

# SECTORIAL FACTORS AND THEIR INFLUENCE ON PRIVATE HIGHER EDUCATION IN BRAZIL: A MULTICASE STUDY IN SEVEN HIGHER EDUCATION INSTITUTIONS

# FATORES SETORIAIS E SUA INFLUÊNCIA NA EDUCAÇÃO SUPERIOR PRIVADA DO BRASIL: UM ESTUDO MULTICASO EM SETE INSTITUIÇÕES DE ENSINO SUPERIOR

# FACTORES SECTORIALES Y SU INFLUENCIA EN LA EDUCACIÓN SUPERIOR PRIVADA EN BRASIL: UN ESTUDIO DE MÚLTIPLES CASOS EN SIETE INSTITUCIONES DE EDUCACIÓN SUPERIOR

## Ricardo Viana Carvalho de Paiva

Doutor em Administração (UFMG) Professor do Centro Universitário UNA Endereço: Rua Aimorés, 1451 – Lourdes 30.140-071 Belo Horizonte/MG, Brasil Email: ricardovcp@animaeducacao.com.br

#### Danilo de Melo Costa

Doutorando em Administração (UFMG) com *doutorado sanduíche* pela York University Professor do Centro Universitário UNA

Endereço: Rua Aimorés, 1451 – Lourdes 30.140-071 Belo Horizonte/MG, Brasil Email: danilo\_mcosta@yahoo.com.br

#### Francisco Vidal Barbosa

Pós-Doutorado pela *Harvard University*Doutor em Competitividade Empresarial pela *Aston University*Professor Associado da Universidade Federal de Minas Gerais
Endereço: Av. Antônio Carlos, 6627 - Prédio da FACE - sala 4050 – Pampulha
31.270-901 Belo Horizonte/MG, Brasil
Email: fvberlim@gmail.com

# Raquel Garcia Gonçalves

Doutora em Planejamento Urbano e Regional (UFRJ) Professora Adjunta da Universidade Federal de Minas Gerais Endereço: Rua Paraíba, 697 - Departamento de Urbanismo – Funcionários 30.140-100 Belo Horizonte/MG, Brasil Email: raquelgargon@hotmail.com

# Ernani Viana Saraiva

Doutor em Administração (UFMG) Professor Adjunto da Universidade Federal Fluminense Endereço: Rua Recife - até 599/600 - Jardim Bela Vista 28.895-532 Rio das Ostras/RJ, Brasil Email: ernanisaraiva@gmail.com

Recebido em 12.05.2014. Revisado por pares em 02.08.2014. Reformulado em 03.08.2014. Recomendado para publicação em 31.08.2014. Publicado em 01.12.2014.



#### **ABSTRACT**

The private sector of education has been increasing its participation in Brazilian higher education. Between 1997 and 2007, the respective sector grew 394%, which represents an average of 17.30% per annum. However, from the year 2008 it can be seen that this expansion cycle came to an end, as the growth has stagnated in most reasonable rates around 3%, creating more challenges and the need of professionalization of the sector (HOPER, 2009). From this scenario, this work proposes to conduct a study of sectorial factors that influence private higher education in Brazil, in order to provide data and information for decision making by the government, maintainers groups, institutions maintained, and the whole community. For this, we conducted an exploratory study, of qualitative nature, by means of bibliographic data collection and interviews with managers from seven private higher education institutions nationally recognized. The results showed that there is a strong influence of the sectorial factors in private institutions of higher education, which should then monitor them properly. The executives interviewed highlighted the importance of these factors, which can turn into big enemies or powerful allies, in a scenario ever more challenging and competitive.

**Keywords:** Competitiveness; Sectorial Factors, Structural Factors, Higher Education, Private Higher Education.

#### **RESUMO**

O setor privado de educação vem adquirindo crescente participação no ensino superior brasileiro. Entre os anos de 1997 e 2007, o respectivo setor cresceu 394%, o que representa uma média de 17,30% ao ano. Entretanto, a partir do ano 2008, pode ser constatado que esse ciclo de expansão elevada chegou ao fim, pois o crescimento se deu mediante taxas mais razoáveis, em torno de 3%, gerando maiores desafios e a necessidade de profissionalização empresarial no setor (HOPER, 2009). A partir deste cenário, o presente trabalho objetiva a realizar um estudo dos fatores setoriais que influenciam a educação superior no Brasil, no sentido de fornecer dados e informações para a tomada de decisões por parte do governo, mantenedoras e mantidas. Para tanto, foi realizado um estudo exploratório, de caráter qualitativo, por meio de coleta de dados bibliográficos e entrevista com gestores de sete instituições de ensino superior privadas nacionalmente reconhecidas. Os resultados apontaram que há uma forte influência dos fatores setoriais nas instituições privadas de ensino superior, que devem então monitorá-los adequadamente. Os executivos entrevistados evidenciaram a importância destes fatores, que podem se transformar em grandes inimigos, ou fortes aliados, em um cenário cada vez mais desafiador e competitivo. Palavras-chave: Competitividade; Fatores Setoriais; Fatores Estruturais; Educação Superior; Educação Superior Privada.

#### RESUMEN

El sector de la educación superior privada ha ido ganando cada vez mayor interés en la educación superior brasileña. Entre 1997 y 2007, el sector creció 394%, lo que representa un promedio de 17.30% anual. Sin embargo, desde el año 2008 se puede ver que esta expansión llegó a su fin, ya que el crecimiento ocurrió de una manera razonable, en torno al 3%, lo que resulta en un aumento de los desafíos del negocio y la necesidad de profesionalismo en la industria (HOPER, 2009). Desde este escenario, este trabajo propone

llevar a cabo un estudio de los factores sectoriales que influyen en la educación superior en Brasil, con el fin de proporcionar datos e información para la toma de decisiones por parte del gobierno, patrocinadores y mantenido, y toda la comunidad. Con este fin, se llevó a cabo un estudio exploratorio, cualitativo, mediante la recopilación bibliográfica y entrevistas con los directores de siete instituciones de educación superior privada reconocidos a nivel nacional. Los resultados mostraron que existe una fuerte influencia de los factores sectoriales en las instituciones privadas de educación superior, que debe vigilar de manera adecuada. Los ejecutivos entrevistados destacaron la importancia de estos factores, que pueden convertirse en amargos enemigos, o fuertes aliados en un ambiente cada vez más exigente y competitivo.

**Palabras clave:** Competitividad; Factores sectoriales; Factores estructurales; Educación Superior; Educación superior privada.

#### 1. INTRODUCTION

The higher education private sector has been gaining crescent participation on the Brazilian higer education, participation that reaches around 73% of the enrolled students. Taking 2012 as a reference-year, the last higher education census released by the *Ministério da Educação (MEC)*, and the public sector had 1.897.376 enrollments (27% of the total enrollment) faced with 5.140.312 of the private sector (MEC, 2014).

According to Hoper (2009), between the years of 1997 and 2007, the respective sector grew 395%, which represents a 17.30% year average. However, from 2008, it was found that the expansion cycle came to an end, because the growth had rates around 3%, which represents a sharp drop, in view of the 25% apex registered in previous years.

The monthly payments have been also presenting a continuous decrease throughout the years, which reflects the sector's competitiveness tightening, that has been also been influenced by the supply being bigger than the demand. Between 1997 and 2007, the supply grew an average year rate of 17.3%, while the demand grew an average year rate of 14.9%. Due to the competitiveness' increase, the relation entrant/spot has decreased, which generated thousands of idle spots on the private institutions. Such factors caused the need for differentiation on the superior education institutions, to keep competitive in a more and more competitive atmosphere, requiring a deep knowledge of the sector (HOPER, 2009).

Even though the sector's billing is high, reaching in 2013 around 32 billion *Reais* (which puts it among the 10 biggest sectors in the country), such indicator does not reflect on the sector's financial data improvement. The growth of the number of private teaching institutions was bigger than the sector's billing, promoting revenue dilution per institution. On the other hand, the sector's concentration is also elevated. In 2013, a group of 13 big conglomerates possessed 36.2% of participation in this private institution market (HOPER, 2013). This new fusion and acquisition phenomenon by big groups made the sector even more competitive.

It is worth mentioning again the moment experienced by the sector, with the participation of foreign capital, since parts of the educational groups went public on the stock market attracting investors to the sector. Investment funds have assumed a leading role in the expansion of large groups, Anhembi Morumbi, bought by American International Laureatre (controlled by the fund KKR), Estácio Participações now being

administered by the fund GP Investments, Anhanguera by bank Pátria and the Kroton, by Advent International (ROUSSELET & DO, 2013). In addition, the group Anima joined the investment fund BR Educacional.

From the assumptions raised above, this work aims to conduct a study of the sector, especially: Supply conditions; Demand conditions; Market Structure; Sector Involvement in International Business; and Incentive arrangements and regulation, in order to provide data and information for decision making by the government, sponsors and maintainers, since it is a sector with great competitive intensification and seeking a better understanding of these variables. Furthermore, this study fills an existing management of private institutions, which in many cases are unaware of the most influential factors in the Brazilian educational sector market gap.

#### 2. THEORETICAL REFERENTIAL

Aiming to reinforce the present study, it is presented in this section some concepts of firm's competitiveness, followed by the sectorial factors' influence and the need for a competitive strategy. Ultimately, it is highlighted a model for the comprehension of the sectorial factors' influence, emphasizing the main variables that should be mapped.

# 2.1 Company's Competitiveness

For the neoclassical tradition of microeconomics (MAS-Colell, et al., 1995), the firm is subject to an array of subordinate prices to actions of agents' preferences, the features and production techniques to the assumption that agents are price takers, ie, do not have the autonomy to impose prices. The firm is not analyzed in detail, and considered only their ability to transform inputs into outputs:

Many aspects must be considered on this broad firm's description: Who is the owner? Who manages it? How is it managed? How is it organized? What can it do? All these questions can be concentrated on the last one. Our justification is not that the other questions are more important, but that we want to get as close as possible to a minimum conceptual display that allows us to analyze the market behavior. Thus our production possibility model is very provident: The firm is seen merely as a "black box", capable of converting inputs to products (MAS-COLELL et al, 1995, p. 127).

The firm's neoclassical microeconomics concentrates its studies, said in a more specific way, on its technological possibilities, on profit maximization and cost minimization function, on the association of these with the demand theory and production efficiency for a determined price vector. In that way, the company's competitiveness is related to its efficiency on the input-output, cost-profit and production-demand relations. As observed by Kupfer (1990), this model presents as limitation its difficult adhesion to reality.

Smith (1996) concentrated his studies on groups of companies, not on individual companies. The firm was considered a group of resources concentrated in one productive process, having a depersonalized nature, in other words, not taking in consideration its participants' psychological aspects. There is no distinction between who provides capital and the business' manager.

For Smith (1996), the firm's profit is the residue generated by the difference between income and cost of labor, rent and raw material. The concepts of balance and stability occupy central role on his discussion. The balance happens when the market price is the same as the natural price. For the balance to happen is necessary for the demanded amount to be the same as the supplied amount. The meaning of free competition is related to the conductor in which resources move to the equilibrium allocation. The rivalry can come from an industry firm or from one that moves itself for the competition area. The number of competitors, as well as the barriers set by the government, defines the behavior of the industry that can be free competition to monopoly. The fewer of them, the greater is the ease to exist mix of stocks, restricting free competition.

Mill (1983) states that the price to be observed in the market is one in which the quantity supplied is equal to the quantity demanded. Considered as very important the business leader's personality and ability for profit obtaining. In other words, the competitiveness of the firm is associated with the profitability of the sector in the first instance, but also with the ability of the entrepreneur to invest in certain activities whose profitability was higher than the other.

According to Jensen (2000), competition is present among both social and economic agents, and between species in nature. The competitiveness between organizations can be seen in several dimensions, not only price and marketing policies, but also, for example, investments, financing, compensation, dividends, leasing, insurance and accounting policies, among others, mediated agreements under which there is an incidence of agency costs. Under general conditions, competition and survival produce an efficient use of resources.

In summary, it is observed that in the neoclassical school, the firm is seen as a model of efficiency in resource allocation, reducing it to a function and cost production. Smith (1996) sees the competitiveness at the aggregate level, tending to a state of balance between the agents. These two currents have a strong character of impersonality, not considering the role of the entrepreneur or manager in conducting business.

For Mill (1983), competitiveness is dependent on industry factors, but also the role of entrepreneur. For Marshall (1982), the concept of competitiveness is associated with economies of scale and labor subdivision.

For Mill (1983), competitiveness is dependent on industry factors, but also the actions of the entrepreneur. For Marshall (1982), the concept of competitiveness is associated with economies of scale and division of labor. Coase (1937) highlights the role of transaction costs and the business manager. Schumpeter (1942) focused his studies on the influence of innovation and its ability to break down barriers and changing industry structures. Nelson and Winter (1982) highlight the importance of the learning trajectory of the firm in the search for competitive advantage. For Penrose (1962), the organization of internal resources is the main instrument of competitiveness of an organization. Finally Jensen (2000) presents the agency costs, as elements that influence competitiveness.

## 2.2. Influence of industry factors and the need for competitive strategy

The competitiveness is strongly affected by the sectorial factors. To illustrate this statement, we can use the concept of competitiveness proposed by Ferraz, Kupfer and Haguenauer (1995, p. 3), which is seen as "the company's ability to formulate and

implement competitive strategies that allow you to extend or retain, lastingly, a sustainable market position." This definition takes into account the dynamics of the competition process, being able to replace the market by their studied sector.

Rather than being considered as an intrinsic characteristic of the firm or a product, it becomes an extrinsic feature to the competition standard in the relevant market. The competition standard consists of the critical success factors for operating in this market. In this sense, competitive firms would be those who, at every moment, to adopt the most appropriate pattern of sectorial competition, competitive strategies which are specific to each sector and changeable over time.

For Porter (1980, 1989), the essence of competitive strategy consists in adapting the internal structure of the company to its outside environment. Competitive strategy is related to corporate actions, aimed at building a competitive advantage in the face of forces that operate in an industry. In this sense, the strategy seeks competitive analysis, construction and obtaining a favorable position, which generates sustainable competitive advantage for the company before competitors.

Shapiro (1989) defines competitive strategy as a strategic move, a threat, a promise or a commitment, whose goal is to influence the behavior of others. This influence, reflected within the business, can be perceived as effective, in that it generates higher returns for the bidder and influence the decisions of potential entrants.

Rumelt (1984); Wernerfelt and Montgomery (1988); Barney (1991.1995); Barney and Hesterly (2007); Hamel Prahaladande (1990.1995); Teece, Pisano and Shuen (1997) argue that competitive strategy is related to the identification and development of resources and skills that are demanded in the present and that will be demanded in the future and, consequently, generate competitive advantage for the company in sector to which it is inserted.

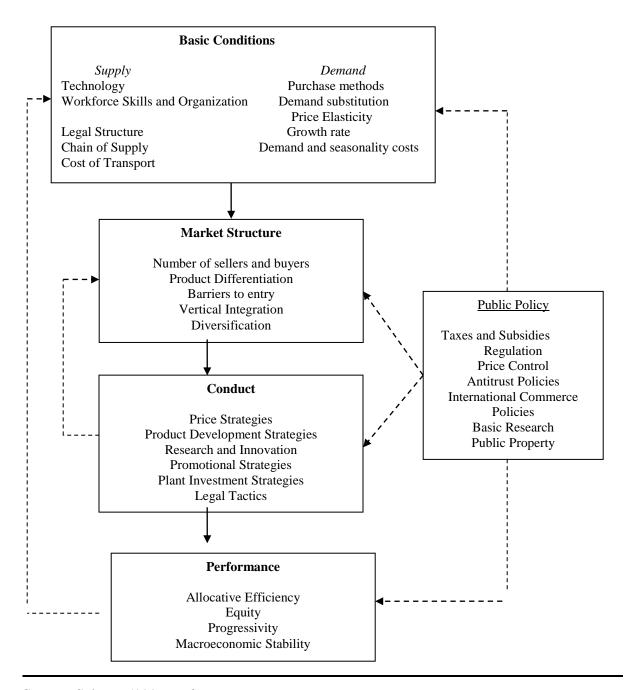
#### 2.3. Model for understanding the sectorial factors' influence

Scherer (1980) proposes a constraint model between industrial structure and economic performance, known as the model of the structure, conduct and performance (ECD). In this, the industry structure is determinant of management options of the firm, which, in turn, are determinants of the economic and firm's performance. Put in another way, the attributes of a sector define the options and restrictions (strategies) that the company faces. In certain sectors, there are few options and many constraints, which make the only companies able to gain competitive parity. In these cases, the structure of the industry completely limits the conduct of the company and its long-term performance. In other sectors, where competition is less intense, there are fewer restrictions and firms have higher management options, some of which are generating competitive advantage. Even with a higher level of flexibility, options and the time that they generate competitive advantage are influenced by industry structure.

Picture 1 illustrates the model of ECD. According to Scherer (1996), a good performance is what a nation expects of its industries. The performance of an industry is constrained by the conduct of its members in several dimensions, such as pricing strategies, product development strategies, efforts to innovation, ways of promotion and dissemination of products, investments in production plants, contingent upon correct demand forecasting and

legal tactics, adopted to preserve the intellectual output such as patents and exclusion from national and international competitors.

**PICTURE 1: The Structure-Conduct-Performance Model** 



Source: Scherer (1996, p. 2)

The conduction of industry members depends on the structure of the current market. This structure is influenced by factors such as the number and relative size of firms and their clients, the level of product differentiation from others (design, functionality, image, etc.) about the difficulty level of the entrance of new competitors in the industry (barriers to entry). The industry structure is also influenced by the level of vertical integration of the production chain and the diversification of the product line offered by firms.

It is believed that the model of Scherer (1996) can be used as a reference for sectorial analysis, but you need to add features from other models to complement the items to be searched (BUCKLEY, PASS and PRESCOTT, 1988, Porter, 1989; PETTIGREW and Whipp, 1991, and Ferraz, Haguenauer and Kupfer, 1995). Therefore, this study adopts the Table 1 (below) as a reference for the variables that compose the sector analysis, presented in the search results:

Table 1 – Gathering of different variables to analyze the Sector Level

Dei	oply Conditions  mand Conditions	Technology Workforce Skills Working capital ratio Legal Framework Supply Chain Related and supporting industries Transportation costs Purchase Methods Replacement demand Price elasticity
Ma	mand Conditions	Replacement demand
Sector		Size and Growth Rate Demand cycles and Seasonality Number of buyers Geographic and income distribution
	rket Structure	Number of competitors Product Differentiation Barriers to entry Vertical Integration Diversification Level of rivalry between firms Industry Maturity and sophistication Commercial networks
Inte	etorial Involvement in ernational Business	Market Share in exports Balance of payments Export growth Profitability Competitive costs Productivity Competitive prices Technological indicators Tax incentives to trade Tariff and nontariff barriers

T ( 1D 1 ( D )	Access to financing and cost of	
Incentive and Regulation Regime	capital	
	Tax incentives to production	
	Regulation of competition and	
	unfair practices	
	Public Property	
	Price Controls	

Source: Developed by author from Scherer (1980), Buckley, Pass and Prescott (1988), Porter (1989), Pettigrew and Whipp (1991), Ferraz, Kupfer and Haguenauer (1995).

#### 3. METHODOLOGY

This research is classified as exploratory, according to the assertion of Malhotra (2006). Was held at first, a theoretical review on the subject, was later made a survey of reports and publications on the education sector and finally we used interviews with executives of private higher education institutions. The purpose of this practice was to identify the relevant sectorial factors that have influenced the competitiveness of the institutions of private higher education sector and research institutions. This study adopted the strategy of multi-case (Yin, 2005). The type of case used was the holistic design of multiple cases since the study adopts, as units of analysis isolated seven private institutions of higher education.

Data collection occurred through the: Specific reports and statistics on the sector, on websites, in newspapers and magazines and academic journals.

• Semi-structured interviews with twelve executives of the institutions analyzed between the years 2009 and 2010, as Table 2:

**Chart 2: Interviewed Managers** 

Institution	Position	Nomination
Grupo Anima de Educação	President	Interviewee 1
	Vice-President of Operations	Interviewee 2
	Vice-President of Expansion	Interviewee 3
	Academic Director	Interviewee 4
Centro Universitário UNA	Dean	Interviewee 5
	Vice-Dean	Interviewee 6
Centro Universitário Unimonte	Vice-Dean	Interviewee 7
Centro Universitário UNIBH	Vice-Dean	Interviewee 8
Kroton	CEO	Interviewee 9
Anhanguera	CEO	Interviewee 10
Estácio de Sá	Coordinator	Interviewee 11
PUCMINAS	Dean	Interviewee 12

Source: Developed by authors

The selected for multiple case study samples is represented by seven private institutions of higher education, as Table 2.

It is worth noting that such educational institutions were chosen because they reflect the reality of the sector in question, consisting of Colleges, University Centers, Universities, by Philanthropic Institutions and For-Profit Institutions, for publicly traded or

not publicly traded institutions and by Institutions with individualized operation or network. Thus, the study allows these institutions to demonstrate the sectorial factors that, in fact, have been relevant to the performance of the same.

As a technique for data analysis, we adopted the technique of Categorical Content Analysis (Bardin, 2009) for the analysis of conducted interviews and collected materials, adopting the NVIVO9® Software, developed by QSR International, for assistance in treatment and analysis of the interviews.

For categorical grid analysis proposed by Bardin (2009), it was adopted in Table 1 what composed an interview script. In this procedure, each of the competitiveness factors found in Table 1 were considered as categories of analysis.

The adoption of this way proved to be effective for data collection in the interviews and the organization of the results collected. After the interviews, a Horizontal thematic analysis was promoted (Bardin, 2009), in which the opinions of Interviewees for each of the factors were classified according to the analysis' categories. The responses of each subject for each category were placed in parallel to promote the repetition frequency of the subjects. Then, the vertical analysis, in which the contents of each category were analyzed in order to verify complementarity and overlaps, was carried out.

# 4. SECTORIAL ANALYSIS: RESULTS

This section describes the sectorial analysis' results, from the interviews, divided in five main topics: Supply conditions; Demand conditions; Market Structure; Sector Involvement in International Business; and Incentive arrangements and Regulation. Each topic is detailed in sub-topics directly related to the variables listed in Table 1 (section 2.3) of this work, in order to deepen the analysis.

#### 4.1- Supply conditions

Supply Conditions were considered by Interviewees as influential on institutions. Technology, Workforce Skills, the Supply Chain, the Correlated Industries and Support were cited as positive. The Working Capital Ratio, the legal structure and the costs of transport were identified as negative for the researched institutions.

#### a) Technology

According to Interviewees, the available technology is appropriate for the industry, though still expensive. There is a trend of intensification of its use in management systems and, mainly, in the distance learning tools, which increased significantly in recent years.

#### b) Workforce Skills

Interviewees felt that the workforce skills affect positively in general, although they may improve. However, there is a shortage of Doctors in the market:

We need to train more doctors. The institution has a good supply of masters-teachers, but nevertheless they fail to devote to research, though being closer to the market. I do not see much workforce skill problem for the sector (Interviewee 11).

For smaller and more distant cities of large urban centers, there is still a shortage of skilled labor:

Perhaps a tipping point, when you go to a more remote unit, it is more difficult to have qualified teachers (Interviewee 9).

#### c) Working Capital Ratio

Executives consider the relationship, in general, mild in the country, with the exception of Minas Gerais and São Paulo and Southern Brazil:

I think in other sectors the union is stronger, maybe in Belo Horizonte and São Paulo. In other places, it does not bring disorders (Interviewee 9).

Interviewees whose institutions are in these states confirm this position in their testimony:

It is terrible and dreadful.

We have a union structure that is extremely harmful and rooted in the defense of the person and not the company. I think the discussion between the working class and the business class is salutary. In contrast, the teachers union advocates individuality and not the collective (Interviewee 1).

We have a professional category union here in Minas, which is very strong and very active. Normally the educational institutions have some difficulties, some barriers in the relationship. There is a certain face, a very strong very strong position just beyond the trade union side. In the south, there is that too. In Brazil, this is not as pronounced as in Minas Gerais and South (Interviewee 10).

It influences negatively.

The legal model is totally outdated. The role of unions is totally questionable. It is a regulated industry and such regulation is based on public institutions. Meritocracies, variable pay, for example, are not present (Interviewee 3).

The industry is labor intensive (70%) and highly regulated. The teachers union is perhaps one of the most organized. We are a company that is restructuring, the curves of the financial performance of the company generate by nature conflict with the unions, insofar as it requires layoffs and restructurings (Interviewee 2).

# d) Legal Structure

The legal structure was identified as a negative factor and major influence on the industry. The Interviewee 1 highlights the changes of the legal framework, in line with changes in the structure of government, subject to partisan influence:

It disrupts, there is an inconsistency in various sectors. For example, you have incentive to research in the ministry of science and technology, who does not speak with the education ministry. The structure is terrible and the biggest problem is that the *MEC* does not have a long-term, as economic project in the country that is nonpartisan. *MEC's* structure is partisan and there are guidelines changes depending on who is there. It changes every time (INTERVIEWEE 1).

The Interviewee 2 points out to the difficulties of reconciling the legal framework for the sector, labor laws and union demands:

In general, the legal framework is not compatible with the technology and the capital-labor relations. For example, for the EAD, currently there is no way to equate labor requirements, the MEC and Technology. What the union wants, the account does not close. You are not a professor with the profile that meets MEC. Even being accepted by the union, there can be problems with Labor Regulations (INTERVIEWEE 2).

The Interviewee 9 considers that the MEC (Ministry of Education) requirements are important to maintain standards of quality, although there are a lot of delays for approval of courses:

It is favorable for one aspect. The MEC has a component as ENAD that filters the industry, taking players who are not concerned with the quality of education. Moreover, there is MEC authorizing and recognizing courses closely linked to the physical structure. The ones with greater structures find it easier to offer courses.

There are delays in authorization to open new courses for non-college or university center. This takes around two years, and it may be that the market demand, which is cyclical, is not met. We have almost three years between understanding a demand and offering (INTERVIEWEE 9).

The Interviewee 7 also highlights the regulation criteria, elaborated based on the federal institutions that are not always best suited to the reality of private institutions:

We even have an ancient structure that has improved greatly. It hurts the sector at times they miss a dose, using federal references to the private sector. I think there is still political influence defending public interests, which are valued based on public institutions (INTERVIEWEE 7).

## e) Supply Chain

All Interviewees stated that there is no negative influence on the supply chain business. The main input are people who, in general, well meet the level of demand in the sector.

#### f) Correlated and Support Industries

The related and supporting industries: the Interviewees stated that they have no negative influence on the industry. Except for an Interviewee, who pointed out the lack of manpower and supplies in construction, used on campuses:

There is and it is very well stocked. What we notice is the shortage of manpower and some inputs in construction. Maybe because it is too hot now and again lack material and workforce. Sometimes we have to bring it from outside because it is missing here (INTERVIEWEE 10).

# g) Transportation Costs

Transport costs were reported as having a negative influence, to the extent that weigh significantly on monthly expenses with student education, as noted by Interviewees 6, 4 and 12, respectively:

It affects, as it increases the cost of education. The student must get around to study. Today one third of the cost of the student is to locomotion. Soon it requires us to have better distributed units (INTERVIEWEE 6).

Students' Cost of transportation is a significant variable it impacts the competitiveness, but affecting locally. You need a location that is close enough to the student (INTERVIEWEE 4).

Transportation is a chronic problem in big cities. We lose students today for this problem, I think it influences. There are students who want to study close to home, and as we are not in a central region, it negatively influences (INTERVIEWEE 12).

According to Interviewee 10, transport costs influence the Anhanguera negatively, due to constant displacements of inputs among the various units:

It is high. I think it's negative, especially for an institution like ours that has an intense logistics involving the movement of people, equipment, and merchandise. Transportation is still too expensive (INTERVIEWEE 10).

#### **4.2 Demand Conditions**

Demand conditions, in general, have been shown positive for the sector over the period. a) Purchase Methods

The purchase methods were favorable. There are various ways to purchase. With respect to the payment terms, the government's programs (PROUNI and FIES), which are considered positive, although the need for its expansion was appointed.)

#### **Demand Substitution**

The replacement demand, according to Interviewees did not affect the sector during the period. It occurs through the federal schools that take potential students from private schools. However, given the size of the sector, little influence was significant, except for the PUC, which is most closely influenced by demand from the Federal University.

For the higher education, it is clear that the Federal is everyone's dream. So in that respect I would say yes. But this does not happen with everyone. In our case, about 40% did not even try. Perhaps because they knew they would not get in (INTERVIEWEE 10).

Another mechanism of substitution with more significant influence associated with the choices of families. There is possibility of substitution of higher education for the acquisition of vehicles, trips, real estate, for example that may influence the decision to study for the potential students:

This affects us negatively. We lose students who stopped studying to buy a car or an apartment, etc. From our evasions, 4% stopped studying to spend on something else (INTERVIEWEE 8).

The demand for technical training, while not affecting the sector in the period analyzed, can be brought to affect in the future, according to the testimony of Interviewee 10:

There is also a large government investment in technical training. So I'd say get the signal a replacement demand. And the other is what I said, the guy spends on other things and leaves the higher education almost last (Interviewee 10).

#### c) Price Elasticity

The price elasticity, according to the Interviewees, presents singular behavior:

Increased prices and decreased demand. The curious thing is that it is elastic upwards. If the price decreases, not necessarily the number of students increases. On student choice, the price is crucial, but it must be combined with the perception of quality. It is different from a commodity that when the price falls, there is an increase in sales. Soon the price is a key factor of competitiveness, but the elasticity is not total. Several times already the courses' price had been lowered and the demand had not increased (Interviewee 6).

#### d) Size and Growth Rate

According to the interviewees, the growth rate, which was high in other periods, currently, increases itself organically. This reduction in the growth rate negatively affects the sector, compared to the phase on which it grew at a higher rate.

However, as noted by the Interviewee 3, there is a large room for growth in the sector, since only 14% of the population has access to higher education, limited by issues of income:

I think that today is negative. The sector is still small considering the potential it has, but I think it's a matter of rethinking educational model. However, today, spots are left and it should cause them to close some schools. On the other hand, there is only 14% of the population at college. I think there are these two biases (INTERVIEWEE 3).

#### e) Demand cycles and Seasonality

The demand cycles and seasonality tended not to influence or to positively influence the industry. First, they exist as declining trend in the young population in the country, which is counterbalanced by the increase in classes C and D and the number of younger people who have returned to school. Secondly, there is seasonality in the demand for specific knowledge areas:

I think the demand is becoming less seasonal and cyclical. Today we are almost all year growing. But yes it matters. For example, the Engineering that for many years did not graduate any engineers in the country and it has now a shortage of these professionals, which makes our courses very highly demanded; this can be true for any profession (INTERVIEWEE 6).

## f) Number of Buyers

The number of buyers in the industry was favorable during the period. There is a huge amount of people interested in higher education. Even with the downward trend of the population between 18 and 24 years, an increase of classes C and D, this eventually enlarged the population with payment terms. However there is still a very large number of potential population, which still does not have enough to pay for a monthly income.

It affects competitiveness. In the analyzed period, I think it was think positively affected (INTERVIEWEE 4).

There is a decrease in the growth rate of the population between 18 and 24. Demand growth slowed. On the other hand, the both of us that came out of the class D and E generated a violent demand (INTERVIEWEE 6).

# g) Geographic and Income Distributions

The geographical concentration in major centers turns out to be favorable to the institutions, which gain in terms of economy of scales. On the other hand, the EAD (Distance Education) has been an alternative for access to regions of low population density.

With respect to income concentration, it is negative for the sector, although there has been an improvement in recent years. However there is still a significant portion of the population without financial conditions for access to private higher education:

The sector has a large unmet demand associated with income. The more concentrated the population is, the better the education business. If not for the large urban centers, many small schools would be required and, thus, there is loss of scale. Distance learning has solved this problem as well. The classroom is where there is greater population concentration for one reason same market. In small centers, the EAD is present. Although in the last five years, higher education practically sprayed the whole country. Is it basically present in all regions (INTERVIEWEE 2).

The geographical issue interferes, but the most important is the income distribution. In recent years, we are seeing the D class entering in higher education, depending on their improvement in income (INTERVIEWEE 5).

#### 4.3. Market Structure

## a) Number of Competitors

The number of competitors is regarded very highly by interviewees. This is one of the main factors that negatively affect the sector:

I think today is the great evil of higher education in Brazil. Schools are everywhere. The idleness of vacancies is high today because of it (INTERVIEWEE 8).

I think there are too many. We have today 2.500 institutions (INTERVIEWEE 3).

This high number of institutions leads to an intense rivalry in the industry, often predatory, as stated by INTERVIEWEE 7:

The rivalry is very high. The Santos region, we have 25 institutions, 1.5 million inhabitants and 40 000 students enrolled and 10 000 enrollments per year. I have now one sixth in market share, but this is still too little for the institution. This greatly influences my financial performance.

We have, for example, a right-accredited course that is capturing transfer students with 50% discount. Another example is the UNIFESP, it provides R\$ 300.00 scholarship for the student in addition to being public. It receives funding from the

government based on the number of students enrolled. This exemplifies the level of competition in the region.

I think we're living in a war that erodes margins. The student sees it as an auction here in the Santos region (INTERVIEWEE 7).

#### b) Product Differentiation

It is observed that there are no clear differences between the courses, which are practically the same as the comments by INTERVIEWEE 6:

It is very difficult to differentiate a product of education. This distinction has a very low weight. A feature of our market is that the buyer knows little of the product he will buy. He goes by indication, but wonders what the curriculum, teachers, and laboratories. What is important is the institution has a strong brand. What counts is the tradition of the course in the city (INTERVIEWEE 6).

As mentioned, the most important is the course tradition and institution.

## c) Barriers to Entry

According to the interviewees, there are barriers imposed by MEC that hinder the entry into the sector. Although it is still possible to open colleges, it is observed that MEC has been restricting the opening of new courses, aware that the number of vacancies is already high. Also requires investment in infrastructure, prior to approval which hampers access.

However, as the interviewees state, more important than entry barriers is the difficulty to remain in this sector. Currently, the student is very sensitive to the brand and tradition. A new college without these advantages faces great difficulties in attracting students. This, coupled with high operating costs, ultimately cripple many institutions that have ventured in the industry. Thus the difficulty of staying in the industry, eventually discouraging new entrants, creating a new barrier to entry:

MEC has put some barriers. The requirement of infrastructure, investment, quality has been an impediment, and also because education investment is heavy. Not for any entrepreneur, for it to be more dynamic. He has to be prepared for about 3 or 4 years to put money. I think this is a great impediment (INTERVIEWEE 10).

It affects negatively. In six months, you open a school. But the sector is closely linked to the brand. You enter, but you have no tradition. To me, I have good brands and that is good (INTERVIEWEE 1).

Largely affects as MEC increasingly make it hard opening new courses. This is clearly an attempt to control the supply of vacancies. This is good for people who are already in this sector (INTERVIEWEE 6).

According to the testimony, it can be seen that this has been a favorable factor to the already established institutions in this sector.

# d) Vertical Integration

Vertical integration occurs in order to go through the whole chain of education, from primary school to postgraduate. There are some groups that act this way. Emerged as high schools and elementary schools and began to offer higher education, such as the Kroton (Pitágoras):

Pitágoras College itself is option B. The majority of its high school students go to the federal universities. From Graduation to post-graduation this has been favorable. The group is stronger because of it. There are many people who dreamed to study in college and had no money to pay, and after employed, can study at college Pitágoras (INTERVIEWEE 9).

I think it is happening and is relevant. There are a lot of Schools opening Colleges in despair and faculties opening plenty of Schools and this increased the number of players in the market (INTERVIEWEE 8).

#### e) Diversification

Diversification has not been a strategy adopted by the institutions surveyed:

Today it does not affect. The schools have not agreed to it yet (INTERVIEWEE 8).

I think there will be a strong tendency of university structure, depending on the EAD, buying publishers, for example, but I think this is the future. During the analyzed period, there is not much influence (INTERVIEWEE 4).

#### f) Rivalry Level between companies

The interviewees consider that the level of rivalry is very intense, due to the great number of educational institutions, the excess supply of vacancies on the number of entrants, generating negative influence for the surveyed institutions. In several markets, the competition turned to the price war which makes a predatory business:

Today is very strong. We are living in cannibalism at any price. The market is not growing, and companies end up trying to get the other students at any price. Perhaps this is what is most influencing our company. We reduced costs all we could, but the feeling is that we are wiping the ice. It is also a very old sector, with many families with family assets mixed with the business, which ultimately holds the institution. For example, the president of *Santos Futebol* owned a college, which generated a high credit to the company (INTERVIEWEE 7).

I think there is strong a competition. Prices have been a differential. I think there are good and strong schools, but there is a good competition between them (INTERVIEWEE 12).

It is huge. Today I think it is very unfavorable. Eventually we had on our door leafleting by the competition (INTERVIEWEE 9).

As noted by Interviewee 2, competition occurs locally. There are few institutions acting nationally and even cooperation between institutions has not intensified:

There is competition, but it is local. There are few national groups. The level of cooperation is still low, which leads us to believe in models of cooperation (networks). But the industry is still immature and the consolidation process is likely to grow. The process of networking and cooperation systems can also have a major impact for the sector (INTERVIEWEE 2).

# g) Maturity and Sophistication Degree

According to the interviewees, the industry is still very young. In the current setting it is a little over ten years old. The trend is that many changes will still happen, for example, mergers and acquisitions:

We are still very young. PUC is 52 years old which is very little compared to the rest of the world. Our masters are still very young. The market in general is young. I think there is much yet to evolve (INTERVIEWEE 12).

10 years ago no one would imagine that we would have public institutions. So we're at that stage that I call consolidation. I believe there will be a third wave; it will be the mega-consolidation, in which large groups will be gathered. From 2004 until now, was the stage of consolidation – Large ones trying to buy smaller ones and smaller ones trying to professionalize to hold the competition. Now maybe it will be large ones buying large ones (INTERVIEWEE 10).

Is in the process of accommodation and there will be plenty of accommodation. This, in my opinion, undermines (INTERVIEWEE 5).

#### h) Commercial Network

Commercial networks generate economies of scale and cost savings. According to the interviewees, there is a trend of consolidation in the sector, through such networks, to the extent that margins are dwindling and the number of competitors is very large.

I think this is starting to happen more frequently. They already create impacts in this sector. I see these networks entering with standardization and low cost. Consolidation is already influencing it. This year, we had the fourth largest buying the fifth largest group in the country: *Kroton* and *Iuni*. It has been impacting the price and distribution of operations (INTERVIEWEE 7).

#### 4.4. Sector Involvement in International Business

According to the respondents, there was no relevance in this regard to the period. Foreign involvement in this sector is still shy as well as the internationalization of Brazilian institutions:

There is a still timid movement in that direction. "Laureate" does a good job being a relevant group, with important institutions. "Devry" operates in the north, holding the Fanor, but cannot have a better performance in the country. Estacio de Sá has a school in Paraguay, but there is not a deliberate move (INTERVIEWEE 2).

There is a government attempt to contain it. Government limits up to 30% foreign capital in institutions, for thinking that the foreign education would lose the quality of national education. But I think there is no great influence in this sector, although there is some influence that may increase in the future (INTERVIEWEE 7).

It is observed that there are legal restrictions that prevent the expansion of foreign capital in this sector.

# 4.5. Incentives and Competition Regulation Regime

#### a) Tariff and nontariff barriers

The interviewees did not suggest this item as influential on the industry.

# b) Access to financing and cost of capital

All interviewees stated that this is a factor that negatively affects the competitiveness of enterprises. Access to funding is limited and the cost of capital is high. For students, there is FIES which has a good rate, but could be expanded:

We have FIES for students. For schools, the BNDES opened a line, but that is so complex that only ended up benefiting those who do not need the money. It is very difficult to get access (INTERVIEWEE 7).

# c) Tax and Incentives to the Production

PROUNI represents an important tax incentive which represents a decrease of 9% of federal taxes. FIES is an incentive, in that it is funding the cheap cost to the student, thus facilitating the access for certain part of the public higher education.

On the other hand, the philanthropic end up having more tax incentives than for-profit institutions, which represents a competitive advantage:

I think the tax level is high in this sector today. This is a serious problem, especially for institutions that no longer are non-profitable and are now for-profit (INTERVIEWEE 11).

As noted by Interviewee 2, currently there is a disincentive for companies to grant scholarships to their employees. If this distortion were corrected, there would be a great incentive for the sector:

The labor and social security reforms would have a direct impact on the sector that is labor intensive. We have a large impact of payroll taxes. Today there is a difference between the philanthropic and for-profit. Tuition fees could be cheaper generating more access to the population (INTERVIEWEE 2).

#### d) Competition and Unfair Practices Regulation

The regulatory system is currently the MEC. The interviewed executives recognize the importance of it; however disabled points in its management were manifested:

The government is maintainer and regulator of the industry and I think this regulation is still made not to develop the sector and to inhibit rather unfair practices, such as the EA, are seeking the rotten apples and not the development of the sector (INTERVIEWEE 2).

There are also differences in requirements for different institutions, which causes distortions in competitiveness, according to Interviewee 12:

I think the government does not address the higher education institutions in the same way. I believe that the requirements of MEC for universities are much higher than for other institutions. That, in a financial point of view is too bad, because the private universities have to keep masters programs, doctorates, which have a very high cost. From a financial standpoint, there is no return. Collected amount is not sufficient to maintain the course. This burdens *PUCMINAS* very much (INTERVIEWEE 12).

Interviewee 3 also points out to the need for greater participation of various segments of society along with MEC:

MEC today does not have the presence of entrepreneurs, students, society in its framework. The worst is that MEC, while regulating it also manages the federal (INTERVIEWEE 3)

# e) Public Property

Federal institutions negatively influence the sector, since they derive from potential students. This influence is more significant for the schools that are the second option of the student, as in the case of the PUC. Schools that work in the most popular segments have not shown that this influence has been significant:

This directly affects the industry. Insofar as they proffer more jobs, it is detrimental to private schools (INTERVIEWEE 12 - PUCMINAS).

The Federal Institutions do not influence negatively, because the number is very limited (INTERVIEWEE 9).

#### f) Price Control

The interviewees did not suggest this item as influential on the industry.

#### 5. FINAL CONSIDERATIONS

According to the result of the content analysis, conducted with interviews with the executives of the companies surveyed, it can be concluded that part of the sectorial factors influenced the education institutions studied, and also influenced the outlook for the sector, however, this maximum did not prevail in all analyzed factors.

Supply Conditions were considered as performance influencers of the institutions surveyed. Technology, Workforce Skills, the Supply Chain, the Correlated and Support Industries were cited as positive. Working Capital Ratio, the legal structure and the costs of transportation were identified as negative for the researched institutions.

Demand Conditions were considered as a favorable influence on the institutions generator. Methods of Purchase, size and growth rate, Demand Cycles and Seasonality, Number of Buyers and Geographical Distribution were considered favorable. Replacement demand occurs through federal and technical courses, but without much relevance. However it is more negative, when observing other consumer goods that jostle for space in the shopping basket of students, such as cars, cell phones, real estate, among others. Price Elasticity is more influential in those institutions that are positioned in the lower price segment, while those who compete for quality, it is less significant.

Market Structure was pointed out as a major influence, in general, negative. The Number of competitors was considered high, Product Differentiation small, the low level of diversification, the level of rivalry between the companies and the high maturity and the degree of sophistication of the industry still incipient. These aspects can be seen as unfavorable to the institutions surveyed. On the other hand, Barriers to Entry, considered high, can be seen as favorable for existing institutions. The commercial networks have been considered as a growing and important trend and identified as favorable to those institutions that adopt such a strategy.

On the other hand, the involvement in International Business Sector was considered by interviewees as not influential on institutions, due to the low level of internationalization of national institutions and even small foreign ownership of companies.

Incentives and Competition Regulation Regime was also considered as an important influence on the institutions generator. The Tariff and nontariff barriers are considered to be non-existent. However the Access to Finance and the Cost of Capital were identified as barriers to the growth of institutions, due to a few lines of credit and the high cost of capital. And tax incentives to production were pointed as still insufficient, although there are important advances, observed by the FIES and the PROUNI. Regulation of Competition is regarded as necessary, but inadequate, considering the profile of action of the MEC. Public Property negatively affects mainly those institutions that are closest competition with the feds. The price controls were considered nonexistent for the sector.

In conclusion, it can be seen with the respective study that there is a strong influence of the factors and variables in the higher education institutions private sector, which should be monitored and evaluated appropriately. The executive interviewees emphasized the importance of these factors, which can turn into bitter enemies, or strong allies in an increasingly challenging and competitive environment.

With the limitations of this study, we conclude that the method used did not allow the assessment of the influence intensity, nor the existence of relationships between the various factors from different levels. Moreover, depending on the type of content analysis adopted (Categorical), intersubjective and contextual aspects of the interviewees were not taken into consideration.

It is suggested for future studies, expanding the database, including other educational institutions and a greater time horizon beyond the adoption of other methods of research aimed at continuing the study of the subject.

#### REFERENCES

BARDIN, Laurence. Análise de Conteúdo. Lisboa: Edições 70 LTDA, 2009.

BARNEY, J.B. Firm resources and sustained competitive advantage. *Journal of Management*, vol. 17, 1991, p. 99-120.

\_\_\_\_\_. Loocking inside for competitive advantage. *The Academy of Management Executive*, Ada, v. 9, n.4, p. 49-61, Nov. 1995.

BARNEY, J.B.; HESTERLY, W.S. *Administração estratégica e vantagem competitiva*. São Paulo: Pearson Prentice Hall, 2007.

BUCKLEY, P.J.; PASS, C..L.; PRESCOTT, K. Measures of International Competitiveness: a Critical Survey. *Jornal of Marketing Management*, v.4, n. 2, p. 175-200, 1998.

FERRAZ, João Carlos; KUPFER, David; HAGUENAUER, Lia. *Made in Brazil. Desafios Competitivos para a Indústria*. Rio de Janeiro: Campus, 1995.

HOPER. Análise Setorial do Ensino Superior Privado-Brasil. Foz do Iguaçu, 2009.

\_\_\_\_\_. Estudos de Mercado 2013. Foz do Iguaçu, 2013.

JENSEN, M. C. *Theory of the firm:* governance, residual claims, and organizational forms. Cambridge, MA: Harvard University Press, 2000.

KUPFER, D. *Padrões de concorrência e competitividade*. Anais XX Encontro Nacional da ANPEC, Campos do Jordão, 1992.

MALHOTRA, N. *Pesquisa de Marketing*: uma orientação aplicada. Porto Alegre: Bookman, 2006.

MARSHALL, A. Princípios de economia. v. 1, São Paulo: Abril Cultural, 1982.

MASS-COLELL, A.; WHINSTON, M.D., GREEN, J.R. *Microeconomic theory*. New York, Oxford University Press, inc.: 1995.

MEC. Censo da Educação Superior 2012. Brasília: Ministério da Educação, 2014.

MILL, J. S. Princípios de economia política. São Paulo: Nova Cultural, 1983.

NELSON, R.R.; WINTER, S. G. An Evolutionary Theory of Economic Change. Cambridge, MA: Harvard University Press, 1982.

PENROSE, E. T. Teoria del crescimento de la empresa. Madrid: Aguilar, 1962.

PETTIGREW, A.; WHIPP, R. Managing Change for Competitiveness Success. London: Blackwell, 1991.

PORTER, Michael E. Competitive Strategy. New York: Free Press, 1980.

\_\_\_\_\_. A vantagem competitiva das nações. Rio de Janeiro: Campus, 1989.

PRAHALAD, C.K., HAMEL, G. The core competence of the corporation. *Harvard Business Review*, Boston, v. 68, n.3, May/June, 1990. p. 79-91.

ROUSSELET, F.; FARIA, G. Educação sob o Domínio do Capital Estrangeiro. UNE: *União Nacional dos Estudantes*. São Paulo. 2013.

RUMELT, R.P. Towards a Strategic Theory of the Firm. *Competitive Strategic Management*. Englewood Cliffs, NJ: Prentice Hall, 1984.

SCHERER, F.M. *Industrial market structure and economic performance*. Boston: Houghton Mifflin, 1980.

\_\_\_\_\_. *Industry structure, strategy, and public policy*. New York: Harper Collins College Publishers, 1996.

SCHUMPETER, J. A. Capitalism, Socialism and Democracy, New York: Harper, 1942.

SHAPIRO, C. The theory of Business Strategy. Rand Journal of Economics, Spring, 1989.

SMITH, A. A riqueza das nações. Investigação sobre sua natureza e suas causas (Livro I). São Paulo: Abril Cultural, 1996.

TEECE, D.J., PISANO, G., SHUEN, A. Dynamic capabilities and strategic management. *Strategic Management Journal*, vol. 18:7, p. 509-533, 1997.

WERNEFELT, B., MONTGOMERY, C. Tobin's Q and the Importance of Focus in Firma Performance. *American Economic Review*, vol 78(1), p. 246-250, 1988.