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**INTERNATIONALIZING BRAZIL'S UNIVERSITIES:
Creating Coherent National Policies Must Be a Priority
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ABSTRACT

It is estimated that approximately 3 million students are enrolled as international students, and it is possible to project that this number may reach more than 7 million by 2025. As global demand exceeds the supply, competition is building for the best of these students. Some countries (or regions) clearly envisage the opportunity this represents and have been strongly stimulating student mobility. There is a race for "brains", be it for professors at the end of their careers looking for new professional opportunities and/or the opportunity to return to their native countries, or for researchers at the beginning of their careers, looking for a place that might offer them a better future, or even for students, who seek more appealing alternatives. How will Brazil fare in this competition for talent? If it is to internationalize its higher education study programs, Brazil must deal with a number of practical problems, including a lack of specific policies and guidelines. Bureaucracy, for instance, is one major problem. A foreigner who comes to live in Brazil faces many obstacles, mainly due to the bureaucracy involved in everything from getting a Visa through the Federal Police office, to opening up a bank account, renting an apartment, registering at school, amongst many other processes and regulations that make it difficult for anyone to come and live in Brazil. One rarely finds a course offered in English or Spanish in a Brazilian university and the selection of faculty are normally held in Portuguese. Currently, there are no plans or projects at either the federal or state level, to address these obstacles. This should be a major concern to all who hold positions of responsibility in the educational process, as Brazil is not keeping pace with higher education reforms found globally. The internationalization movement is growing, and Brazil must actively seek reforms to keep pace with economic competitors.

Global higher education is experiencing a period of significant change, including an increasing number of international students and programs intended to attract talent from throughout the world. Internationalization is a trend that will continue to grow in its importance, marked by increased competition among nation-states, and influenced by the short- and long-term strategies developed at the national, regional, and institutional level.

From an academic point, the internationalization of universities is an important and positive influence on learning environment of students. Besides the immense personal value for international students who have the means to pay for their education abroad, the presence of greater cultural diversity on campus benefits the broader student population, helping to broaden democratic values, ethics, broaden dialogue, and mutual understanding.

Even so it is important to highlight the fact that there are other factors to consider in observing the costs and benefits of internationalization, such as the marketplace pressures and the Brazilian views of various important actors at the institutional, regional and national levels.

The following essay highlights changes in the world's demography, the global education scenario (market, public funding, etc), the emergence of new actors in this competitive race for talent, with a focus on conditions in Brazil and what policy changes are needed to make help keep and attract talent for a quickly developing economy. There is a race for "brains", be it for professors at the end of their careers, looking for new professional opportunities and/or the opportunity to return to their native countries, or for researchers at the beginning of their careers, looking for a place that might offer them a better future, or even for students, who seek more appealing alternatives. In this context, Brazil needs to think more creatively and quickly innovate. In the conclusion, I offer a number of policy recommendations.

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WORLD DEMOGRAPHIC CHANGES

With the declining birth rate in most developed countries, Africa, Asia and Latin America are responsible for much of the world's population growth. One consequence is the lack of qualified workers in the developed countries, leading to recruitment of foreign students and qualified workforce.

On the other hand, high population growth rates in countries that do not have a well-established educational systems that can grow has led to the search for opportunities in other countries. With the population growth and aging, there also are social pressures to change the destination of public resources from education to health, for example. It is not clear, in this scenario, how various countries, including the BRICS (Brazil, Russia, India, China, and now South Africa), will respond to the pressure for the massification of higher education, which has reached 40 to 50% of the young population in some countries (world average is around 25%).

It is estimated that approximately 3 million students nowadays have the means to benefit from an international experience, and it is possible to conjecture that this number may reach 7.3 million by 2025. As global demand exceeds supply, there is an opportunity for Brazil. But there is increased competition for these students.

EDUCATION AS A GLOBAL MARKET AND GOVERNMENT FUNDING IN DECLINE

Some countries (or regions) clearly envisage the opportunity that this growing world demand for higher education represents and they have established policies and programs to stimulate student mobility. In regions such as Europe, a political agenda has emerged that has made higher education more international in its scope, with scholarships for international students, and the acceptance of disciplines and courses taken in another country (the most important example is certainly the Bologna Process).

Moreover, these changes in the market for international students coincides with the internationalization of scientific research in which academics work and communicate increasingly with colleagues from throughout the world.

Public spending per student is decreasing globally, and governments are transferring costs to institutions and students. Universities are being held more and more accountable for their financial dealings, activities and results, and, as a consequence, the universities increasingly tend to follow a more business like model, with strategic planning, efficiency focus and so forth. The lack of public funding has led to some creative partnerships with the private sector in many public universities, especially for the construction of facilities, funding for research or the execution of specific programs.

Communication becomes a crucial factor, and English (the dominant language in the world of business and academic research) is also the *lingua franca* of any nation or university that wishes to attract talent to its academic programs. From this perspective, countries where English is used in higher education have a competitive advantage in this complex educational "market".

This fact of the postmodern world provides an advantage for universities in the USA, Canada, Australia and the United Kingdom, and also in India, South Africa, Hong Kong, Singapore, and other countries both in Europe and in South East Asia that have tended to use English in their academic programs.

CHANGES IN THE WORLD SCENARIO OF HIGHER EDUCATION

Despite criticisms, the ranking of higher education institutions has been used to shape public policies in some countries, like Spain, Japan, Hong Kong and South Korea. Others, like Germany and China, plan actions with rather ambitious goals to develop elite world class universities.

An analysis of the various rankings indicates a growing presence of countries that have not been part of the traditional block, the result of a deliberate national strategy to become important educational hubs in their area of influence. This is the case in China, Singapore, Malaysia, South Korea and the Gulf countries, all aiming at becoming world class educational and research centers, and challenging primacy of the USA and Europe.

In this strategy, many universities in developing nations have cooperated with well-known universities, creating a wide debate about the internationalization models. It is worth noting, in this case, the absence of Africa and Latin America in this agenda of building world-class universities and attracting international talent.

THE BRAZILIAN CASE

The Brazilian population today is 195 million inhabitants, distributed in 27 states and in more than 5 thousand cities, the country currently has the world's 7th largest Gross Domestic Product (GDP) (approximately 2.1 trillion dollars). The country has a very distinct higher educational system, with a relatively small number of public (federal, state, or municipality) research universities,

and a large number of private institutions, both philanthropic/confessional and for-profit oriented. There are, currently, approximately 5.9 million young students enrolled in higher education undergraduate programs in the country, with 77% of these students enrolled in private institutions.

Historically, the higher education institutions were organized according to the European tradition. There are only incipient experiences of "college" type undergraduate study programs. There is also a small and yet growing segment of vocational post-high school education (about 10% of the total enrollment figures).

Brazilian universities are relatively young, the oldest schools date from the 19th century, but the first universities were structured in the 1930's. The 1968 educational reform introduced many elements of the North American higher education model, including the masters degree and doctoral programs, the credit system, the substitution of chairs for academic departments, among other changes.

This reform was accompanied by the creation or expansions of many agencies to support research, both on federal and state levels that designate additional resources to students in public universities. Among these agencies we may include two from the Ministry of Science and Technology: The National Council for the Scientific and Technological Development (CNPq), that provides scholarships and resources for individual research projects, and the agency of Funding of Studies and Projects (FINEP), intended to finance large scale projects, infrastructure and innovation. Another agency of the Ministry of Education is responsible for the Coordination for High Education Improvement (CAPES), providing graduate scholarships and evaluating graduate study programs in Brazil.

There are also state agencies that support research and offer scholarships. In the State of São Paulo, the Foundation for the Support to Research of the State of São Paulo (Fapesp) is guaranteed 1% of the resources obtained from the Tax on the Circulation of Goods (ICMS) by the state constitution. In 2009 Fapesp received around 400 million dollars from this source. The State of São Paulo produces around 50% of the published papers and is responsible for 45% of the PhD theses of the country.

SYSTEM LIMITATIONS

Despite its professionalization and expansion, the public system has not grown rapidly enough to accommodate the growing demand for higher education. Most of that growth has been absorbed by private institutions. Nowadays, approximately 77% of enrollments in higher education programs in Brazil are linked to private institutions (2/3 of that total in for profit institutions), many of them of questionable quality.

The limited growth of public institutions may be explained by two factors: their high cost, due to research expenses and the relatively high salaries paid to faculty members, and an extremely competitive selection system for entering students, called the "vestibular". To give an idea of this competitiveness, the 2011 "vestibular" held at the University of Campinas (Unicamp), one of the most important public research universities of Brazil, had approximately 57 thousand candidates for a little more than 3.3 thousand enrollment vacancies, which means that only 6% of the applicants get a seat in the university classroom. This is very different than what happens in most Latin American countries, where, in general, admission is open and free of charge and there is a lack of incentives to pursue relatively poorly paid academic careers in public institutions.

In Brazil, public institutions are financed with federal or state government funds and charges of any kind are forbidden by the constitution. On the other hand, private institutions mostly depend on tuition and fees.

There is an intrinsic contradiction in the existing model. The tuition-free public institutions attract students with more qualifications, usually from wealthier families. So, the majority of the private institutions focus on a low-income public, with night classes because the students, in general, have to work during the day. These institutions cannot afford to hire full time professors or offer them conditions to carry out scientific research. Besides that, they do not offer courses that require high investment, such as those requiring labs or small classes. Therefore, the majority of courses focus on the social professions, such as administration, law, accounting, and pedagogy, instead of basic science, engineering, medicine and so forth.

The graduate sector data is collected by CAPES. In 2009, there were more than 103 thousand students in Masters Degree programs and almost 58 thousand in Doctorate programs. Of the 161 thousand graduate students, 80% were in public universities, one third of them in the State of São Paulo. More than 12 thousand PhD's and 41 thousand Master Degree certificates were awarded in 2010, in all areas of knowledge.

The graduate system is rather well structured, with a consolidated evaluation system, organized by Capes, and with more than 2,700 Masters and PhD programs. This graduate system leads to a research process that has also been consolidated, both in terms of numbers and of quality. The growth rate of research in Brazil may be verified by the number of published articles in ISI

Web of Science indexed journals, for example, which has increased by 18% in the last few years. Brazil has obtained, in 2009, the 13th place in the ranking of the number of articles in this database (32,100 articles), which represents 2.7% of the articles produced in the world. These figures could be higher, if one takes into account the fact that only 1.1% of Brazil's GDP is spent on Science and Technology, a rather low percentage if compared with many developed or developing countries.

GRADUAL CHANGE

Public universities nowadays represent a minor group in the Brazilian higher education context, in terms of undergraduate study programs, with no indication that the private sector will evolve towards a more serious academic model. These facts highlight the huge differences that exist between both sectors and they show how complex it is to deal with this theme in such broad perspective. The public educational system absorbs only 23% of the youth enrolled in higher education, and that percentage has continuously declined for the past 15 years (it was about 40% in 1994). It may soon be that only 15% of Brazil's 18-24 age cohort attend a public university level program.

In summary, the dynamics in the higher education system in Brazil move extremely fast and several elements are coming into play and changing the current situation. In the public sphere, federal and the state governments have encouraged public institutions to take in more students and offer night time undergraduate level programs, as a means to expand the reach of the public universities. Additional resources are offered by a federal government program called REUNI, to public universities to expand their enrollment. Also, a number of new federal universities have been created in different parts of the country. Simultaneously, private universities that offer scholarships to a certain number of low-income students receive a tax exemption statu, from the federal government, through a program called PROUNI.

To help partially address socio-economic inequalities in Brazil, many institutions have initiated affirmative action practices (using various criteria) and a vigorous debate about the subject has begun. Furthermore, new elements have emerged in the Brazilian higher education context, including technical college level programs, which have increased greatly in past years, along with federal and state initiatives to expand e-learning, of which the Open University of Brazil – UAB, is an example, in the federal sphere. On a state level, Univesp, in São Paulo, is another model to be considered.

A PARADOXICAL SITUATION

Brazil presents a paradoxical situation when the discussion involves higher education and its place in the world. On the one hand, it presents a number of consolidated research centers (both federal and state owned), with 2.7% of the world's research (13th place in a worldwide rank), and 12 thousand PhD's and 41 thousand students completing master degree level programs every year.

However significant these data may be, they are timid when compared to other places of the world. Brazil has approximately 1.4 doctors per thousand inhabitants in the age group of 25 to 64 years old, whereas developed countries have, for example, 23 in Switzerland, 15.4 in Germany, 8.4 in the United States, and 6.5 in Canada (source: "Doctors 2010: Studies of demography of tech-scientific Brazilian base", edited by CGEE).

Thus, despite the efforts, Brazil still lacks a significant critical mass of researchers and PhD's and needs to create specific policies that should include attracting talent from around the world. These deficiencies are more evident in moments of economic growth, when the lack of specialized professionals is most exaggerated. Brazil has a growing unmet demand for engineers, for instance, which is a concern for politicians, educators and those in charge of the private sector.

These challenges for Brazil also reflect problems in the pipeline to higher education. There continue to be large disparities at the elementary and the high school levels with immense regional differences that reflect tremendous economic and social development inequalities. The country should deal with and present solutions to the lack of space in public universities, in order to increase the number of young people enrolled in higher education, and thus advance in this discussion as to what is the role and participation of private and public institutions, in the context of the higher education system.

This topic has to do also with the public funding issue, governance, and many other needy areas, so as to make real significant changes in the existing scenario. Furthermore, another issue needs to be tackled: the access to public universities and the diversification of possibilities made available to young people as they complete the High School program, which should bring into this debate issues related to affirmative action and social inclusion.

Brazil boasts consolidated and leading research and teaching groups, world leaders in many areas, as well as other specific areas in which the country is certainly a world reference. Moreover, Brazil has developed a complex and comprehensive evaluation system for both undergraduate and graduate levels, regulating the sector as well as providing useful information to the universities and programs seeking self-improvement.

Finally, the country has research and innovation funding agencies (with both federal and, in some cases, states funds) that guarantee adequate resources to perform top research in any area of knowledge, provide resources for infrastructure, equipment, and scholarships for undergraduate, graduate students and post-doctorate researchers.

From this perspective, along with the fact that Brazil has managed to maintain a degree of economic stability, and a great international visibility, there is great potential for the nation to develop policies and programs to attract talent and make its higher education system more productive.

POLICIES SOLUTIONS

The following outlines a few specific policy areas and proposed reforms that should be pursued in Brazil to make it a more attractive locale for talented students, faculty, and university staff.

- *Cut Bureaucracy and Revise Visa Policies*

Bureaucracy is one of the factors that hinder the process of internationalization. A foreigner who comes to live in Brazil faces many obstacles, mainly due to the bureaucracy involved in everything, from getting a visa through the federal police office, to opening up a bank account, renting an apartment, registering at school, amongst other rules and regulation that make it difficult for any foreign-national to consider living in Brazil.

- *Revise National Limits on Teaching in English*

One rarely finds a course offered in English or Spanish in a Brazilian university and the selection of faculty are normally held in Portuguese.

- *Universities Need to Be More Flexible in Their Academic Calendars*

Besides the language barrier, Brazil also poses intrinsic difficulties given its location in the southern hemisphere, and operates with a different school calendar when compared to the school calendar in a northern hemisphere– classes usually go from February to June, and from August to December. This poses a difficulty in developing student exchange programs, and, therefore, creative solutions must be found in order to minimize its effects.

- *Universities Must Diversify and consider curricula and Syllabi in a less rigid way*

The system of credits recognition is extremely slow and rigid. Usually the departments rely only on what it is written in the specific syllabus of a particular course (including number of hours spent in class, specific content and bibliography). There is almost no flexibility to consider different approaches or content variation, and the students (both Brazilian and foreigners) risk to losing hours of study not recognized for their plan of studies, or even holding a diploma that will not be accepted in Brazil. University faculty and staff must discuss this issue and establish clear rules and policies regarding the accreditation of prior learning and study completed abroad.

- *International experience of faculty members*

With the rapid growth of the undergraduate and graduate education in Brazil, one important drawback is that most of the faculty in the Brazilian universities do not have any international experience. The universities, together with the funding agencies, should make specific programs to stimulate the international experience of the faculty members, graduate and undergraduate students.

- *Language support*

As previously mentioned, the language issue can be an important constraint for the internationalization of Brazilian universities. The university must organize an intensive language support approach, both for the foreigners who come to our campuses, and for the students and faculty that would eventually pursue education and research on an international stage.

In conclusion, the lack of specific policies and guidelines such as suggested here hindering the maturation of Brazil's universities. Brazil has tremendous potential to be competitive for international talent, and to make its universities, and society, more international in perspective. But to date, there are no federal or state level plans or projects along these lines. This should be a major concern to all who hold positions of responsibility in the educational process, as it is already happening in many places around the world.

The internationalization movement is growing, and Brazil must actively participate in it to be globally competitive.