contributed to meeting IFC’s strategic goals in education sector including (1) developing skills and enhancing employability of graduates and trainees, and (2) increasing reach and impact at all levels of education.

WRITTEN BY
This case study was authored by Ann M. Casanova, with valuable insights provided by IFC colleagues, Victor Correia Lima Viana, Carmen de Paula, Juliana Cristina da Silva Alves, Juliana Guaqueta Ospina, Salah-Eddine Kandri, Mohammed Ali Khan, Vitor Ribeiro Marques, Alexandre Fernandes Oliveira, and Elena Sterlin.

ACKNOWLEDGEMENTS
A special note of appreciation is extended to Ser Educacional for sharing details of their experience particularly Janyo Diniz, Rodrigo Alves, Geraldo Soares de Oliveira Junior and Simone Bergamo. Special thanks to Marco Calvi of ITAU/BBA and Valdir Nagem of Nagem, who shared their insights about the sector and the company. The author is grateful to Cassia Peralta for assistance with Portuguese translation.

Special thanks to Elizabeth Price and Irina Sarchenko for communications advice as well as Leticia Crentsil for copy editing and creative design.

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After graduating Andreza de Oliveira got a job at one of the largest accounting firms. Her earnings increased by 40 percent.
EDUCATION AS A TOOL FOR SOCIAL MOBILITY

At the age of 18, Andreza de Oliveira had completed high school but was still unsure about her career path, so she did what many Brazilian students do; she got a job. For 12 years, she worked in an accounting support function but was still yearning for more. Having found her passion, she decided it was time to improve her career prospects and increase her earnings by pursuing a Bachelor’s degree, but her father was a retired civil servant and her mother was a housewife. Her salary was committed to other priorities so it was important to find an affordable institution.

She enrolled in the Accounting Sciences program at the University of Guarulhos (UNG), an institution that is part of the Ser Educacional, S.A. (Ser) network. Andreza chose UNG because her program had achieved good-quality metrics in the evaluations carried out by the Ministry of Education and Culture (MEC). Although she was a little nervous about going back to school after such a long break, by the end of the first semester she realized that she was in the right institution and in the right program.

Soon after starting her studies, she began to see a return on her educational investment. She was hired by one of the largest accounting firms in Guarulhos. Now that she has graduated at the age of 33, she is happy working as an accounting analyst in a multinational chemical company in Guarulhos. After graduation, Andreza’s earnings increased by 40 percent and she earns extra income by providing independent tax return services. The degree positioned Andreza for new employment opportunities and provided improved social mobility that would not have been possible without the degree.

Janguiê Diniz, Ser’s founder can relate to the desire to escape the traps of inequality. As a boy, he was a shoe shiner on the local streets. He explained in his book, *Transforming Dreams into Reality*, “Because of my own experience, I was sure that education was the only way out of poverty to achieve success in life. Even as a child, I knew that education was the only way to break free from poverty. I studied to change my life, to win in life; otherwise my fate would have been to become a farm worker like my father.”

At the age of 14, his parents moved to a remote village of Brazil where there was no school for him to attend. He loved studying and seeing that his life was at a crossroads, he decided to leave his family and search for an uncle he had never met so that he could continue studying in Recife. The experience transformed him. Years later, Janguiê went on to study at a prestigious public university and became a lawyer and a judge.
As a professional, he recognized that there was pent-up demand for higher education in the Northeast region of Brazil that was largely underserved. He explained, “The demand remained very large and the supply of institutions was insufficient. Further, there was a need to qualify the workforce in a market-oriented way.” In 2003, he decided to found a small college in Recife, “Faculdade Mauricio de Nassau” (FMN). Today, Ser, the holding company, has grown to become the sixth largest private education provider, by number of enrolled students, in Brazil.

Ser is a private, for-profit, network of post-secondary education institutions in Brazil focused on offering relevant education at a cost that price-sensitive students can afford. It is a leader in the North and Northeast regions, a traditionally under-served market in the least developed region of the country. It has an educational platform that encompasses 10 post-secondary institutional brands that offer vocational, undergraduate and graduate degrees.1 Its affordable tuition structure, combined with federal government student loans and grants, enables students at the base and middle of the pyramid to access degrees that can transform their lifetime earning potential and break the cycle of poverty.

As of June 2017, the company had about 158,000 students, taught by 4,500 faculty, across 64 campuses in 20 states. Most of Ser’s students are working young adults from lower- and middle-income families that are between the ages of 18 and 35 and in 2016, 55 percent of the students were female. Many are the first in their families to obtain university degrees. Between December 2013 and March 2017, Ser awarded more than 67,300 undergraduate and graduate degrees and nearly 20,000 vocational certificates. About 10,000 students graduate annually.

Ser has experienced very rapid growth and its market share, currently 2.6 percent nationally and nearly 10 percent regionally, is expected to continue to increase. By December 2016, the company had net revenues of R$1.1 billion ($315 million). Over the last three years, its EBITDA margins averaged 32 percent and outperformed most of its peers. In July 2017, Fitch Ratings raised Grupo Ser Educacional’s long-term national rating from A+(bra) to AA-(bra), one of the highest credit ratings in Brazil.

Since 2010, IFC has played a catalytic role in the company’s expansion with three investments, two debt and one equity, totaling a disbursed amount of $55 million. The financing was used to open and acquire new campuses, modernize existing campuses, and develop its distance-learning platform. IFC also supported Ser as an anchor investor with its Initial Public Offering (IPO) and in executing its long-term vision. Since going public, Ser strategically weathered a major economic crisis in Brazil and has since consistently exceeded market expectations, even as others in the sector are still struggling.

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1 The Company operates under the following brands: Faculdades UNINASSAU, UNINASSAU – Centro Universitário Maurício de Nassau, UNINABUCO – Centro Universitário Joaquim Nabuco, Faculdades UNINABUCO, Escolas Técnicas Joaquim Nabuco, Escolas Técnicas Maurício de Nassau, UNAMA – Universidade da Amazônia, UNAMA – Faculdade da Amazônia, UNIVERITAS – Centro Universitário Universus Veritas, and Faculdades UNIVERITAS.
**KEY SUCCESS FACTORS**

To grow, Ser seeks a good return on investment for students and shareholders. The keys to success are (1) responding to pent-up demand, (2) affordability, and (3) long-term financial sustainability.

**RESPONDING TO PENT-UP DEMAND**

Ser targets markets with pent-up demand and high-growth potential through organic growth and acquisitions. Through market studies, it understands the nature of both employer and student priorities and then opens relevant campuses, academic programs, and courses. It is prioritizing areas, such as health, that are important to the economy and where students are less susceptible to drop out. Distance learning is helping it reach new students in frontier regions at a lower-cost point while diversifying revenues. By entering a market at an early stage and delivering good quality at an affordable price, it has earned a strong brand reputation that has yielded benefits.

**AFFORDABILITY**

A large percentage of Ser’s students are students who are price sensitive. As such, Ser assesses the local community’s purchasing power and then prices its programs below the competition. Its value proposition is to offer students good location and quality at an attractive price. Its average tuition of R$732 ($236) a month is the most affordable among the top listed companies. To appeal to a broader audience, it segments the market with several brands that are differentiated by price points. As of March 2017, about 37 percent of Ser’s undergraduate students received student loans through FIES, a federal government student loan program that helps students finance their education. This has helped attract more students who could not otherwise afford higher education and has helped the company grow.

**LONG-TERM FINANCIAL SUSTAINABILITY**

Ser is a company focused on long-term financial sustainability. It is financially disciplined and always ensures it can cover its costs with a margin. It focuses expenses on the essential elements that students need inside the classroom, avoids frills, and carefully controls its biggest costs. With labor, it blends full and part time faculty, while still meeting Ministry of Education (MEC) requirements. Rather than tying up its capital in long-term mortgages, it rents campuses in locations that are convenient for students and faculty and are close to work and transportation hubs. It has introduced several operational efficiencies across its network such as the “unified curriculum,” and headquarter-administered exams, which harmonize and ensure consistency of teaching and exams. Standardization has made its business model rapidly scalable. Ser dilutes operating expenses across a large volume of students, creating economies of scale that allow the company to compete on a cost and quality basis while growing the student base.
Faculdade Joaquim Nabuco is a low-cost technical and vocational school geared toward full-time workers in low-paying jobs who want to increase earnings by improving their skills.
EDUCATING THE MASSES IN BRAZIL: COUNTRY CONTEXT

As recent as the 1990s, a large share of the Brazilian workforce was largely uneducated. In 1993, a staggering 70 percent of the Brazilian labor force aged 26-30 had not completed secondary school. Some students had started post-secondary education but a low percentage of the population held a degree. This was a concern because to compete effectively in a global economy, the country of 206 million people needed skilled workers. In the mid-1990s the Brazilian government embarked upon a series of educational reforms to increase completion rates in basic and secondary school and provided greater access to tertiary education for a larger segment of the Brazilian population. The 1996 Education law reduced regulation and prioritized quality and accessibility of tertiary education. The government set a target to increase the Gross Enrollment Rate (GER) from 12 percent in the mid-1990s to 50 percent by 2024.

Historically, tertiary education was concentrated in prestigious public institutions but these were largely limited to students with the strongest academic credentials. Furthermore, the Brazilian government lacked the financial capacity to expand public tertiary institutions to the masses, thus, it decided to bolster access to higher education through private institutions, largely supported through FIES, a federally funded student loan program and PROUNI, a federal grant program.

The reforms succeeded in increasing access. The tertiary education industry sprouted across Brazil and between 2005 and 2015, there was a 50 percent increase in new, on-campus students. In 2015, there were about 2,350 post-secondary institutions. By 2016, Brazil had become one of the largest tertiary education markets in the world with 8 million enrolled students, with a market potential of 35 million students. This demand is largely met by the private sector, which accounts for 75 percent of access.

While growth has been impressive, gains have not been uniform and quality has been uneven. In the North and Northeast regions, home to 20 percent of the population and the second least developed region, enrollment has lagged. A 2004 World Bank study found that “education attainment in paraíba, as in the Northeast as a whole, is the single most important poverty-reducing factor.”

By 2014, the GER in North and Northeast regions rose to 18 percent, while the overall national average was 34 percent. MEC attributes this growth to governmental programs such as FIES and PROUNI, which effectively contributed to expanding enrollment in private institutions.

Higher education in Brazil is particularly important because there is a significant wage premium for those who have completed their education. Given the skills gap, employers are willing to pay “a substantial salary premium” to get qualified workers. According to the Organization of Economic Cooperation and Development (OECD), University graduates in Brazil earn 2.5 times more than students without degrees. This is a bigger wage differential than in any of the other 34 countries that are members in the OECD. In the North and Northeast, this wage differential is even higher, estimated to be 3.5 times more for 15 years of school versus 11 years of school.

3 The Gross Enrollment Rate is the percentage of youth in the 18 to 24 age bracket who are enrolled in post-secondary education. “Planejando a Próxima Década. Conhecendo as 20 Metas do Plano Nacional de Educação.” Ministério de Educação. 2014.
5 Internal IFC documents citing PNAD, (Brazilian Institute of Geography and Statistics) 2008.
Through organic growth and mergers and acquisitions, the Ser brand has expanded rapidly.
FROM SHOE SHINER TO UNIVERSITY NETWORK OWNER

Janguiê Diniz was born in a remote, rural area of Paraíba State. The village was so remote that it was not even listed on a map. His parents were migrant farm workers, and moved the family of nine periodically in search of work. Looking to raise money, at the tender age of eight, Janguiê set up his first business as a shoe shiner on the local streets. An entrepreneur in the making, he soon switched to selling oranges after discovering that they were more profitable.

By the age of 14, the family moved again but he encountered a problem—there was no local school in their new community and if he remained at home with his parents he would have to work on the farm. His parents always encouraged him to study and so in search of better opportunities, he moved by himself to Recife in search of an uncle he had never met. With the proceeds from his small businesses, he paid for a typing course to get the necessary skills and began working at his uncle’s law firm. The law firm experience opened his eyes to a world of opportunity and underscored the importance of education as a tool for social mobility.

In 1983, Janguiê was admitted to the law program at the Federal University of Pernambuco, a prestigious public university. Janguiê reflects on that period, “I worked during the day and studied at night. I studied a lot.” His own experience was a foreshadowing of how students at his institutions would also work and study and how critical affordability is to provide access.

Two decades later, the region was still lacking in teaching institutions that provided academic programs that were needed by employers and that reflected students career interests. Recognizing that low- and middle-income students had few opportunities to study in the Northeast of Brazil, in 2003, Janguiê founded “Faculdade Maurício de Nassau” (FMN), a college in Recife. He was a judge at the time so he brought in his brother, Jânyo, to manage the daily operations.

While there was a broad need to provide a range of courses that would aid in the region’s development, resources were constrained and the company began with a few strategic programs that were authorized by MEC such as in law, business administration, social communication, and biomedicine. From the outset, he wanted to position the company to compete on quality and soon thereafter the brand started to earn a positive reputation in the local market and enrollment began to grow. In its first year, Ser enrolled 500 students at a price point below what the other institutions were offering.

FMN was enjoying success and he decided to diversify and go further down market. By 2007, he opened “Faculdade Joaquim Nabuco,” a low-cost technical and vocational school. The institution is geared toward full-time workers in low-paying jobs who want to upgrade their career outlook and improve their earning potential by studying part time. Many of these students, who are on average 26 years old, never had access to higher education.
Over the course of the next decade, the company entered an expansion phase through organic growth as well as mergers and acquisitions. It expanded the number of institutions in its network, its academic programs, and number of students. As the company was growing, competitors started to notice how it was offering affordable prices to the base of the pyramid and was still growing sustainably, but they found it hard to compete. Its brand presence was much greater than its competitors and its positive reputation helped it to keep growing and expanding into other regions. In 2010, realizing that it needed to bring several institutions under the umbrella of a single brand, it created the brand “Grupo Ser Educacional.”

In 2013, on the occasion of its 10th anniversary, Ser was on the brink of its newest expansion phase and needed to strengthen its balance sheet to position itself for new acquisitions. It was time for Cartesian, a private equity investor to exit and the company decided the timing was ripe to go public. The proceeds from the IPO were later used to acquire Universidade da Amazônia (UNAMA) and Universidade de Guarulhos (UNG).

Today, Ser’s target market is low- to middle-income students in the urban centers of frontier regions where demand has not yet been satisfied by other local educational institutions. To appeal to a wide range of students with different levels of purchasing power, Ser has segmented the market with two different levels of brands: “Balanced” and “Premium.”

“Balanced” is geared toward students looking for a good institution, such as Joaquim Nabuco and UNG, but where cost is a limiting factor. “Premium” is for students willing to pay more for an academically distinguished institution, such as UNINASSAU and UNAMA. It sees its Premium brands as an alternative to the “Elite” public universities in Brazil.

Jânyo Diniz, CEO of Ser Educacional, reflects on the company’s accomplishments, “Ser’s biggest achievement is providing an educational product that contributes to the professional success and social mobility of the student and that is also in sync with the needs of the workforce for the development of the region.”

Today, Ser is the leading provider of tertiary education in the North and Northeast of Brazil and Janguiê is the controlling shareholder of the university network. It has expanded to other regions of Brazil, recently introduced a distance learning platform, and is positioning itself to be a formidable national player.
As a result of its expansion, Ser is the leading provider of tertiary education in the North and Northeast of Brazil.
Healthcare programs have a higher than average monthly tuition and lower dropout rates.
THE RIGHT PRICE RAPIDLY EXPANDS ACCESS AND THE NETWORK: SER’S BUSINESS MODEL

GROWTH OF THE NETWORK

The Brazilian education market differs from many countries in that its educational brands tend to operate on a regional basis, rather than as a standalone institution catering to a single local community. It is in this context that Ser has grown and as of June 2017, it had a presence in 20 out of 26 states in Brazil.

SER’S NATIONAL FOOTPRINT

Nation-wide footprint anchored on strong regional brands
GROWTH STRATEGY

When considering entering new undergraduate and graduate markets, it targets cities with populations greater than 300,000. Ser’s growth strategy is based on three pillars: (1) organic growth through accreditation of new campuses and creation of new undergraduate programs at existing campuses, (2) selected acquisitions that complement its platform, and (3) expansion of distance learning.

1. Organic Growth

Ser’s primary strategy is to open new campuses where local demand has not yet been met. Ser began with a small number of programs focusing on strategic segments and over time it has expanded to include a portfolio of more than 1,300 courses. It is continually working to accredit new programs that respond to local demand from both students and the labor market. It also prioritizes programs that present opportunities for growth, such as medicine, dentistry, psychology and engineering programs, which have higher than average monthly tickets and lower dropout rates.

The expanded campuses and courses are needed to respond to demand and attract more students. Over the last five years, it has received several approvals from the Ministry of Education (MEC) to continue to expand operations organically. As of March 2017, it had a total capacity of nearly 400,000 seats. As of June 2017, it had completed the accreditation of 25 new campuses and was in the process of accrediting 20 more. According to Ser documents, “The expansion of smaller campuses and increase in available openings allows organic growth with little need for investments and with reduced risks.” The costs of expansion are incremental due to the number of efficiencies the company has introduced. To date, about 45 percent of its growth has been organic and 55 percent has come from acquisitions.
2. Acquisitions

The tertiary education market in Brazil is highly fragmented and Ser uses acquisitions to consolidate, solidify, and expand its existing presence. Since the accreditation process for new institutions takes an average of 36 months, and it takes 18 months to accredit a new course at an existing institution, the acquisition of an accredited institution provides a fast track solution to entering a new market. Mr. Jânyo Diniz explains, “We look for institutions that are in a region with growth potential, especially where demand is greater than supply, or an institution that is differentiated by a quality profile and good name recognition.” Acquisitions also allow the company to enter new regions, such as with Universidade de Guarulhos (UNG), which provided entry into Southeast Brazil and access to the São Paulo market, the most populous city in Latin America.

Target acquisitions consist of institutions, ideally universities or university centers, with regional recognition or a “white label” that already have accredited programs and satisfactory levels of quality above 3 (5 is the highest), as evaluated by MEC.6 MEC’s evaluation system is based on a 5-level scale, which is used for authorization, accreditation, and renewal of accredited programs and institutions. A score of 4 or 5 reflects above-satisfactory quality, while a score of 3 reflects satisfactory quality. A score of 1 or 2 reflects unsatisfactory quality. Ser does not seek institutions with an official quality rating of less than 3 because this type of institution would be under supervision by MEC and it would stall growth for at least two years.

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6 The regulatory framework in Brazil authorizes universities to do research. In contrast, university centers are purely teaching institutions that do not conduct research. Degrees from both are equally recognized by law.
Ser has strict criteria for acquisitions, including a convenient location and facilities for students and faculty. It also considers other factors such as target market size, competitive environment, penetration rate of tertiary education, number of high school graduates, purchasing power of potential students and local socio-economic conditions. Between 2014 and 2015, it added 34,000 undergraduate and graduate students to its base through acquisitions.

3. Distance Learning

Distance learning represents diversification into a new business line for Ser. This delivery channel will allow Ser to reach new students that live in cities that are far from major urban centers. Since this segment of students must periodically attend face-to-face classes and take exams at its distance centers, it selects venues that are conveniently located. The cost of facilities is lower because infrastructure requirements are smaller and there is a lower cost of rent.

Ser began offering its first distance learning course in January 2014 and in the first half of 2014, it introduced distance learning at UNINASSAU’s nine learning centers. With the acquisition of UNG, it added six more centers to Ser’s network. In late 2015, it received authorization from MEC for its UNG and UNINASSAU brands to expand into distance learning and it is prioritizing cities where there are less offerings of on-campus education.

After three years of operations, it had 6,100 students enrolled at 15 centers. Following the recent liberalization of the distance learning regulatory framework, in July 2017, MEC streamlined the approval framework for institutions with positive quality standards. As a result of the new policy, as of July 2017, Ser received fast-track approval to open up to 700 new learning centers and it plans to open an additional 400 new learning centers by 2019. The positive reputation that the brands have earned is expected to play an important role in quickly attracting new students.
This segment is expected to grow significantly given its attractive tuition price of R$250 ($80) per month, which is 34 percent below the cost of on-campus programs. Even though tuition is cheaper, the fixed costs are significantly less. Ser can offer distance learning at a reduced cost because the incremental cost for new students is low and most of the operating expenses are diluted by the existing on-campus administrative structure. Similarly, the costs of faculty are diluted across a larger volume of students. Ser expects that this segment will continue to provide quality education, through its standardized curriculum and headquarter-administered testing mechanism (see below) with a convenient option for students while generating higher margins. Since distance learning students are not eligible for FIES student loans, it could also help offset any future volatilities stemming from changes to FIES.

**INFRASTRUCTURE**

A key element of Ser’s strategy is to position its campuses in locations that are convenient to where students live and work and are supported by strong transportation links in major urban centers. By eliminating barriers and facilitating greater convenience with location, it increases the likelihood that a student will complete the program. To locate its facilities in prime locations, it has adopted an asset-light model. By renting rather than purchasing buildings, Ser can secure the locations it wants without having too much debt on the balance sheet. It sees the rental strategy as a better way to allocate its cash to areas that students require instead of on fixed assets.

Its facilities are focused on the essential needs of commuter students; thus, many of its organically grown facilities do not have a campus. Mr. Jânyo Diniz explains, “We are targeting the use of resources to aid in growth and development. The infrastructure has modern classrooms that are focused on giving the student exactly what is needed without a lot of frills. We focus on the essentials that are necessary to benefit the student’s learning process—a physical classroom, multimedia equipment, and some laboratories. We don’t have huge soccer fields or unused land that would incur maintenance costs.”

SER rents buildings to better allocate cash to areas that students require instead of on fixed assets.
FACULTY

As of June 2017, Ser had 4,500 faculty members. More than 60 percent of Ser’s faculty holds a Masters or Doctorate degree and it is in compliance with MEC requirements. Most of the faculty are working professionals who teach part-time, enabling them to bring real job experiences from the working environment into the classrooms. Ser documents explain further, “By perfecting academic development, training our faculty, and establishing managerial and administrative function controls in our head office, we are able to reduce administrative and management costs at each of our campuses, allowing us to charge accessible monthly tuition fees, while offering our students quality education.” Even still, labor is its greatest expense. Between January and March 2017, 70 percent of company costs were spent on payroll and social charges.

PRICING STRUCTURE

Tuition prices range across Ser’s institutions depending on the brand, the region, and the specific course. The company does a market study to understand the local demand for specific courses in a target market as well as the local purchasing power. Then it compares prices charged by others with comparable quality standards and generally prices courses at about 15 percent below others. Even though it aims to undercut competitors, it always ensures that it can cover its costs per course. Since the company adjusts prices to local conditions, the same course may be priced lower in a community with a lower purchasing power than in one with a higher ability to pay. As of June 30, 2017, the average monthly tuition rate for on-campus undergraduate courses across its network of institutions was R$732 ($236).

COMPETITION

In Brazil, the tertiary education market is highly fragmented and in 2015, MEC reported that there were about 2,350 providers. Consequently, Ser faces competition in each market it operates in. It believes that when a student is selecting an institution, several factors are considered including price, program offerings, faculty, facilities, location, overall education experience, and reputation of the institution. On price, of the top-listed companies, Ser’s average monthly tuition across all its campuses and programs are the lowest. On the other elements, it has worked hard to provide a package that is relevant to the needs of the market and is competitive and attractive for students. This has led the company to quickly establish itself and compete with larger players in a short period enabling it to attract enough students to be ranked the third largest institution nationally, by number of students, and is poised to continue to grow.

AVERAGE MONTHLY TUITION PRICE AND ENROLLED STUDENTS

<table>
<thead>
<tr>
<th>Company</th>
<th>Monthly Average Tuition - 2Q17</th>
<th>Number of Enrolled Students as of December, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON CAMPUS</strong></td>
<td></td>
<td>(In thousands)</td>
</tr>
<tr>
<td>Ser</td>
<td>236 USD</td>
<td>131.1</td>
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<tr>
<td>Estacio</td>
<td>243 USD</td>
<td>360</td>
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<tr>
<td>Kroton</td>
<td>276 USD</td>
<td>418.7</td>
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<tr>
<td>Anima</td>
<td>*285 USD</td>
<td>80.5</td>
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<tr>
<td><strong>DISTANCE LEARNING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ser</td>
<td>81 USD</td>
<td>6.1</td>
</tr>
<tr>
<td>Kroton</td>
<td>84 USD</td>
<td>490</td>
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</tbody>
</table>

Source: Ser and Competitors information filed on the CVM website *1H17
FINANCIAL AID

The growth of the FIES program had a dramatic impact on student access. In 2010, student enrollment was at 28,000 and only about 4 percent of Ser’s students relied on FIES to finance their education. By 2014, when FIES reached its peak and nearly 48 percent of Ser’s students took advantage of the expanded government program, undergraduate enrollment skyrocketed to about 101,000 students. Mr. Jânyo Diniz, explains, “FIES created a culture that raised awareness that financing education is possible. This was particularly important for students who earn less than three minimum wages.”

FIES only provides financial aid to undergraduates and is an important source of reliable cash flow for the company because the government pays the tuition for the entire semester up front. From a financial standpoint, a FIES student is more attractive than a self-financed student because the institution collects the full tuition price up front, the delinquency rate is lower, and students are less likely to drop out.

FIES created a culture that financing education is possible.
THE FIES CRISIS ACCELERATED THE INTRODUCTION OF GREATER EFFICIENCIES

While FIES was an essential element to expanding access and to the long-term sustainability of tertiary institutions, it came with risks. During the integration of two major acquisitions, UNG and UNAMA, a crisis unfolded. In December 2014, the Brazilian economy was combating a major economic recession and the government rapidly adopted austerity measures. It made a surprise announcement that it was slashing the number of student loan contracts available through FIES across Brazil from 730,000 to 310,000. In addition, it established new criteria for the allocation of funding agreements, prioritizing regions, types of courses, and cities with a certain human development index ranking. The abrupt change in government policy, coupled with the economic crisis that affected students’ ability to pay, forced the company to make quick and long-term adjustments to preserve margins.

Ser worked with a limited number of students who had the capacity to pay and had a guarantor. For those who did not have the means to pay, Ser made the difficult decision of recognizing that they could not re-enroll and wrote off the losses right away. The company experienced an increase in the default rates and a decrease in its margins. In 2015, Ser faced an extraordinary dropout of approximately 8,300 students and in 2016 the overall intake dropped by 3.3 percent.

As the student base was reduced, Ser introduced several long-term initiatives to make the company more efficient. It (1) reduced costs, (2) introduced greater efficiencies, and (3) pursued new revenue streams.

1. **Reduced Costs:** The company reduced its general and administrative expenses. Given that labor is its greatest expense, incurring about 72 percent in 2015, it reviewed the organizational structure and combined functions where possible. It resized the number of classes in the middle of the semester to realign the student-teacher ratio and redesigned the administrative department to optimize expenses. Through the integration of UNAMA and UNG, it further diluted faculty expenses. It restructured its lease agreements on 18 properties, renegotiated with suppliers, and launched initiatives to reduce electricity costs. Combined, the company generated savings of R$16 million ($4.8 million).

2. **Introduced Greater Efficiencies:** Ser’s corporate culture had long been cost conscious but the crisis introduced a new era of frugality that also increased productivity.

   a. **“Enrollment Business Intelligence” (BI):** Ser needed to recruit more self-financed students with a good capacity to pay. It created a business intelligence unit and staffed it with a team of analysts that conduct market analysis on a faster timetable by relying on an integrated IT backbone anchored in Customer Relations Management (CRM) Sales Force.
Aided by big data analytics, the platform enables “intelligent management of the entire enrollment cycle.” The system visualizes indicators, actions, registration, and enrollment. The communications platform facilitates a better exchange with prospective students. The system guides students through the sequence beginning with registering for the entrance exam, to enrollment, to financial aid. The new approach supports a centralized selection process that accelerates admissions decision making.

b. **Course Consolidation:** It made changes to the curriculum matrix and consolidated the number of classes to improve the class distribution and maximize classroom productivity. It identified areas of commonality across different disciplines and courses. It combined the early stage fundamentals where there were synergies. For instance, the curriculum requirements for engineering students in electrical, environmental, and production programs were combined into the same course. It identified courses that were mutually compatible and integrated lessons. It did this for several healthcare programs such as biology, nursing, and physio-therapy, as well as engineering and teaching.

Similarly, it combined the syllabi for institutional disciplines that tend to be in the soft skills area such as communication and expression, research and methodology, personal development and employability, ethics and social responsibility, and entrepreneurship. It then complimented the traditional classroom environment with blended learning, shifting some courses that were previously face-to-face to on-line platforms. By concentrating the number of students in one class and introducing blended learning, it required fewer teachers to teach more students and enabled greater dilution of labor costs.

*Big data analytics helps accelerate recruitment and admissions.*
c. **Ser Retention System (SRS):** As Ser was getting more self-financed students, it needed a more effective tool to collect tuition from students. It created the SRS, which communicates frequently with students to remind them of their financial commitments. It integrated into a database key student information such as payment behavior patterns, academic performance, financial scores, and social media posts to statistically predict student behavioral patterns that typically lead to nonpayment and dropout. Ser’s student dashboard provides a rapid view of the dropout probability by institution, campus, and drills down to the academic program level.

This big data allows the company to reach out to the student after the first missed payment and reach an agreement on a partial payment while establishing an installment agreement for the balance. This helps solve the student’s problem at an earlier stage and leads to a higher probability of retention. Interventions can take place face-to-face, on-line, or through the call center. Ser was concerned that if the situation was left unmanaged, the student would get to the end of the semester and would likely not have the money to pay even with a negotiated settlement, thus increasing the likelihood of dropout and financial loss.

3. **New Revenue Streams:** Ser hired consultants to study the worst-case scenario without FIES. They found that without government support or access to distance learning, the size of the addressable market reduces from 35 to 19 million students. Taking into consideration the 8 million students that are already enrolled, the potential market shrinks to 11 million. In this scenario, the market only increases by moving to distance learning and incrementally adding students through private financing.
Since Brazil is still an under-penetrated market, Ser believes that if it is efficient and able to introduce new courses in different locations, it will inevitably find students and can continue growing, even with a significant economic crisis in the country. The more Ser can do this well, the more it will be able to sustain a lower cost per student.

The study validated the track it was already on and it continued further expansion into the interior of the country and rapidly expanded its distance learning platform. It also continued to diversify the mix of brands and courses that were in demand, particularly in programs where students were less likely to drop out. It increased its programs in health and the average tuition price.

The results thus far have been very positive. Ser’s undergraduate enrollment for the first quarter of 2017 shows a growth of 15 percent over the same period in 2016. At the close of the first quarter 2017, there were 46,100 new undergraduate students enrolled, versus 39,900 in the same period in 2016. The highlight of the quarter was the distance-learning segment, which reported a growth of 52 percent, enrolling 4,000 students, versus 2,600 in the first quarter 2016. The results of student enrollment prove that the strategy is working.

**REVENUES**

Between 2014 and 2016, Ser’s net revenues increased from R$705 million ($299 million) to R$1.1 billion ($315 million), representing a compounded annual growth rate (CAGR) of 24.91 percent. Ninety six percent of revenues were derived from on-campus undergraduates. Over this period, Ser’s student base grew at a CAGR of 7.3 percent, in part due to a 10 percent increase in student enrollment in health programs. Over the same period, the average monthly ticket increased 22 percent and outpaced the rate of inflation, which was 18 percent. Ser’s EBITDA margins over the last three years were an average of nearly 32 percent. Even with the FIES crisis, its margins have consistently been above its peers.

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7. The annual average foreign exchange rate in 2014 was R$2.353 to US$1.00 and for 2016 it was R$3.49 to US$1.00. Source: Reuters.
Ser is focused on preparing students who are rapidly employable.
Ser has worked hard to earn a reputation for competitive quality and it recognizes that this is fundamental to its ability to attract students. It is also essential to achieve its mission to shape ethical, honest, and skilled professionals that are well prepared for employment. Ser wants to graduate students that are rapidly employable and can quickly find jobs. It does not want to produce students with diplomas that do not have the necessary competencies. Good quality scores from the government are also critical for the institution to be eligible to receive FIES and PROUNI, as well as to open new distance learning centers. Given the importance of good quality to its bottom line, Ser instituted several standards and internal controls to ensure consistent delivery and accountability across its network.

QUALITY ASSURANCE

MEC has very prescriptive requirements regarding the core curriculum competencies that students need to master to obtain degrees, yet Ser found there was a great deal of subjectivity in teaching and consequently a range in quality that could compromise its student’s ability to perform well on MEC evaluations. It believed that having varying degrees of quality across the institution was not fair to students and was a threat to long-term sustainability, thus, it created a standardized structure to ensure that students mastered the required competencies.

Mr. Jânyo Diniz, a former glass production engineer, explains, “From our headquarters, we manage all our campuses with very rigid control systems that allows us to keep up, in real time, with the quality of the teaching and the quality of students as they leave. We control what the teacher is teaching and the level of learning of students. We shifted student examinations from the teacher to the institution. “We can guarantee that the students have standardized quality as they graduate.” This is achieved through several tools including the “Unified Curriculum,” the “Collegiate Test”—a headquarter-managed student assessment, the “E-Journal,” an educational management system and internal evaluations.
1. Unified Curriculum

In 2009, Ser created the “unified curriculum.” Developed by course coordinators and full-time faculty, the company standardizes course objectives and expected competencies that are necessary to master the discipline. It establishes detailed content of what needs to be covered for each course. Ser structures its content to be less focused on theory and places a greater emphasis on practical aspects that are relevant for the job market. The teacher is free to teach in a personalized style so long as the content that will be tested by headquarters is sufficiently covered. About 60 percent of Ser’s faculty are active in the labor market. This is attractive because they can provide insights based on real world experience that help bring the content to life. Professors, program coordinators, and campus directors are trained in procedures and techniques that promote uniformity in performance. These policies help to carefully control the faculty’s workload and reduces costs.

2. Headquarter-Managed Assessments / “The Collegiate Test”

In 2007, Ser introduced the “collegiate test,” whereby all exams are administered by company headquarters rather than the individual teacher. A group of professors, all with Master’s and Doctorate degrees, developed a database that currently has nearly 900,000 examination questions that are rotated frequently. The database is updated with new questions every semester. Exams measure student competencies on the standardized content of the unified curriculum that the professor must cover. The questions for each exam are randomly selected by a computer, based on selected criteria and the level of difficulty as defined by the academic department. The multiple-choice exams are computer graded.

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The exam is a tool that allows management to monitor whether the teacher is effectively covering the requirements under the unified curriculum. If results are largely unsatisfactory, students must repeat the course or reinforce some areas in the following semester and the teacher is fired. When the system was introduced, there was resistance and the company had to let go 30 percent of the faculty. Today, it is accepted.


The E-Journal is a technology-based educational management platform that is placed in each classroom to monitor course delivery and attendance in real time. At the beginning of each semester, the syllabus and lesson plans are uploaded into the system. After each class, the professor annotates the completed lesson plan and verifies student attendance. The system also allows management to verify, in real time, that the professor was present in the classroom at the scheduled time.
4. Internal Evaluations

Ser has adopted several internal controls to ensure good results in MEC’s evaluations, reduce the dropout rate, and continually improve the institution’s reputation. It takes a proactive stance and internally measures all of MEC’s parameters of student performance on the national exam, faculty, and facilities (discussed below) so that it can detect any possible non-compliance issues early enough to implement a corrective action plan. In addition, it carries out several other internal evaluations of the institution, which it uses to make improvements.

QUALITY RESULTS

To measure quality of individual tertiary institutions, the Brazilian government has three key evaluation tools: (1) the National Exam for the Assessment of Student Performance (ENADE), which measures the effectiveness of teaching and learning. This assesses the level of competency that students are expected to learn in each academic program. (2) The Course Concept Index (CPC), which measures infrastructure and the faculty’s level of schooling, and (3) the General Course Index (IGC), which is a three-year average of the CPC results. Each indicator is measured separately and scores are published by MEC to promote a culture that promotes transparency and enables students to make informed choices when selecting an institution.

In 2015, Ser’s scores were largely solid. In the IGC, 100 percent of its institutions received scores above satisfactory. Similarly, in the CPC, 92 percent of its courses were ranked above satisfactory. There was a decrease in the ENADE score from 67 percent (2012) to 53 percent of students performing above satisfactory. This is attributed to companies that were acquired and that conducted ENADE before Ser took over management. Ser reports that all the other campuses received a weighted average of above satisfactory.

Achieving scores above satisfactory on MEC’s evaluations are crucial to maintain continued access to government financial aid programs such as FIES and PROUNI, access to which reduces its effective tax rate from 34 percent to a minimum of 1 percent, the typical tax rate of for-profit organizations. This levels the playing field between for-profit and non-profit educational institutions.

As another indicator of quality, the company is constantly getting new accreditations from MEC for both its courses and its organic growth platform. In addition, it works to upgrade the status of its colleges. For instance, in July 2017, the college of Faculdade Joaquim Nabuco was accredited as a university center. Accreditation as a university center (does not conduct research) or university is only granted after the institution has operated as a college and has met satisfactory quality standards, including positive evaluations, as well as meeting the legal requirements applicable to each type of post-secondary education institution, such as the minimum qualifications and work regime of the faculty.

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EMPLOYABILITY

For a 27 year old company with about 2,000 employees, Nagem, an office supply, papercraft and electronics retailer and distributor with 29 owned stores and 34 franchised stores from major brands such as Samsung, Motorola and Sony across the Northeast and Southeast, has lived the evolution of the labor market. Mr. Valdir Nagem, Co-founder and Sales Executive Officer of Nagem explains, “Years ago, Brazil faced a structural problem characterized by a lack of offer of a qualified workforce. Today, while employers still face such problems, access to qualified workers is far better with the expansion of private universities and for us one key contributor has been Ser.”

Nagem hires about 50 new employees annually for positions such as management, economics, and accounting. Currently, about 70 percent of Nagem’s new hires for entry level positions in Recife come from private universities and of those, nearly 90 percent are from Ser. He attributes this positive experience with Ser students to good preparation. He said, “They stand out for their qualifications, professionalism, and willingness to work. Further, recruiting Ser students is ‘safer’ and more cost-effective than recruiting from other institutions because the retention rate is better.” He believes that Ser has an outstanding and effective career matching program.

Simone Bergamo, Ser’s Academic Director, explains their competitive advantage. “Ser’s students differentiate themselves because employability is in the DNA of our courses. In addition to learning the technical content, all courses are designed to help students develop the right skills, such as communication and presentation, problem solving and collaboration in groups because these are essential competencies that students will need in future jobs.” Through its career center, Ser has established partnerships with about 8,600 companies.

At recruitment time, companies like Ser’s approach to matching candidates. Ser carefully pre-screens and provides companies with a short list of candidates to be considered. Mr. Nagem agrees that Ser is excellent at providing an effective package of well aligned candidates, presented in a timely and organized manner.

Since both Nagem and Ser have a footprint across the Northeast and Southeast, the size of Ser’s network allows them to recruit from campuses across different states, while utilizing the same relationship with Ser in the home state of Pernambuco. The low turnover of recruits from Ser coupled with access to qualified workers through Ser’s large network has improved the company’s competitiveness and will benefit Nagem’s expansion which will require the hiring of 600 additional employees as it opens 20 new stores across the region in 2018.

As an employer, Mr. Nagem has a very positive perception of the quality of education at Ser and believes that it is “providing students with a high-quality education that targets labor market needs and allows them to have better jobs.”
“Recruiting Ser students is ‘safer’ and more cost effective than recruiting from other institutions because the retention rate is better.”

Valdir Nagem, Co-founder, Nagem
To grow exponentially, Ser needed access to capital with longer tenors that IFC provides.
THE ROLE OF IFC

When Faculdade Maurício de Nassau opened, Janguiê knew that he would tap into pent-up demand. By 2007, the company was already experiencing dramatic growth with more than 13,000 students. It had acquired two institutions and increased the number of campuses. Ser had been funding expansion from internal revenue generation but to grow exponentially, it needed access to capital with longer tenors. The issue was that private higher education financing by local banks in Brazil was still in its early days and long-term financing was not widely available, thus Ser began to look to international markets. In October 2008, Ser obtained an equity investment from Cartesian Capital Group, a private equity firm from the United States that took a $48 million equity stake.

By 2009, Ser was in discussions with IFC. Jânyo explains, “Ser was interested in IFC because it brought the most wholesome package. It was a differentiated institution that was focused on helping the institution to develop. This was true from the initial evaluation to get the credit approved, where IFC did a detailed evaluation of our processes in a way that was quite different from what usually happens in the market. Even after approval, IFC continued to offer valuable sector-specific expertise. In addition, IFC brought a level of credibility to our institution. Even after disbursement, IFC maintained the relationship. IFC is a long-term partner for us.”

IFC was interested in working with Ser because it was a good fit with IFC’s country and sector strategies to support strategic clients with sufficient scale to deliver good-quality, affordable education to underserved populations of Brazil. Ser’s business model of targeting low- and middle-income students in less developed regions of Brazil was appealing. Further, the opportunities for growth in new markets and in areas of low penetration, raising standards of educational services, and providing a career track for improved employment opportunities for skilled professionals was important to IFC.

Between 2010 and 2015, IFC and Ser went on to partner on three investments totaling a disbursed amount of nearly $55 million in debt and equity to help the company increase the number of campuses, make new acquisitions, modernize and remodel existing campuses, and establish the distance learning platform. The transactions are tied to the Brazilian Real and Ser does not bear any foreign exchange risk; this has been particularly important over the last few years where the Real has experienced significant exchange rate volatility. IFC also shared best practices as well as industry contacts and guided Ser on improvements to its environmental and social management systems. In 2013, IFC supported Ser as an anchor investor with its IPO which was oversubscribed.

In 2015, IFC’s Country Office in Brazil pioneered a student internship with Ser to increase opportunities for students from the North and Northeast regions. Carmen de Paula, Principal Investment Officer said, “The idea was to align IFC’s focus on boosting the quality of private education and student’s employability after graduation. The program aims at enriching student’s skills and providing an opportunity to work and live in Sao Paulo. The university prepares the students with certain skill sets before the internship and IFC provides feedback after the internship. This provides Ser with another tool to bolster its curriculum.”

“I learned so much at IFC! I met highly competent professionals who inspired me to be confident, forget about ‘maybe,’ and pursue my dreams.”

Romena Charchar Marques, Ser / IFC Intern from Belem
Successful elements from Ser’s model, such as its approach to cost efficiency, can be replicated in other markets.
REPLICABILITY IN OTHER MARKETS

How can others replicate the success of Ser, such that the middle and base of the pyramid can have increased access to affordable higher education? The Ser experience would suggest the following tips.

**Enabling Environment**

- Work with the government to develop a plan that will increase the gross enrollment rate. Influence the development of an enabling environment that recognizes that the government cannot do it alone and needs the private sector to reach the masses. Some factors to consider include:

  1. Supporting regulation that permits for-profits and non-profits to operate in the market. Allowing for-profits to operate in the market helps companies to pursue broader financing options, such as equity, that will allow companies to expand on a faster timetable than a non-profit. For-profits set the stage for more rapid growth, which enables access on a faster timetable.

  2. Level the playing field for all types of operators, especially for-profits and non-profits. For instance, provide tax incentives that provide greater parity between for-profits and non-profits, and create an incentive system so long as government stipulated performance requirements are delivered satisfactorily.

  3. Government financed student loans are an important part of increasing access to tertiary education. Consider the long-term financial sustainability of the program and balance the promotion of increased enrollment with a package that may be less generous but that will survive the test of time.

**Cost Efficiency at All Levels**

- Manage costs strategically and achieve economies of scale to lower costs and enable investment in other areas.

- Secure a strategic location by renting facilities. This will free up long-term capital that can be reinvested in other student-centric developments.

- On infrastructure, focus on providing the essentials that students need i.e. a physical classroom, multimedia equipment, and minimize the frills.

- Dilute labor expenses across a greater volume of students. Combine functions and maximize faculty and staff time to make spending more efficient. Consolidate common elements between courses where possible. Consider standardization of key elements of the curriculum to ensure that requirements are sufficiently covered while reducing teacher preparation time. Promote a shift in teaching from a subjective “art” to a controlled “science” that yields more consistent quality and avoids remedial efforts. Increase the use of technology to support blended learning.

- Use business intelligence to identify and recruit students with a better capacity to pay and develop an early warning system that will help prevent dropouts.

- Leverage distance learning as a low-cost, high-volume solution to offset reductions in other revenue streams.
### Diversify Delivery Channels
- With low price points, distance learning can quickly go viral and catapult access with a large network of small centers.
- Locate centers in a convenient location with proximity to where the primary market of working adults is concentrated.

### Relevance and Quality
- Prioritize academic programs that are needed for the economic development of the region and country in areas where there is local demand in each community.
- Teaching staff from industry will provide students with real-world insights and relevance.
- For government evaluations, be disciplined about achieving institutional targets and position students, faculty and infrastructure to consistently achieve rankings above satisfactory scores.

### Growth Strategy
- Optimize growth by blending organic opportunities (expanding campuses and programs) with mergers and acquisitions that provide entry into new markets.
For-Profits set the stage for increasing access to more students on a faster timetable than non-profits because for-profit companies can pursue longer-term financing options, such as equity.
Ser’s model works because they address an underserved market and combine educational quality, profitability and growth.
Fourteen years ago, Janguiê opened the doors to a small college in Recife that has now grown into a leading university network in Brazil. They have broken new ground by addressing an underserved market. Through higher education, they are providing social mobility to thousands of students like Andreza who can improve their lives through higher education.

The Diniz brothers are proving that it is possible to provide access to higher education to the base and middle of the pyramid in a financially sustainable way. Mr. Jânyo Diniz attributes this success to “(1) teaching quality, (2) strong brands that are recognized by the labor market, and (3) brands that operate with quality infrastructure and are well located.” Its competitive tuition price provides a cost-effective return on the student’s investment and positions them for good jobs after they graduate.

The model works because Ser combines educational quality, profitability, and growth. Ser’s levels of profitability are among the best in its segment, consistently outperforming its peers. By strategically positioning the company in high-growth areas, the company has become an important consolidator in the education industry in Brazil. “With a solid balance sheet to support new investments and acquisitions, it will be possible to continue expanding the new campuses and distance-learning centers with quality infrastructure and professionals motivated to provide affordable education for our students. We are ready for a new growth stage in other regions of Brazil and have identified about 50 companies for potential acquisition,” Diniz said.
For more information about IFC’s investments in health please contact:

Elena Sterlin  
Global Manager, Health and Education  
Email: Esterlin@ifc.org  
Washington, D.C., USA  
www.ifc.org/education  
www.ifc.org/health

Salah-Eddine Kandri  
Global Lead, Education  
E-mail: skandri@ifc.org  
Washington, D.C., USA  
www.ifc.org/Education