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INSTITUTIONAL THEORY AND THE INTERNATIONALIZATION OF HIGHER EDUCATION IN SOUTH AMERICA: THE BRAZILIAN CASE

ABSTRACT

Theory of internationalization has mainly focused on the internationalization of firms and their economic effects and has neglected the role of the education institutions. The Brazilian higher education system is the largest in Latin America (Inep, 2010) and has passed through important structural changes since the beginning of the 1990s. This paper aims to analyze, from the lens of institutional theory, the process of internationalization of higher education in Brazil. We use the lens of institutional theory as a way to understand the elements that permeate the organizational field of universities, institutional managers, regulatory agencies and decision makers at the organizational and national level. Finally, we perform an analysis of some international patterns and standards and propose strategies to the South American higher education institutions.

Key Words: higher education, internationalization, South America, strategies

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The first day, we pointed to our countries. Then we
were pointing to our continents. By the fifth day we
were aware of only one Earth
(Sultan Bin Salmon al-Saud, Saudi Arabia - Astronaut).

[...] The sun so bright out there
the sun so bright, Emerald,
and in my soul - dusk.
(Manuel Bandeira, Brazilian Poet).

INTRODUCTION

The Brazilian higher education system is the largest in Latin America (Inep, 2010) and has passed through important structural changes since the beginning of the 1990s. This movement followed international tendencies and created big challenges to Brazilian higher educational institutions towards the development of international standards.

Little is known about this process and about the trends and opportunities for internationalization of the educational institutions. Research in internationalization theory has focused mainly on the internationalization of firms in different sectors, from hi-tech industries (Knight and Cavusgil, 1996; Madsen and Servais, 1997) to the entrepreneurial “arts and crafts” firm (Fillis, 2000; Mcauley, 1999).

It is clear that, besides the economic dimension, the internationalization process has also influenced the structure of the educational system and society. Thus, we use the link to the internationalization theories to check whether they help explaining the patterns of internationalization of the educational system in South America.

One clear example of the structural changes is the emergence of a great number of private institutions. With the increasing demand for higher education, private universities have found an important share of the market which could be no longer supplied by public universities - data from Brasil (2010) show that, in 2007, 89% of all Brazilian high educational institutions were private. Then, it is important to understand how these institutions, key players in the late years, have changed the structure of the higher education system and how they contribute to the process of internationalization.

Moreover, it is important to evaluate the changes in the internationalization process in other countries, especially the ones considered benchmark in education. Therefore, based mainly on data from the OECD (2010), we discuss the distribution of the foreign students in the world in order to better understand the dynamics and the changes during the decades.

Given the current changes and the need to examine the transformations of the higher education system in Brazil, the following research question arises: How does the institutional theory explain the internationalization process of the higher education in Brazil? From this issue, this paper approaches the public policies adopted in Brazil for higher education and historical data related to internationalization of higher education.

Thus, this paper aims to analyze, from the lens of institutional theory, the process of internationalization of the higher education in Brazil. For this purpose, we take as fundamental principles the historical issues relating to the pressures of the neoliberal model, expansion of the market, public policies, and the way those principles influenced the institutionalization process of the internationalization of the Brazilian higher education. We discuss the new model of the neo professional, heteronomous and globalised worldwide university. We base on the lens of institutional theory as a way to understand the elements that permeate the field of the users, institutional managers and decision makers at national and institutional level.

A brief description of the role of the different actors involved in the internationalization process aims to show the size, motivations and development of this phenomenon in recent years. The goal is to discuss whether Brazil has internalized the new internationalization patterns in the academic field or if it is a mere reproduction of current paradigms.

Thus, this essay is divided as follows. After a brief overview of the literature on internationalization theory, we present some cases of internationalization of education as well as some statistics of leading host countries for international education. Following, we look at the Brazilian institutions and the current patterns of internationalization of the higher education system. Finally, we point out some challenges and opportunities faced by the Brazilian institutions and propose some strategies of internationalization.

INTERNATIONALIZATION THEORY

Internationalization theory is usually related to the theory of the firm. A number of authors have begun to examine the phenomenon of rapid internationalizing firms in different sectors, from hi-tech industries (Knight and Cavusgil, 1996; Madsen and Servais, 1997) to the entrepreneurial “arts and crafts” firm (Fillis, 2000; Mcauley, 1999). They identified some entrepreneurial competences as drivers of competitive advantage, such as:

a global vision, a focused approach in doing business, the ability to recognize technological opportunities and to capitalize them.

For Coviello and Jones (2004), the internationalization studies have failed to integrate research from both the entrepreneurship and the international business fields. Therefore, there is a need of a closer investigation of internationalization theories in order to provide additional insights in bridging this gap.

One important contribution to the theory, the Uppsala Internationalization Model, could be traced to works published by Carlson (1975), Johanson and Wiedersheim-Paul (1975), and Johanson and Vahlne (2006). According to the Uppsala Internationalization Model (Carlson, 1975), the organization gradually increases its international involvement and lack of knowledge prevents it from entering culturally distant markets. Firms follow a sequence from low to high commitment modes of operation and enter new markets with successively greater psychic distance. The Uppsala model was strongly influenced by the work of Penrose (1959) about firm's growth.

The network approach on the theory of internationalization emphasizes the role of relationships, which are gradually formed in a particular market. According to the network perspective (Johanson and Mattsson, 1988), the internationalization of a firm means that it develops business relationships in foreign networks. This can be achieved through the: a) establishment of relationships in country networks through international extension; b) development of relationships in existing networks by penetration; and c) connection of existing networks in different countries.

Gabrielsson and Kirpalani (2004) argue that, in order to internationalize, the organizations must utilize large channels provided by networks and the internet. So far, the organizations internationalize in many different ways. These changes require flexibility, adaptation, and faster responses to new contingencies. But what are the effects of internationalization on education? And how can the internationalization theories help to understand the patterns of internationalization of the education system?

INSTITUTIONAL THEORY

The institutional theory has its origins in social sciences, mainly in political science, economics and sociology (Powell and DiMaggio, 1991; Scott, 2001). According to Scott (2001) the recent works linking the organizations to institutional arguments began around 1940. In such studies, three main directions are identified: (1) the first stimulated by

translation of texts Weber on bureaucracy; (2) the second developed by Talcott Parsons, applying his own institutional-cultural theory; and (3) the third, developed by Herbert Simon with the collaboration of James March, with his influential work on the limited nature of rationality (Scott, 2001).

In organizational studies, the institutional approach, part of a symbolic-interpretive organizational reality, presents a predominantly subjectivist epistemological position, stressing the social construction of organizational reality. The institutional theory emphasizes the character of legitimization of the institutional rules, myths and beliefs, and their influences to mold the social reality (Berger and Luckmann, 1967; Selznick, 1949, 1957). Institutionalization studies have shown a set of influences which the values and social meanings have on the characteristics of organizations (Oliver, 1991; Scott, 1987; Meyer and Rowan, 1977) and on the organizational change (Dacin, Goodstein, and Scott, 2002; Barley and Tolbert, 1997).

Thus, this institutional approach explains the organizational phenomena, through the understanding of how and why the organizational structures and procedures become themselves legitimated, as well as their consequences on the results achieved (Meyer and Rowan, 1977; Clegg, 2010; Suddaby, 2010). For Powell and DiMaggio (1991), Selznick (1949, 1957) was the forerunner of neo-institutionalism in his analysis of organizations such as a differentiated type of social system. Selznick (1957) interprets the organizations as a structural expression of rational actions that, over time, are subject to the pressures of the social environment and transform themselves in organic systems.

This evolution that Selznick (1957) called “institutionalization process” may be summarized in one aspect: the values shall replace the technical factors in determining the organizational tasks. For Scott (2001), with the work of Selznick (1949, 1957) organizations began to be understood in addition to its structural expression of rational action, since they were treated only as a mechanism to achieve specific targets. On the vision of Selznick (1949, 1957), the organization operates as an organic system, affected by social characteristics and by its participants, as well as by variables imposed by the environment (Scott, 2001).

For Scott (1987, 2001), the concept of institution and institutionalization is being defined in various ways, with a substantial variation between the approaches. However, Zucker (1977, 1987) believes that two definitions are shared by institutional theoretical approaches of organizations: a) as a rule, a social fact, a standard organized action

(exterior); and b) as formal structures, that is, formal aspects of organizations not linked with actors or situations (impersonal/objective). Moreover, Scott (2001: 33) defines institutions as “cognitive structures”, normative and regulative actions that provide stability and meaning to social behavior. According to the author, the institutions operate in multiple levels of jurisdiction, and develop themselves by means of cultures, structures and routines.

There are two different theoretical approaches of the institutional theories: one that treats the environment as an institution, assuming that there is a process of reproduction or a copy of the broad social system by the organizational level; and the other that treats the organization as an institution in which the process is generated in a central organizational level (Zucker, 1987).

The organizational structure is characterized as adaptive (Selznick, 1957), being formed in relation to the characteristics of the participants, influences and forces of the environment (Scott, 1987). Thus, the institutionalization relates to an adaptive proceeding, and its most important meaning is the infusion of a value in addition to the technical requirements (Selznick, 1957). The institutionalization occurs when there is a reciprocal typification of actions by usual actors (Berger and Luckmann, 1967).

Meyer and Rowan (1977: 341) add that, in the institutionalization, the social process, the obligations, or the realities come to take a status of rule in the thoughts and social action. The discussion of social institutions has given great importance to the theme persistence and stability. As seen in Hertzler (1961: 81), the institutions in a society have a high degree of stability and operate as a mechanism of social continuity.

The concept of organizational field is central to the institutional analysis (DiMaggio and Powell, 1983), being considered by Scott (1991, 2001) as the level of greater significance for the institutional theory. The topic has gained prominence in organizational studies with Powell and DiMaggio (1991), who means by organizational field those organizations which, together, constitute an area recognized of institutional life: master suppliers, consumers of resources and products, and regulatory agencies.

With an understanding around Powell and DiMaggio (1991) on the concept of organizational field, Scott (2001: 84) says that organizational fields are defined by the presence of cultural-cognitive or normative structures with a common regulatory system. The concept of field takes to the existence of a community of organizations which share

common meanings systems and in which participants interact more frequently (Scott, 1994: 207-208).

By definition, isomorphism is a restrictive process that forces one unit in a population resembles itself on the other units which face the same set of environmental conditions (Powell and DiMaggio, 1991: 66). The greater the complexities and pressures of the environment, the smaller the degree of freedom to change. In consequence these forces of domination and power, the organizations would become more similar.

Powell and DiMaggio (1991) identified three mechanisms through which the pressures to homogenize may occur: regulatory, mimetic and coercive isomorphism.

- a) Coercive isomorphism results from the formal or informal pressure of organizations which have prevalence over others. Thus, the change or organizational adaptation may occur as a direct response to a new legislation or modifications defined by government, or standards imposed by matrices companies to their subsidiaries, or by guidelines imposed by competition when new technologies or substitute products are created.
- b) Mimetic isomorphism is characterized by imitation or a copy of policies, strategies, structures, technologies, productive systems, products, services and administrative practices in general, already tested and successful in similar organizations.
- c) Normative isomorphism arises from the professionalization establishing a set of rules and procedures defined for the occupation or specific activity.

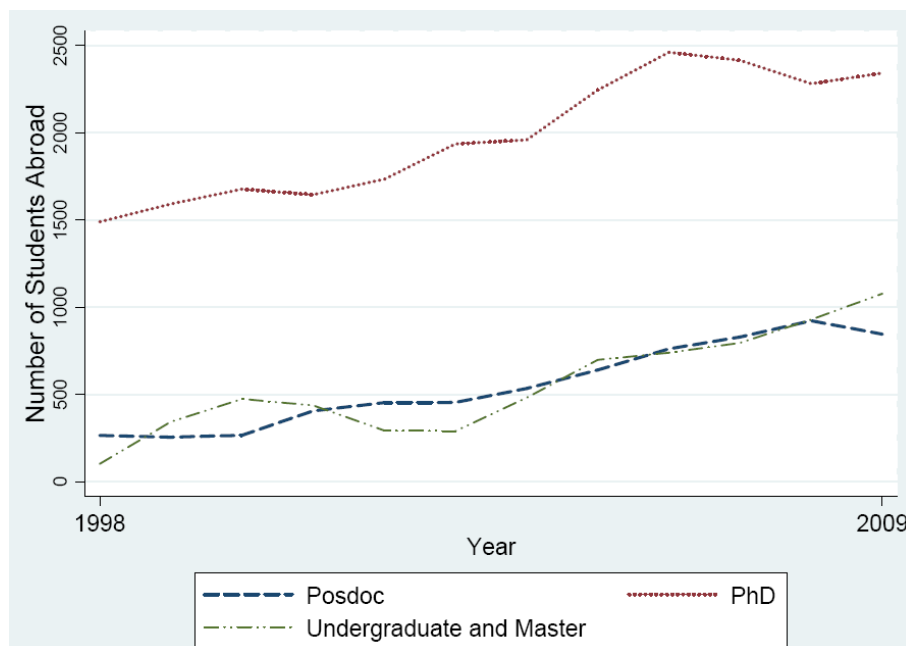
The process of definition or institutional structuring consists of four aspects: the increase in the amplitude of interaction between the organizations in the field; the appearance of structures of domination and coalition well defined; the increase of the number of information; and the development of mutual awareness among the participants in the field (DiMaggio and Powell, 1983; Powell and DiMaggio, 1991; DiMaggio, 1988).

Scott (2001) still added other indicators of structuring in the field: (1) the extension of the agreements in institutional logic that directs the activities in the field; (2) the increase in isomorphism among populations; (3) the increase of structural equivalence groups of organizations in the field; and (4) the increase in the definition of the field borders. Therefore, in so far as the organizations tend to institutionalize, adopting rules, developing similar skills and behavior patterns on their own context, we may say that there is a configured field (Selznick, 1957).

INSTITUTIONAL THEORY AND ITS ARTICULATION WITH THE INTERNATIONALIZATION OF HIGHER EDUCATION: FOCUSING ON THE BRAZILIAN UNIVERSITIES

The subject “internationalization of the higher education” started to be discussed in Brazil during the 1990’s, when the regulatory agency Capes (2010) increased the pressure to build international standards for the graduate studies and research institutions within the public system. Since the system was highly centralized and regulated, the internationalization process was mainly induced and oriented to the government priorities, and lead by the government and institutions, in order to help the country’s development.

Figure 1: Number of students abroad by year and type of study



Source: Capes (2010); own elaboration.

The internationalization process gained significant dimensions when more joint programs from international agencies started to operate in Brazil (for instance, post-graduate scholarships and joint research projects) and national programs with similar purposes were created, in order to support post-graduate programs, generating possibilities for exchange of experts as well as of information. These actions show that

the government and the universities are seeking to work as the main players in order to strategically build cooperation, creating a management, strategic and operational structure. The consequence of this process is the institutionalization of the higher education's internationalization, which can be observed from the increase in the number of Brazilian students in foreign countries in different levels (from undergraduate studies to master, doctoral and post-doctoral studies), in the last decades. Figure 1 shows this process for the years 1998-2009.

Another consequence of the internationalization process was the creation of many different programs, as for instance: programs to increase the study of foreign languages, joint research programs (inter-institutional and/or international), double certificate programs with international universities, and mobility programs for students, professors and researches.

In the last few years, the government investment in higher education has also increased substantially. This process has also a consequence in the internationalization process, which received higher investment in the last few years, as Table 1 shows.

Table 1: Investments on public education in Brazil

Indicator	Unit	2003	2004	2005	2006	2007	2008	2009
Expenditure on Education, Public (Absolute)	US Dollar (Millions)	21867.6	25518.8	29941.8	36129.5	45015.6	51711.9	58217.3
Expenditure on Education, Public (Growth)	Percentage	11.095	16.6968	17.3323	20.6658	24.5951	14.8755	12.5801
Expenditure on Education, Public (Per Capita)	US Dollars	118.8715	136.8384	158.428	188.6963	232.1366	263.3759	292.933
Expenditure on Education, Public (Per Capita Growth)	Percentage	9.5596	15.1146	15.7774	19.1054	23.0213	13.4573	11.2224
Number of Students in Tertiary Education (Absolute)	Number	3786837	4134725	4423662	4572297	5272877	5637135	6100351
Number of Students in Tertiary Education (Growth)	Percentage	12.9076	9.1868	6.9881	3.36	15.3223	6.9081	8.2172
Public Education Expenditure as a % of GDP (Absolute)	Percentage	3.96	3.8461	3.3959	3.3172	3.377	3.2511	3.8916
Public Education Expenditure as a % of GDP (Growth)	Percentage	1.5958	-2.8763	-11.7054	-2.3175	1.8027	-3.7282	19.701

Source: DataMonitor (2010)

Aligned with the propositions of the World Conference on Education by UNESCO in 1998, the government and the Public Brazilian institutions reaffirm its position on the definition of education as a public asset, defending the knowledge as a social patrimony.

In the period between the years 1996 and 2002, the higher education in Brazil has undergone major changes, especially after the approval of the Law of Guidelines and bases of National Education, by the National Congress Law n. 9,394 /1996. The reforms in higher education cannot be seen as disconnected from its broader insertions and from the own conception of State. The recent years were marked by constitutional changes (1988's Constitution) and institutional (new tributaries, welfare, fiscal and education laws), as well as the Law of Directives and Bases of National Education (LDB) (Brasil, 1996).

Brazilian policies of higher education can be analyzed in different areas: the reforms in National Education System (SNE) CNE/MEC/Capes/Inep; the reforms in the National System of Science and Technology (SNCT) STM/CNPq; and the reforms of the State that occurred particularly in the second half of the decade of 1990 and in the initial years of the new century and the scope of wider phenomena, part of the sociocultural field.

The first phase (1970's), marked by the expansion of higher education institutions, occurred due to the pressures of the communities for having higher education. The changes mediated by the expansion were the improvement of quality of education and the creation of the courses of graduation. The second phase (1980's and early 1990's), the expansion of graduation courses (master's, doctorate's and post-doctorate's), occurred in the movement of pressure by titles (degrees); these courses were implanted in the years 1970, as part of the plans for economic and social development, through the National Plans of Graduation (PNPGs), and consolidated as a system in the 1980s. The third phase (mid 1990s and beginning of 2000s) was the expansion of the System of Higher Education (SES), through the diversification of higher education institutions, courses and programs. Independently of this diversification, we note a tendency for search of expansion and international partnerships.

In 1991, with the signature of the Treaty of Asuncion, which represented the formalization of the Common Market of the South (Argentina, Brazil, Paraguay and Uruguay), several steps were taken to improve the internationalization of educational system. Recently Brazil entered the Ibero-American Network for the "Quality Accreditation of the Higher Education System (Riaces)", with representatives of Latin-American countries and international organizations, such as the Board of Governors - American Center University (CSUCA), and the Institute of Higher Education in Latin America (Inep, 2010).

As regards to multilateral agreements, the “Iberoamerican Program of Science and Technology for Development (CYTED)” is worth mentioning. This program involves 21 countries, and promotes scientific and technological cooperation for innovation. The international organizations IADB, ECLAC, OAS and UNESCO participate as observers. From 1992, the program was integrated with the cooperation of the meetings of Ibero American Summit of Heads of State and Government. This program aims: to promote the culture of cooperation as a strategic instrument to improve and complement national capabilities in science and technology; to internationalize the national systems of innovation; to contribute to the modernization of institutions; and to promote the development of a scientific Ibero American community. In order to achieve these objectives, the program concentrates in multilateral activities of research and development (R&D), encouraging the applied research and technological development to obtain transferable results to productive systems and to social policies of Ibero American countries. These activities of multilateral R&D are supplemented by management and technological innovation. The activities of the program are developed in 16 thematic areas or subprograms. The main methods of fomentation are: thematic networks, projects of pre-competitive research and innovation projects (CNPq, 2010).

Table 2: Main destination countries of Brazilian students in higher education (sum of students in the period 1998-2009)

Destination Country	Number of Posdoc Students	Number of Posdoc Students	Number of Undergraduate and Master Students
Australia	117	425	0
Netherlands	106	463	0
Italy	207	659	0
Canada	385	1080	0
Germany	334	2057	1826
United Kingdom	508	2938	0
Spain	722	2020	6
Portugal	607	1940	6
USA	1838	6158	1727
France	1475	4934	3079

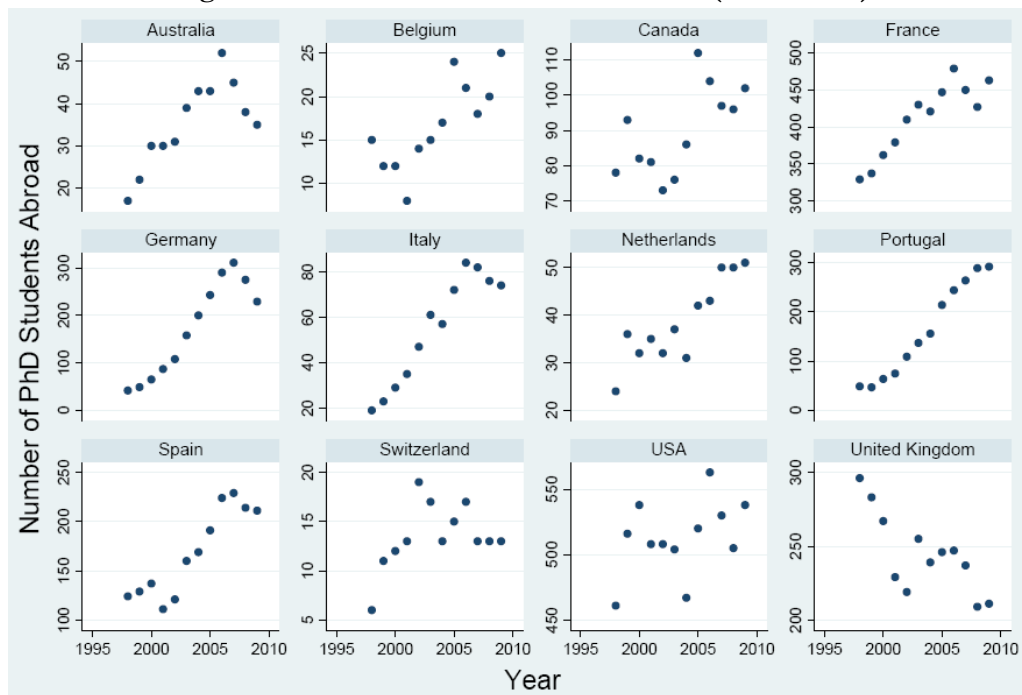
Source: Capes (2010); own elaboration.

In addition to the bilateral and multilateral agreements, the Capes and CNPq are the main agencies promoting scientific research, training of Brazilian students and researchers

abroad. Although, the international cooperation is a relatively new fact, as the example from Mercosul. The data from Capes (2010) shows that, in the year 2003, from the 1,449 scholarships granted, only four (4) (Argentina) of them were for post-doctorate and split PhD, one (1) (Uruguay) for PhD, one (1) (Chile) for post-doctorate, one (1) (Cuba) for specialization and one (1) (Mozambique) for split PhD.¹ The main destination countries of Brazilian students in higher education from the period 1998 up to 2009 can be observed in Table 2.

In addition, Figures 2 and 3 show that, among the years 1998 and 2009, increased the number of Brazilian students registered in full or partial PhD (split PhD) in the main countries with which Brazil has sent students and researchers for graduation studies.

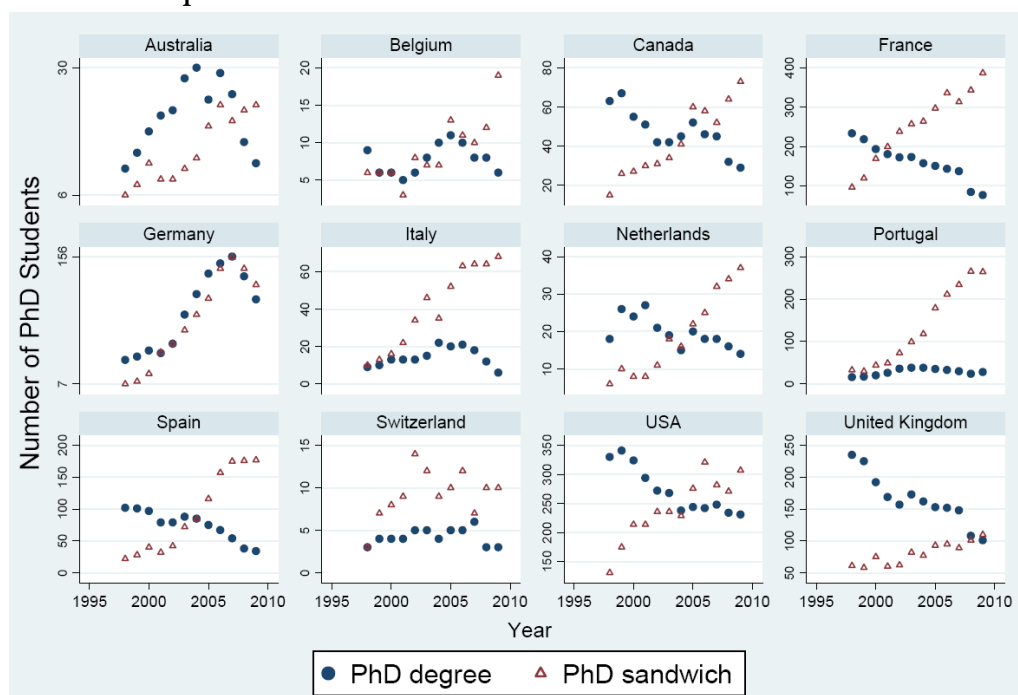
Figure 2: Number of PhD students abroad (destination)



Note: Sum of students with “full PhD abroad” and “Sandwich Model PhD”; Countries were selected according to the higher number of PhD Students abroad; Source: Capes (2010); own elaboration.

¹ Split PhD is the name given to a doctoral program that aims to support students formally enrolled in doctoral courses, to develop part of their doctoral research in other foreign institution. This type of program is widely used in Brazil, and the doctoral student may undertake a research stay abroad, from 4 to 12 months, financed mainly by Capes and CNPq.

**Figure 3: Number of PhD students abroad:
Comparison between full PhD abroad and Sandwich Model PhD**



Note: Countries were selected according to the higher number of PhD Students abroad; Source: Capes (2010); own elaboration.

Capes (2010) has adopted a policy of fortification of its graduation programs with international partnerships, based on the principle that strong programs with discussions and experiences integrated, cooperate not only for the development of teachers individually, but for the promotion of under graduation and graduation. In recent years, we identified a search for new international partnerships and fortification of international relations with the countries in South America. In addition, regarding the countries with greater number of Brazilian students performing PhD and split PhD, the number of scholarships and opportunities increased. On the other hand, we note also a decrease between the years 2007 and 2010 of the number of students performing PhD in these countries (see Figure 3). In the context of South America, the largest international partner has been Argentina. In the year 2000 Capes supported 341 missions of studies (51 in Argentina), 524 missions of work (46 in Argentina) and 300 joint projects (28 in Argentina) (Capes, 2010).

Besides the governmental agencies, the policy of internationalization is supported, at state level, by the Secretariats of Science and Technology and their agencies for the Advancement of Research (FAPs). Among the agencies, the Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) [Foundation of furtherance of Search of the State of Sao Paulo] is worth mentioning, which, of a total of 1,317 aid for international scientific exchanges, were granted 205 for developing regions (Africa, Asia and Latin America), 167 for communications, 29 for visitor researcher and 9 for research (FAPESP, 2010).

For the purpose of assisting the development of science and technology in Mercosul, the website of Journals of Mercosul was created (Capes, 2010), in partnership with the Department of Science, Technology and Productive Innovation (SeCTIP) and the Department of University Policies (SPU) of the Ministry of Education, science and technology of Argentina, with representatives of the National Science, Technology and Innovation Administration (Dinacyt) of the Ministry of Education and Culture of Uruguay and the University of the Republic of Uruguay (Capes, 2010).

The institutional posture integration to Mercosul is affected by the diversity of the system of higher education, by its academic organization (universities and non-universities), by administrative dependence (public and private) or by preponderant universities (education and teaching/research), among other issues.

Despite the fact that most research on internationalization have focused on economic aspects of the firm, a closer inspection on the current developments of the internationalization process shows that, besides the economic dimension, the structure of education and society has also passed through significant changes. These spillover effects on education should not be neglected: this process opens challenges to meet international standards as well as opportunities for significant improvements on the educational system, especially in what concerns higher education.

The world market for international education is measured by the number of students enrolled in educational institutions outside their country of origin (Mazzarol and Hosie, 1996). Data on international student movements collected by UNESCO (1992) shows the evolution of the number of students enrolled in tertiary education and reveals substantial a high increase in the late years. While in 1975 there were 0.6 million students in tertiary education outside their country of origin, in 1985 they amounted 0.9 million, in 1995 1.3

million and around 1.9 million in 2000 (OECD, 2010). Values for the current years are shown in Table 3.

Table 3: Number of foreign students enrolled in tertiary education outside their country of origin (head counts)

Students	2000	2001	2002	2003	2004	2005	2006
Foreign students enrolled worldwide	1,894,792	1,972,111	2,267,627	2,507,931	2,697,759	2,847,536	2,924,679
Foreign students enrolled in OECD countries	1,583,744	1,642,676	1,897,866	2,085,263	2,265,135	2,368,931	2,440,657

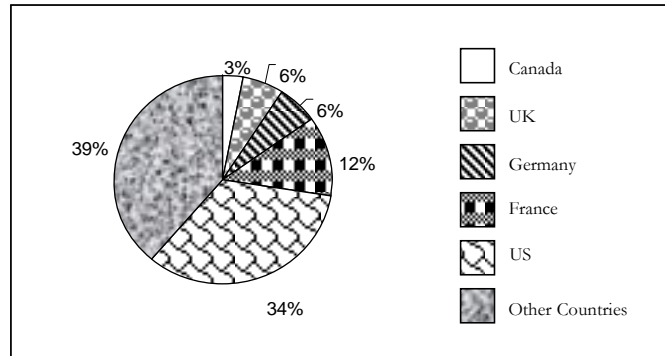
Source: OECD (2010)

According to estimates of UNESCO, the majority of these students are in Asia, Africa and Europe. In 1990, for example, approximately 90 per cent of international students undertaking higher education were studying in only 50 leading host countries (Zikopoulos, 1994: 3). Of these 50 nations, five (the United States, France, Germany, the United Kingdom and Canada) take the majority of international students (63 per cent in 1990) (UNESCO, 1992: 390-415). In 2004, the majority of students went to USA, Australia, UK, France, Germany and France. Figures 4 and 5 illustrate the dominance of these countries as destinations for international students.

The USA is the largest provider of international education. And as Table 2 shows, this country draws its students primarily from Asia, in particular China, Japan, Taiwan and India. France is host to students, and North Africa, Morocco, Algeria and Tunisia are the major source countries. Germany draws a large proportion of its students from Turkey and Iran. The UK has a more even distribution of source countries, but Malaysia and Hong Kong represent the top two sources of students. Canada also draws heavily on Hong Kong for its students (Zikopoulos, 1994: 7).

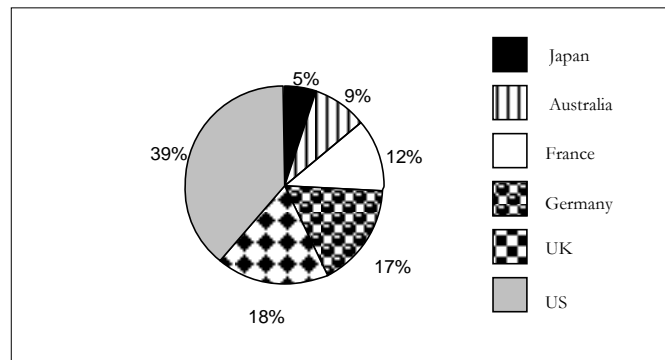
Internationalization in higher education is “a driving force for national development, [...] modify institutions and bring them in line with progress in a contemporary world in order to provide global training for their graduates” (Laus and Morosini, 2006: 111). Brazil was one of the last countries in Latin America to establish universities. Its leading classes were educated in Europe during the colonial period (1500-1822), and the first universities emerged at the beginning of the nineteenth century. In 1907 Brazil had 25 universities, with 5,795 students. The first Brazilian university, the University of Rio de Janeiro, was founded in 1920 (Capes, 2010).

Figure 4: Leading host countries for international education in 1996



Source: Mazzarol and Hosie (1996: 37)

Figure 5: Leading host countries for international education in 2001



Source: OECD (2010).

The main actors in the field of internationalization of higher education in Brazil are: a) the Ministry of Education; b) the Ministry of Science and Technology; and c) the Ministry of Foreign Relations. In Brazil, the internationalization of higher education in public universities and institutes began with the objective of attending the demand for research and training of the Ministry of Agriculture and the Army, as well as in the fields of aerospace, science, and technology. This process has expanded throughout the higher education system since the late 1990s (Laus and Morosini, 2006).

Due to the internationalization process of the scientific and technological development, the institutions of higher education, particularly universities, seek to extend

its space to adapt to this new scenario. There is a need, therefore, that these institutions become prepared to attend the demands of sociopolitical challenges induced by economic and cultural globalization. Once they review and update their strategies, they open opportunities for students and graduates to count on professional and academic competences, what would also enable them to interact in an increasingly multicultural and international society.

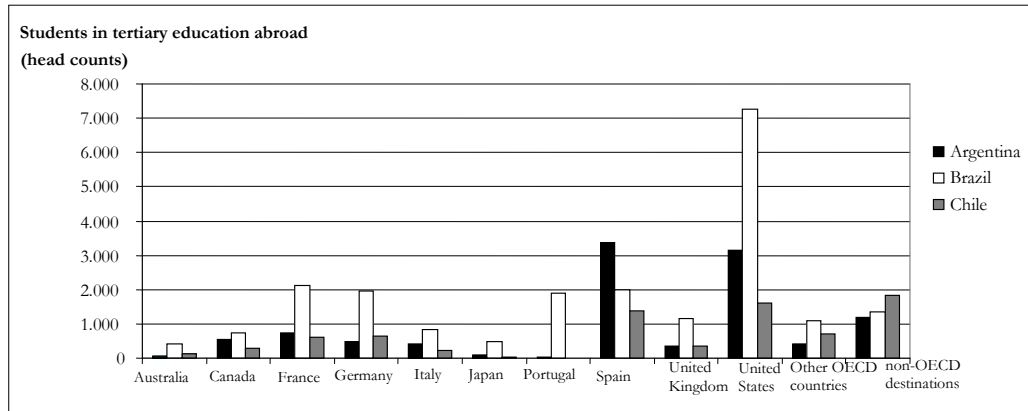
The internationalization of the Brazilian higher educational system became a key factor in the early 1990s, especially with the Law of Regulation and Norms for National Education 9394/96 (Laus and Morosini, 2006). This movement followed international tendencies of more flexible policies, a reduced role of the central government and the need for an expansion of the system.

Brazil's higher education system is divided into universities, university centers, faculties, higher institutes or schools and technical centers. According to this classification, in 2006, the country had 178 universities and 2,092 other institutions classified into the other aforementioned categories (Inep, 2010). Within the Brazilian educational system, there exist large differences in the degree of internationalization between graduate and undergraduate students. Since graduate studies are closely related to research and to the creation of usually long-run academic networks, there is no doubt that the graduate education has been the most dynamic one in the internationalization process.

Research is coordinated by the Ministry of Science and Technology and supported by the CNPq. Through this channel, not only graduate students but also faculty staff have profited from international experience. Moreover, as pointed out by Laus and Morosini (2006), 92% of the institutions have programs for academic staff mobility and 70% have programs for student mobility.

Statistics from the OECD (2010) present a picture of the Brazilian graduate students abroad (Figure 6). From all Brazilian students enrolled in tertiary education abroad (based on head counts), 34.1% are in the United States, 9.9% in France, 9.3% in Spain, 9.2% in Germany, 9% in Portugal, 5.5% in the United Kingdom, 4% in Italy, 3.5% in Canada, 2.2% in Japan, 2% in Australia, 1.4% in Switzerland and 10% in the remaining OECD countries.

Figure 6: Students in tertiary education abroad (head counts) in 2008



Source: OECD (2010)

In absolute values (number of students in tertiary education abroad), a comparison among Argentina, Brazil and Chile is shown in Figure 6: except for Spain, Brazil is leading in the absolute number of students in OECD countries. For non-OECD countries, Chile has the higher number of students in tertiary education abroad (1822 students) followed by Brazil (1352 students), most of them in Latin American universities.

As aforementioned, trade liberalization had an important effect on the structure of the educational system. Due to the increasing competition with multinational enterprises, the Brazilian economy experienced an increasing demand for labor force pursuing skills to compete in the foreign market. Thus, Brazilian universities started, especially during the 1990s, a great effort towards the development of international standards.

The effect on the restructuring of the education market is clear: with the increasing demand for education, private universities have found a market which could no longer be supplied by the public institutions. Table 4 gives an overview of the distribution of institutions: clear evidence shows the great participation of the private sector, especially related to the so-called non-autonomous institutions. Non-autonomous institutions comprise faculties, higher institutes or schools and technical centers - universities and university centers are the only higher education institutions considered autonomous. Moreover, according to Laus and Morosoni (2006), the share of private universities is more evident in the south-eastern, central-western and southern regions; in the northern and northeastern regions, the insufficient economic dynamic still impede the entry of good-quality private institutions.

Table 4: Distribution of high educational institutions in Brazil

	Institutions											
	Total General				Universities				Other institutions*			
	Total	Total %	Main city	Inland	Total	Total %	Main city	Inland	Total	Total %	Main city	Inland
Total	2,270	100%	811	1,459	178	100%	82	96	2,092	100%	729	1,363
Public	248	11%	82	166	92	52%	46	46	156	7%	36	120
Private	2,022	89%	729	1,293	86	48%	36	50	1,936	93%	693	1,243

Note: Other institutions embrace university centers, faculties, higher institutes or schools and technical centers; Source: Brasil (2010)

The role of the private institutions in the internationalization should not be neglected: these institutions enrol about 400 thousand of the 3.2 million students enrolled in higher education, and attract specially people who give value to international standards and who might leave Brazil if high-quality programs are not available (Laus and Morosoni, 2006).

A number of authors have examined the phenomenon of rapid internationalizing firms in different sectors, from hi-tech industries (Jolly et al., 1992; Knight and Cavusgil, 1996; Madsen and Servais, 1997) to the entrepreneurial “arts and crafts” firm (Fillis, 2000; Mcauley, 1999). Contemporary research adopts a broader definition of international entrepreneurship: as McDougall and Oviatt (2000: 903) state, international entrepreneurship is “a combination of innovative, proactive, and risk-seeking behavior that crosses national borders and is intended to create value in organizations”.

This definition goes beyond international new ventures and beyond knowledge-intensive industries, and provides a rationale for inquiring the links to the educational institutions. As Richardson and McKenna (2002) point out, the overseas appointments are not confined to managers and executives in enterprises: the internationalization of the higher education and the need for *strategic alliances* between universities and other educational institutions have boost the willing of academics to take overseas appointments. Then, not only the enterprises but also educational institutions should be aware of some key competences as drivers of competitive advantage: global vision, a focused approach to doing business/research, the ability to recognize opportunities and to capitalize on them.

In the core of the internationalization process of the educational system are the universities and other educational institutions, which can work as “functionally specialized global network” agents. Despite the role of the government in providing grants and financial support for research, the higher educational institutions play an important role in

creating networks with research institutions and universities around the world. Besides facilitating the exchange of projects, such initiatives also enhance the exchange of research ideas and human resources.

In many Pacific and certain European countries, the institutions have already perceived the need to “modernise” their industrial development through business and management education. As shown in Howe and Martin (1998), as a result of this pressure, many countries have created cooperation programs with international universities and have perceived a high growth in MBA programs. One inevitable consequence is the diffusion of “best practices”. Following this idea, we propose in the next section some strategies to enhance the internationalization process of the Brazilian education system.

In this subsection we try to shed some light on strategies for the internationalization of the South American higher education institutions, especially based on successful study cases and surveys. The theory of internationalization was already presented and the concept of internationalization could be summarized as the process of increasing involvement in international operations and can be approached with a special emphasis on strategy (Welch and Luostarinen, 1999). Strategy is understood in this context as a plan that describes the firm’s intention according to predetermined long-term goals (Mintzberg et al., 1998). So far, Melin (1992) defends internationalization as a major dimension of the strategy process of most firms oriented on business. The strategy determines the ongoing development and change in terms of scope, business idea, action orientation, principles of the organization, nature of managerial work, dominant values, and converging norms, and the internationalization dimension is related to all these aspects of the strategy process (Melin, 1992).

For a high school institution that intends to internationalize, some questions for the strategies must be inquired: a) what are our best resources?; b) what are our internal capabilities?; c) what are our core competences?; d) what are the conditions and the state of the home market and of the target market in terms of competition, market size and growth?; and e) have we an international department in our organizational structure? (Welch and Luostarinen, 1999).

Howe and Martin (1998) use a case study to defend that, increasing the cooperation with international universities, especially with Western European countries, the countries under their study experienced a great diffusion of “best practices”. Although, the authors also observe the drawbacks of this process by showing that, trading on their English

language attributes, American and Australian universities have been particularly aggressive in their desire to increase student numbers and fees arising from business in Asia. This, while getting the advantage of the cooperation, the contract terms must be clear: the universities need to build strategies in order to profit from the “best practices”.

According to these “best practices” of successful universities, some of the following strategies should be considered by institutions of higher education as *internationalization strategies*: internationalizing courses; adding international courses; adding foreign language course components; offering work or study assignments in overseas countries; exchanging faculty staff and/or students; setting up joint degree programs; setting up collaborative programs with overseas institutions; and undertaking joint research and consultancy programs with overseas colleagues (Raimond and Halliburton, 1995).

Although some of these strategies are feasible only in the very long run, and the universities can, through exchange and cooperation programs using the “best practices”, make a big step towards the internationalization and the consequent increase of the quality standards.

Some of the challenges faced by the higher educational institutions are:

a) The challenge of the international standards: The internationalization poses some important challenges for the Brazilian educational institutions. While increasing the opportunities to create international networks with high quality institutions, it also increases the challenges: the internationalization also implies a harmonization of the higher education systems (the Bologna process is a clear example of that). The harmonization is an important step towards a more trustful and understandable system, but, specially for developing countries, it increases the challenges to compete in a global market. Thus, Brazilian institutions should intensify networking with foreign institutions based more on collaboration rather than competition.

b) Serving the local market with international standards: According to Laus and Morosini (2006), the higher education system in Brazil is the largest in Latin America, but, due to a serious social exclusion, the gross rate of enrollment by young adults 18-24 amounts to only 17% of this population group. This value is only a half of other Latin American countries and lies far below the 50% in developed countries. Thus, it is clear that there exists a need for universities to serve the local community. Most of research in strategic areas such as physics and engineering are coordinated by federal universities and the government. Although, public universities can no longer supply the increasing demand

and private universities have shown to be the “big players” in the late years. Thus, it is clear that cooperation projects among universities may facilitate the creation of excellence clusters and may also avoid the brain drain. Such strategy also leads to a higher quality in teaching and to higher quality standards.

c) Research and human capital without borders (the need for cooperation): Research is mobile across countries and the creation of stronger networks with foreign universities facilitates the international activities by academics. One relevant theory of internationalization that helps to create such a strategy is the network approach by Johanson and Mattson (1988). The authors argue that the creation of networks in firms can be achieved through the establishment of relationships in foreign countries and the development of this connection. As pointed out by Laus and Morosini (2006), some challenges in this area concerns the need for real co-financing of projects, the need for transnational elements in projects as well as the difficulty to find ideal partners. It is clear that higher participation of the faculty staff in international activities play an essential role to enhance the creation of research networks and to facilitate the exchange of human resources. As an extension of this strategy, one could think of the reinforcement of bilateral exchanges to support joint teaching among universities.

d) The development of the image of a reliable and qualified institution: Internationalization requires the development of the image of a reliable and qualified institution. As Mazzarol and Hosie (1996) point out, the marketing of higher education requires special treatment and the achievement of a sustained competitive advantage occurs through the development of an image of quality within the target market. One way to achieve this image is a long-term strategic outlook with detailed and reliable research.

CONCLUSION

It is a big challenge for developing economies to take part in the international education market. While some countries have clear advantages in terms of financial resources and infra-structure to receive good students, many developing countries fear intellectual marginalisation if more effort is not put into increasing the human capital.

In this essay we claimed that trade liberalization has affected the structure of the educational institutions as well as their role in the society. Key drivers of these changes are the advances in communication and technological services, the increasing labor mobility as well as the increased private investment and decreased public support for education.

Thus, the international dimension of the higher education system and its increasing complexity should not be understated. Little is known about this development process and about the trends and opportunities for internationalization of the educational system.

Coming back to our literature review on the theories of internationalization, there is no clear evidence whether the Uppsala and network models are the most appropriate for analyzing internationalization phenomena in the context of higher education. Thus, there is a need to reconsider these theories in order to understand the behavior of the organizations and institutions under the turbulent conditions of transition markets.

From a strategic perspective, this study provides a broad picture of the higher education institutions and their structure in the Brazilian economy. It also briefly explores the literature on internationalization, showing the case of the educational system in Brazil and stylized facts of other countries. As our goal, we looked at the current patterns in the internationalization of the higher educational system and proposed some strategies of internationalization. Contributing to this process, one should not neglect the role of the private institutions: as mentioned in this essay, with the impossibility of the public institutions to attend the increasing demand for higher education, private institutions experienced outstanding growth rates and attracted students who might leave Brazil if high-quality programs are not available.

From this study on internationalization of the Brazilian higher education, we suggest for future studies the following points: Is there a global model for universities that follows the recommendations of multilateral organizations? Can this model be applied for all South American countries? What would be the main characteristics, advantages and disadvantages of this new model of internationalization of higher education? What are the possible impacts for the new configuration of higher education in South America?

Thus, Brazilian high educational system still faces important challenges to take part in the international education market. While developed countries have clear advantages in terms of financial resources and infra-structure to work as host and source country for high education, Brazilian institutions need to define a clear line of actions and priorities in order to create a robust structure and to facilitate the exchange of students and the creation of networks which can enhance the establishment of high quality and with international standards institutions.

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