

MONEY FOR PRESTIGE: A GEOPOLITICAL TRANSACTION

by

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ABSTRACT

This study explored how political and economic forces influence internationalization activities in Brazil and the United States. Eighteen international officers and faculty members at two public research universities in the United States and Brazil were interviewed to understand how internationalization activities have changed given new political and economic circumstances in these countries. This study found that the major forces influencing internationalization activities in higher education in Brazil and the US are federal and state policies, institutional internationalization strategies, and the pursuit of money and prestige. Furthermore, this study found that Brazilian higher education increased its internationalization activities and prestige pursuit through federal policies encouraging mobility programs that brought the standardization and formalization of such activities at the institutional level. Additionally, US higher education institutions are increasingly engaging in entrepreneurial behaviors regarding internationalization activities. The interaction of these forces have resulted in a geopolitical transaction: money for prestige.

CHAPTER 1: INTRODUCTION

Globalization has challenged the traditional foundations of higher education institutions. The way in which students learn, how higher education institutions deliver knowledge, how they perform teaching activities, and how knowledge is produced and distributed represent activities that have changed universities. Some of the consequences of globalization in higher education include: the use of English as the dominant language for global communications, English as the lingua franca for scientific exchange and key to open opportunities of mobility, the global international labor market, the growth of communications, the emergence of global rankings and the pursuit of university prestige (Hazelkorn, 2017).

Globalization is defined as “the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many [kilometers] away and vice versa” (Held 1991, p. 9). Globalization is a phenomenon that was shaped after the emergence of a global economy creating new forms of collective decision-making forces that have fostered new regional orders in various matters of institutional life (Held, 1991). Many distinctive views have been expressed about the nature, causes, consequences, and future implications of globalization for education. Applying the concept of globalization to higher education, Altbach and Knight (2007) define it “as the economic, political and societal forces pushing 21st century higher education toward greater international involvement” (p. 1).

The processes of globalization are not unidirectional. Globalization has recently shaped many activities and behaviors in universities (OECD, 2013). Globalization promotes partnerships that link institutions in vigorous dynamic forces. Unintended consequences of these partnerships

and collaboration interactions may deeply impact universities as well as the uneven human aspect of migration and exchange (Lee, 2015).

Globalization is most often confused with internationalization (Altbach, 2004). While the concept of globalization remains as the virtual elimination of distances through social interconnections and a push towards greater international involvement, internationalization in higher education is “the process of integrating an international, intercultural, or global dimension in to the purpose, functions, or delivery of post-secondary education” (Knight, 2003, p.2). The contrast between globalization and internationalization is that globalization may be unalterable, while internationalization involves many choices (Albach & Knight, 2007). Globalization concentrates its wealth, knowledge and power in those that already have it; it creates its structures based on capitalist strengths (Waters, 2011). Internationalization, though, is a two-way street—institutions, people, and nations give and receive (Albach & Knight, 2007).

Demographics deficits across most developed countries due to the greying of the population, and government and institutional strategies to recover from the global financial crisis of 2008 contrasts with continuous growth in developing countries and economies in transition such as the BRICS (Brazil, Russia, India, China and South Africa). Over the next fifty years, changes in the world order will intensify as the economic balance shifts towards emerging economies (OCDE, 2017). This order would be linked with the current phase of globalization, which is distinguished by the speed, interconnectedness and interdependence of the knowledge economy as the core political project of the world economy (OECD 1996; Jessop 2012). While many universities were an important part of nation- or city- building, ever since the success of research base-corporate centers, governments around the world have set up plans to establish their best universities as intellectual centers for economic regional development.

International economic interests play a major role in university restructuring in the globalized context. The similarity of university reforms packages in various Latin American countries reflected the convergence of exogenous forces and pressures exercised at the international and national levels, such as the implementation of neoliberal policies. The latter helped to construct what Torres and Schugurensky (2002) call a “new institutional common sense” in higher education. This new common sense consists of the implementation of new agendas for research, policy, planning, routines, and regulations. Despite the international nature of this new common sense, the new restructuration goes beyond the rhetoric of excellence, quality, and diversification, guiding principles in the past. As it existed in the past, the undertone for profit, reputation and external influence are being reinforced.

Purpose of the Study

Extensive research has been conducted on the topics of internationalization of higher education institutions in the US and Brazil separately. Both countries have experienced different phenomena in the last ten years; while the US has been characterized by declines in state funding, Brazil has expanded investments in internationalization activities in Higher Education Institutions (HEIs). The overlap between these topics has not been sufficiently examined. As US HEIs increasingly engage their international offices in entrepreneurial activities, and nation building institutions in Brazil pursue world classness; it becomes more important to contrast and understand the relationship that exists between these two phenomena. This research looked at the changing activities and strategies of two universities, one in Brazil and one in the US and how these changes intersect. This study explored the approach these two institutions have towards internationalization strategies. In doing so, this study bridges the gap between research on the geopolitical transaction of two institutions resulting from changes in their internationalization

activities due to political and economic forces.

Statement of Purpose

The purpose of this research is to examine what political and economic forces are influencing Brazilian and US higher education international activities at a major Latin American public university and a research public university in the Southwest of the United States. This study explored how changes in internationalization activities interact given the political and economic circumstances of universities in both countries. It will seek to understand a new geopolitical transaction emerging from the change of their internationalization activities.

Methodology

Two universities were examined in order to answer the research questions of this study. The international offices of a major public university in Brazil and a public research institution in the United States. Eighteen International Officers, including faculty, were interviewed to understand the activities and strategies of their universities how their units function and the external economic and political forces that influence their behaviors. Document analysis was performed and universities' webpages' mission statements, vision statements, calls for Study Abroad programs, partnerships, and strategic plans were examined. In-person interviews were conducted in Brazil and the United in the interviewees' native language (English, Spanish and Portuguese) for accuracy and better communication.

Every interview was recorded, translated (if necessary) and transcribed. Transcriptions were organized and analyzed based on the categories of political, economic, and institutional forces guiding the internationalization activities. Sub-themes emerged such as rankings, prestige,

and the federal program Science Without Borders (SWB) as a subtheme of political and economic forces. Information obtained from documents, calls, and universities' web pages was also categorized into these themes.

This study used Academic Capitalism as a theoretical framework to analyze the data. Academic capitalism explores the capitalization of higher education as colleges and universities focus on knowledge less as a public good and more as a commodity to be exploited in profit-oriented activities. This two framework set the foundation of this study to explain the political and economic forces influencing Brazilian and US higher education internationalization activities and the geopolitical transaction resulting from this interaction.

Organization of the Study

This study is divided in to five chapters. The first chapter, Introduction, presents the goal of this study: to understand what political and economic forces are influencing Brazilian and US higher education international activities. The second chapter, Literature Review, begins by examining how internationalization has taken place in higher education and then discusses the evolution of higher education internationalization in Latin America. The literature review then explains contemporary changes in Latin American higher education tied to political and economic changes in the region. A brief description of how US universities are increasingly engaging in revenue-generating activities is provided. Chapter two ends describing the theory used to frame this study, academic capitalism.

Chapter three, Methodology, contains the research question and sub questions that will help understand what political and economic forces are influencing Brazilian and US higher education international activities that guided this study and the methods that will be used to

answer those questions. The methods chapter describe the institutions chosen to perform this study. Chapter three also explains how interviews were coded, addresses positionality, and describes potential limitations to the present study.

In the fourth chapter, Findings, I present the data obtained in my research. I highlighted themes to be significant to address my research question. Those themes are identified and explored in depth. The fifth chapter, Conclusions, summarizes the goals and design of this study. The fifth chapter also identifies how this study has filled a gap on the understanding of political and economic forces influencing Brazilian and US higher education international activities and identifies a new geopolitical transaction crisscrossing these activities.

Significance of the Study

This study will advance the theoretical understanding of the geopolitical interaction of political and economic forces influencing Brazilian and US higher education internationalization activities. New broad comprehensive internationalization programs have been launched in Latin American countries given the economic bonanza of the last 15 years in the pursue of prestige and ‘world classness’ (Maldonado, A. M., & Bassett, 2013). Running parallel to this input, several scholars have identified trends on the way academic capitalism has affected higher education institutions in the US. Universities and colleges in this country began to respond to the reduction of public support (Slaughter & Leslie, 1997; Carbone & Winston, 2004). International offices are now engaging in entrepreneurial activities in order to look for alternative sources of revenue (Deschamps & Lee, 2014; Green et. al 2015). Under these conditions, a new understanding of the political and economic forces influencing Brazilian and US higher education international activities and how these forces interact will bring light to the field of higher education.

CHAPTER 2: LITERATURE REVIEW

This literature review begins by examining how internationalization has taken place in higher education. Globalization has influenced higher education institutions to prioritize internationalization. The internationalization of higher education takes place in diverse areas. Examples include international student exchange programs, study abroad programs, international research collaboration, second language courses, and student internship research programs.

The next area to be discussed is the evolution of higher education internationalization in Latin America. Contemporary changes in Latin American higher education cannot be isolated from political and economic changes in the region, which in turn are related to the dynamics of globalization. Previous concerns that characterized the Latin American region such as autonomy, equity, and accessibility have been surpassed by new concerns about excellence, efficiency, internationalization, and prestige.

Following the summary of literature on the evolution of higher education in Latin America is a review of the increasing importance of global university rankings. The impact and influence that university rankings are having on higher education ranges from public opinion to public policy making. University rankings are a product of the internationalization of higher education and the marketization of knowledge. Stakeholders, federal, and state governments have legitimized rankings. According to them, rankings link the knowledge-producing capability of HEIs with the state power to advance in the knowledge economy (Hazelkorn, 2017). Thus, “rankings send out strong signals not just to students and their parents, or stakeholders of all hues, but critically to mobile capital and talent” (Hazelkorn, 2017, p. 1). Since the the first global ranking was published, they have become a phenomenon in every world region, especially

in developing countries looking to position their best national universities with the distinctive characteristic of world classness.

Finally, I review the main forces that have pressured US universities to engage in revenue generating activities. Literature has described three main forces fostering corporatization of HEIs in the United States, society's growing expectations, state funding decline, and growing competition between institutions. The disrupting decrease in state funding is one of the major issues forcing institutions to engage in activities and behaviors that encourage revenue generation in various institutional levels. Until recently, one of the areas increasingly engaging in entrepreneurial activities is internationalization activities. More specifically, entrepreneurial activities engagement in international offices has been recently studied (Deschamps & Lee, 2014).

An understanding of the characteristics that have shaped the internationalization of higher education in Latin America and the United States will bring light to the new motivations, activities, behaviors, and implications of the relationship between both systems.

Globalization and Higher Education

Globalization is a "social process in which the constraints of geography on economics, political, social, and cultural arrangements recede, in which people become increasingly aware that they are receding and in which people act accordingly" (Waters, 2001, p. 5). This definition, when applied to higher education, holds that despite long distances, HEIs are connected to each other. Globalization has enhanced the interconnections between universities around the world and more than ever before, national, regional, political, and economical factors shape HEIs internationalization strategies.

The relationship between globalization and higher education is interactive. Global trends in economics, policy, and social movements affect higher education. These include the movement to a knowledge society and economy; developments in information and communication technology; a higher sense of regionalism (economic, cultural); greater mobility of people, capital, ideas, knowledge, and technology; more trade liberalization; and shifts in locus of governance from national to regional and international (Knight, 2004). In short, globalization has an effect on higher education, and higher education has an effect on globalization.

The Latin American Way

Internationalization in higher education has been common since its origin. The exchange of ideas, professors, and students on an international scale took place from the earliest days of German universities in continental Europe and in the Arab world. For example, the trans-national influence of “specific dominant institutions and models on higher education has long been a key to understanding national higher education systems” (Marginson & Rhoades, 2002, p.288). The Bonapartist model shaped universities in Spanish-speaking America, whereas the effects of the German model are equally evident in the US, throughout Europe, and in Scandinavia. The effects of British and French models are evident in former colonies (Marginson & Rhoades, 2002). Nowadays, the U.S. model is a noticeable force influencing higher education systems and institutions throughout the world.

In the Latin American region, universities have existed for almost 470 years. Mexico was one of the first countries in the Americas to have universities. During Latin America’s colonial period, 25 universities were created based on the Spanish universities of Salamanca and Alcalá (Figueredo-Cowen 2002). After securing independence from Spain and Portugal, which most

countries achieved in the decade between 1810 and 1820, the new republics reshaped universities according to the ideals and aspirations of the time.

Universities were created from scratch, or redesigned after their colonial predecessors, with the objective of building a modern nation-state released from colonial heritage. All of the new universities were public; in other words, they were created, funded, and governed by the state. The mission of these new institutions was to promote national identity and unity by educating the professional and secular elites (Winkler, 1994). The main organizational units of this model were professorial chairs grouped in faculties corresponding to three main fields: law, medicine, and engineering. Additionally, men in the liberal arts and letters were appointed to one of these chairs. Because this new university scheme was brought from France, the mission, history, and organization of the Latin American universities at that time were characterized as “Napoleonic.”

The next turning point in Latin American Higher Education is the Córdoba Reform. Born in Argentina in 1918, it forced the state to loosen its grip on higher education. The principle of this reform was autonomy from governmental control in specific matters: governance, structure, and mission of the universities. The reform brought democratic governance with the participation of faculty, students, and alumni—as well as commitment to social reform. In the ensuing half century, autonomy became the most highly sought after characteristic that the new organization of the universities looked for in the region.

The Córdoba reform had a broad influence on most universities in Latin America. At the same time, by the end of the 20th century, expansion and mass enrollments redesigned higher education in the region. There was an explosion of new public universities (e.g. Mexico, Argentina, Venezuela, Honduras), a development of a large private sector (e.g. Chile, Brazil, and

Colombia), or both (e.g., El Salvador and Dominican Republic). This expansion and the proliferation of technical and vocational schools brought politicization, deterioration of quality, corruption, and chaotic massification. In response, the vocational and technical sector remodeled themselves after either the French *institutes universitaires du technologie* or the U.S. community college structure (Castro & García 2003). As a result, the major national public universities, few state and elite private ones, offered high quality education, while the private sector resembled offering low quality education.

Higher education in the second half of the 20th century followed the Latin American model (Bernasconi 2008). For our purposes, a model of the university can be defined as a “culturally embedded idea of the essence, role, and mode of organization of the university and of its relationship to the state and to society” (Bernasconi, 2008 p. 29.). Literature describes the Latin American model as a cross between elements of Napoleonic characteristics and the ideas of the Córdoba reform movement (Castro, De Moura & Levy, 2000). Three main characteristics arise from this model: professors organized in faculties, democratization of access through tuition-free education, and expansion of enrollments and democratic co-governance by students, professors, and alumni without government intervention.

The attrition of this model saw its big decline beginning in the 1970s due to three main factors. First, the massification and diversification of the public and private HEIs and their consequences; disrupted growth, quality detriment, and corruption. Second, the military dictatorships of the 1970s. Finally, the factors that played a major role was the economic crisis of the 1980s and the subsequent turn into a neoliberal economic policy in the 1990s. This resulted in a crisis of identity and legitimacy of higher education in the region.

Neoliberal Policies in Latin America

As a response to the profound Latin American financial crisis of the 1980s, international leading agencies recommended a set of measures based on neoliberal ideals. These were promoted by organizations such as the International Monetary Fund (IMF), the World Bank (WB), the Inter-American Development Bank (IDB), and the World Trade Organization (WTO). The neoliberal measures consisted of guidelines “for the adjustment and stabilization of programs as the only solution for tackling the economic problems of the region” (Hill and Kumar, 2008, p. 153). Moreover, these recommendations should not be questioned by Latin American governments according to the institutions which adopted them.

The recommendations were very critical of the welfare state fostering the reduction of it and the strengthening of the market. From this perspective, the Latin American model was perceived as having a profound crisis of efficacy, efficiency, and productivity. Under this logic, the consensus was to open the educational sector to the market; privatizing services and making the state weak. The WB was one of the leading organizations making policy reforms recommendations of neoliberal nature across Latin America. Those reforms advocated for the elimination of federal- and state-supported higher education and the privatization of schools based on the principle to financially support of the individuals and not the higher education system in order to better respond to the needs of families.

The recommendations were early adopted by the wealthiest economies of the region. Mexico, Chile and Brazil are countries characterized by their alienation to neoliberal principles in the region. The reforms could have not been adopted without the support of influential and powerful sectors of the Latin American societies. To this respect, the composition of the dominant classes in these countries suffered a profound transformation; from the managerial

military dictatorships society represented by the national industrial bourgeoisie and state companies (PEMEX, PETROBRAS) to multinational corporations, financial capital and societal sectors related to agribusiness, mineral exploration, commodities exports and drug dealers (Leher, 2008). This dominant class had more financial power than ever before and pushed for neoliberal reforms in all sectors of the countries under control. The subsequent effect of the implementation of these measures were that -with the exception of the major universities in Latin America- state universities and other public systems starting to charge tuition and the private sector saw its biggest growth in the region. Curriculums and university outcomes then were linked to the need of emerging economic needs and publicly funded research was aligned to the knowledge economy. In the Brazilian higher education system, the neoliberal reforms had a profound effect.

Internationalization Development in Brazil

In Brazil, prior to the Second World War period, there was no tradition of contact and collaboration between industry and science. Scientific research was seen as a cultural activity at that time and not as a necessary tool for the country's economic development (Schwartzman, 2001). In Brazil, the strategic vision of science as an economic tool for economic growth saw its first attempt after WWII. The first time that the Brazilian federal government gave political status to science was in 1951, creating the first national research center, CNPq¹ (*Conselho Nacional de Desenvolvimento Científico e Tecnológico*) until 1974 *Conselho Nacional de Pesquisas*. In the same year, the federal government created CAPES (Coordenação de

¹ CNPq was created by Law No. 1310 published on January 15th. The so-called "Golden Law of research in Brazil," In 1974 CNPq was renamed the National Council for Scientific and Technological Development, currently linked to the Ministry of Science, Technology and Innovation (MCTI).

Aperfeiçoamento de Pessoal de Nível Superior), a federal government agency, under the education ministry, responsible for quality assurance in postgraduate studies in Brazil. Both agencies have the mission to promote the industrial development of Brazil. Both agencies evolved to become the two most important institutions directing the technological and scientific development of Brazil.

The consolidation of scientific production as an integral part of the national agenda was based on the Constitution of 1988. The government institutionalized the role of the State as the development inductor of science and technology in order to adapt the country to international competitive, productive and commercial systems (Pereira, 2013). The policies that arise from the Constitution of 1988 were influenced by the United States. In 1989, based on the Washington Consensus, the new guidelines for the advancement of neoliberalism in Latin American countries sunk in external debt; economic stagnation and inflation were the beginning of higher education systems alienation to neoliberal ideals. (Teodoro, 2011). External pressures guided the reforms in exchange for the financial bailout.

After implementing WB recommendations, science was placed in the social and economic structure of the Brazilian State and the production of knowledge went out the domains of universities to the contexts of corporate interests and applications in the 1990s (Velho, 2011). The initiatives to foster science and technology development were implemented to promote industrialization and economic development. At this time, the State seeks an active stance on policies considered strategic for economic growth and tried to align this development with the reduction of social inequalities and the competitiveness of Brazilian companies in the international scenario. By the first decade of the 21st century, new links have been established for the promotion of a sustainable economy. In this new dynamic, science and technology are linked

to innovation in order to achieve socially defined goals, and included an active insertion into global capitalism. This new model of development was strongly pursued in the government of Luiz Inácio "Lula" da Silva and it prioritized the insertion of science and technology in the agenda of public policies. The interaction of education with science, technology and innovation is part of the agenda of 24 strategic actions for economic growth with environmental sustainability and reduction of inequalities (BRASIL, 2006a), which Lula gained reducing poverty levels of around 30 million people.

Science, technology and innovation became a trinomial concept that began to compose policies and be understood as fundamental for the encounter of Brazilian science and technology advancements with the productive and service sector (Pereira, 2013). There were three laws launched to ensure this input in the public agenda. The first was the so-called Law of Technological Innovation, launched by 2004. Which allowed partnerships between universities, research institutes (CAPES and CNPq) and corporations. A second law was launched in the same year, the Industrial, Technological and Foreign Trade Policy. This had an incentive to support areas considered as groundbreaking for 21st century industry, such as nanotechnology, software and pharmaceuticals (Mercadante, 2010). The third of these laws was launched in 2005, the "Law of Good", which granted tax incentives to legal entities sponsoring technological research and innovation development.

The programs and actions that followed the mentioned laws enactment were summarized in the document called "National Strategy for Science, Technology and Innovation" (ENCTI 2012-2015). Derived from these strategies, the V National Postgraduate Plan 2005-2010, for the first time, directly linked the improvement of the national postgraduate system to policies of international cooperation and training of human resources abroad. From then on, international

cooperation was promoted through universities and the exchange of students and teachers was institutionalized. In accordance with the view that international academic collaboration networks are important for the scientific advancement of Brazil, the Special Follow-up Commission for the Postgraduate Plan recommended new actions regarding the internationalization of higher education through the institution of the Science Without Borders Program (SWB) in the chapter regarding internationalization and international cooperation. SWB represented the second largest expansion of international education in Brazil and established an "early action of formation of the new institutional culture " (CAPES, 2013, p.48).

The Knowledge Economy and Universities

The knowledge economy introduced new mindsets in the goals and research agendas in universities. Universities had to align with agendas that promoted economic growth and had to follow patterns that guided them through the generation of "prized knowledge". In the knowledge economy, education, science, technology and innovation have become the axes of capitalism. Knowledge that generates innovative products and wealth, is the new driving force in the productive dynamics of the knowledge economy. In this dynamic, universities and research institutes are at the core of government investment policies as the locus of the "complex and cyclical process of new technologies feedback" (Mello, 2011, p. 58). According to Kazamias (2012), the university campus is no longer a socio-cultural space to educate citizens but a corporate territory that produces instrumental knowledge, technology, science, and acquisition of marketable skills.

The wide-reaching rise of the U.S. concept of a research university continues its leadership in scientific productivity and in overcoming challenges of the new economy (Bernasconi, 2008). According to Altbach (1998), the characteristics of the U.S. model of

interest abroad are mainly the departmental organization, the system of faculty ranking and promotion, a cadre of highly specialized administrators, academic governance by faculty, curriculum flexibility, the rewards for research and publication, and the flexible balance between autonomy and accountability. These characteristics would then become those of a world class university.

World Classness and Global Rankings

Global rankings are a “comparison of institutions using common quantitative indicators where the results can be used to indicate a ranked order of institutions given the results of one or more of these indicators” (Usher, 2017). In current rankings, the indicators come from three different sources; 1) independent third party sources, these could be government surveys or data bases, 2) institutional data, and 3) surveys. Rankings have increased in importance since they unintentionally measure world classness, placing these type of institutions on top of their list. Rankings are not new to the 21st century, nevertheless, their importance have reached to the point of institutional direction to institutions, guiding educational policy and funding implications.

Late in the 19th and the beginning of the 20th century the first attempts of university rankings began in the US and the UK. They were characterized by being individual efforts and based on graduate perceptions. After World War I, university rankings in the United States focused on reputation measure. By the 1970s, technology changed the panorama and rankings starting using biometrics. In the region of Latin America, there were few universities at the time and the major national universities had the hegemonic dominance in higher education. Most of them were placed in the capital or main cities of the Latin American countries. After the

publication of the *Gourman Report*² that produced a rate for universities and departments all across the US, Japan took this idea and produced a list of universities holding the average university scoring in their national college admission examination. The name they gave to this rate was *hensachi*, which meant the exclusivity of the admission process for each of their universities. In the 1980s and 1990s, Germany, France, The United States, Canada and Taiwan released rankings based more on individual academic programs.

A groundbreaking ranking was born when in 1998 when the People's Republic of China announced a high financial support to 30 institutions in their country to make them world class universities. Shanghai Jiaotong University institutional leadership personnel asked engineering professor Nian Cai Liu to work on the meaning or word classness. In his first exercise, Cia Liu compared indicators of the US against Chinese universities. This same exercise then was repeated at a Global scale, where the ranking "tried to analyze excellence in the specific framework of American research universities" (Usher, 2017, p. 38). The latter implied that this ranking (which is the most legitimized because of its methodological rigor) gave significant importance to institutional concentration of scientific talent, historical prestige, and publication metrics. The latter gave a high weight to institutions where research is the main drive force, leaving out regions of the world where institutions hold a higher teaching or social mission. According to the literature, the global reach that this ranking provided marked the first 'wave' of global rankings.

The second wave of global rankings represented more regional and national rankings that gave birth to multidimensional and personalized rankings. The latter meant that those institutions

² The *Gourman Report* was a pseudo-ranking written by professor Jack Gourman from California State University in 1967 for the first time.

outside the top 100 could be placed in a ranking given characteristics other than the traditional rankings' indicators (based on research outcomes and prestige). The resulting rankings were regional rankings by continents or geopolitical groups (BRICS), by knowledge disciplines, and a "multidimensional" type of rankings. This third type was followed by Europe within the *U-Multirank* that included as much as indicators as possible of all university activities including the service and teaching mission of the university (Usher, 2017). The third 'wave' of rankings most innovative characteristic is that they consider students' outcomes as indicators. Those vary from student retention and graduation rates to graduate salaries and students' debt.

Rankings in Latin America

While around 12% of the worldwide tertiary enrollments belong to this region (UNESCO, 2017), the presence of LAHEIs in rankings is almost non-existent (Maldonado-Maldonado & Cortes, 2017). According to Maldonado and Cortes (2017), only 18 Latin American universities are present in global rankings. Moreover, the percentage of Latin American universities in global rankings ranges from 2 to 6 (Table 1). Brazil, Chile, Colombia, and Mexico are the only countries in the region that have national rankings and most of them came from newspapers and magazines. Even though the presence of Latin American universities in global rankings is low, some countries dominate the ranking arena in the region. Brazil, Mexico and Chile hold the highest number of institutions in the global rankings. Of all these countries, Brazil holds the highest number of institutions highly ranked in the tables.

Table 1. percentage of Latin American universities in global rankings (Maldonado-Maldonado & Cortes, 2017)

Global Ranking	Percentage of LAHEIs
Academic Ranking of World University (ARWU)	2
US News and World Review Best Global University Rankings	2.9
Times Higher Education World University Rankings (THE)	4
QS World University Rankings (QS)	6.7

One of the few analyses that have been performed in literature regarding rankings and the behavior of LAHEIs before them, is the way worldwide rankings are used by national science and technology development agencies to decide the destination of students awarded with graduate fellowships abroad. This is the case of CAPES and CNPq in Brazil, the National Council of Science and Technology (CONACyT) in Mexico, Colciencias in Colombia, and the National Commission of Scientific and Technological Development in Chile. All of these government agencies allocate public funding to fund students for graduate programs abroad. These agencies share a common requirement regarding rankings, all of them give the funding to those students accepted in graduate programs from highly ranked institutions. Given the popularity of this requirement among these agencies, it is important to understand this

phenomenon given the high amount of scholarships that these agencies provided after adopting neoliberal policies.

After the 1990s processes of national transformations take place in the Latin American wealthiest nations, HEIs set internationalization as one of their priorities. During this decade, an important phenomenon occurred. Having an international overview of the state of higher education, policy makers realized that there was a low level of preparation of Latin American academics (most of them did not hold a graduate degree). The PhD, therefore, became the standard for academics, especially those working in research institutions. In the 1990s, the push towards getting a PhD abroad became a common standard, which gained widespread legitimacy in the region. This process of internationalization in Latin America had a specific meaning: to set quality assurance standards (Levy, 1986).

Future professors being trained abroad is one of the most influential aspects of the Latin American universities in the beginning of the 21st century. These professors brought with them a culture of the westernized research university. The rise of salaries for faculty enabled real full-time dedication to researchers in Mexico and Brazil. Federal grants for research increased for these countries. Most of the new faculty trained abroad did it in universities in the United States, the United Kingdom, France, and Germany. All the professors who were trained abroad pressed for departmental organization, research labs, equipment, funds, full-time contracts, and international collaboration agreements (Schwartzman 1993). Taking advantage of the connections made abroad, the push for international agreements was one of the most sought after activities by faculty trained abroad.

International Partnerships

Academic mobility has various consequences: circulation of ideas, technology transfer, cultural awareness, and renovation of ideas. In addition, perhaps the most significant consequence is the human relations that are formed after obtaining a graduate or even undergraduate degree abroad. According to Moja (2008) establishing and empowering development partnerships that connect universities with transnational networks is the foundation of the “intellectual project that will define the contribution of higher education in the 21st century” (p. 166).

The *partnership model* emerged during the 1990s as a dominant framework for transacting international development assistance (OECD, 1996). This model consists of technical support, but it should go beyond this and look for complementarity and synergy for the mutual benefit of all participating parties according to Beerkens (2004). In terms of international partnerships, all regions of the world—North and South, East and West—interact dynamically. The paradigm of partnerships is no longer conceptualized as unidirectional from North to South or West to East (King, 2008; Koehn, 2011). When applied to higher education, Kiners and Green (2009) define partnerships as “cooperative agreements between a higher education institution and another distinct organization to coordinate activities, share resources, and divide responsibilities related to a specific project or goal” (p. 4). A relevant aspect to highlight is that many partnerships initially emerge from personal networks. In the mindset universities today, external networks, alliances, agreements or partnerships are deliberate mechanisms for campus internationalization.

Partnerships in Latin America

Latin American countries are actively engaging in partnerships, alliances, and building transnational networks. These transnational activities are also mechanisms for the advancement of research, curriculum offerings, and institutional reputation. The U.S. leads the list of destination countries for Latin American students. Europe, particularly Spain, Italy, France, the United Kingdom, and Germany also host a significant number of students from Latin America (OECD 2013). Additionally, the number of scholars from Latin America teaching or conducting research abroad has increased. For example, the number of visiting scholars in the United States from Argentina, Brazil, Colombia, and Mexico grew 20 percent in 2002 (Chin 2003).

Universities in the region are developing strategic alliances with sister institutions abroad (Gacel-Ávila, J. 1999; Deardorff, de Wit, Heyl, & Adams; 2012). Within the region, Brazil, Colombia, Chile, Costa Rica and Mexico among others have established distance learning programs. Perhaps the most successful example is Mexico's Technological Institute of Monterrey (ITESM), which operates virtual graduate programs that provide distance education to more than 15,000 students throughout the Americas. Agreements have been promoted in order to harmonize certificates and credit within the region, as is the case with Universidad Católica in Chile, Instituto Tecnológico de Buenos Aires in Argentina and ITESM in Mexico (UNESCO 2002; Burkle 2002).

Institutional Agreements

Agreements represent the opportunity to be in the hub of transnationally interconnected networks for universities. Although there are a high number of international agreements, many of them are reported to be inactive (Deardorff, et.al., 2012). In many cases, the signing of an

agreement seems to be more a protocol than a real commitment of mutual collaborations.

Beyond the number of agreements signed by a university, sometimes, agreements resemble simulated sparkles for universities strategies of internationalization in that they offer “a sense of international involvement and inclusion without doing much except making dents in the travel budgets of presidents and provost” (Thrift, 2010, p. A72).

Empirical research reports three main aspects about institutional agreements in Latin America (ANUIES, 2000; Maldonado & Bassett, 2013). First, depending on the type of university agreements, the objectives they pursue vary: for public institutions most agreements are in the area of research (Schwartzman, 2013, Balan, J. 2013), private institutions focus on student mobility (Gacel-Avila, Knight, 2005), and private Catholic universities focus both on research and mobility, this is the case of Chile (Bernasconi, 2011). Second, outside Latin America where there is historically a high amount of interregional agreements, the geographical regions preferred by the universities in South America are European countries, whereas the United States is the most favored partner for Mexico and Brazil (Patlani, 2012; Schwartzman, 2013). Collaboration and agreements with countries in Asia and Oceania are growing. Australia and New Zealand have partnered with institutions in Mexico and Chile as well as Japan, China, and the Republic of Korea. Third, the most active countries building networks are Argentina, Brazil, and Mexico.

Recently, Latin American countries are pushing more students to study abroad. In order to do so, many institutions have been building new agreements or redesigning them in order to reach their goals. Most of the students are going to the U.S., and governments across the region are using part of their newfound wealth to increase the number of students going abroad through generous scholarship programs that focus on science and technology (Downie, 2011).

Internationalization Activities in Latin America

Administrative offices for the management of internationalization play an important role developing the international education in HEIs. International offices are generally in charge of activities such as international students' immigration status and safety, international activities of campus, international students' advising, study abroad programs management, and international institutional networks. Thus, international offices have an essential role for campus internationalization (Knight & de Wit, 1995). The responsibilities of international offices vary according the country and type of institution. The functions of an international office cover managerial and leadership roles. Nevertheless, faculty members and staff could take over international collaborations in a wide range of roles mainly, directing international matter at academic departments (Amorim, 2015). U.S. international offices have different characteristics and functions compared to their Latin American counterparts. The considerable growth of international student mobility after World War II began the push towards the professionalization of international education in the U.S. This was fostered by the creation of the National Association of Foreign Student Advisors, or NAFSA, in 1948 (Glazier & Kenschaft, 2002). The postwar period, the last quarter of the 20th century and the early 21st century, saw a strong growth of higher education internationalization. Between the 1975/76 and the 2008/09 academic years, the U.S. international student population tripled from 179,344 to 671,616 students, and the U.S. study abroad enrollments quadrupled. The latter resulted in the growth of international offices (Bhandari & Chow, 2011). Lately, in the 2000s, international offices began to respond to the reduction of public support and the increase of competitiveness in higher education (Slaughter & Leslie, 1997; Carbone & Winston, 2004). International offices are now engaging in

entrepreneurial activities in order to look for alternative sources of revenue (Deschamps & Lee, 2014; Green et. al 2015).

In contrast, Latin American international offices are developing professionalization of their personnel in the last five years. Until the beginning of the 21st century, higher education institutions were not used to plan their international activities in a systematic way. In addition to the lack of planning, international offices have financial constraints that hinder the support they can offer to their internationalization activities. The notable exceptions to this are UNAM (Universidad Nacional Autónoma de México), the University of Guanajuato in Mexico, and the University of São Paulo, in Brazil. They have undergone the Internationalization Quality Review Process established by the International Management of Higher Education program of the OECD (OECD, 2010).

The state of the international offices described above has to do with the high turnover in senior staff positions in the Latin American region. Generally, international offices occupy a low position in institutional flowcharts. Thus, these offices do not have the autonomy and authority required to implement strategies. In spite of these characteristics, these offices still guide many of the strategies and activities of internationalization. Furthermore, since the investments in international mobility programs in the region are going up, these offices need to be more mindful about the strategies and activities of internationalization in their institutions (Downie, 2012).

Concerns

Concerns have arisen since Latin American institutions introduced internationalization in their agendas. Given the fact that governments and the market are pushing towards internationalization, those traditional providers (countries like the USA or Australia) have

rapidly identified a growing market of international students which they see as a source of revenue. The major risks identified by Knight (2015) and Altbach (2015) are the commercialization and commodification of educational services, profit-driven new neocolonialism, and new trends to attract international students and academics for brain power (brain train) and income generation. The role that the internationalized market is playing in generating profits may threaten traditional academic values by generating revenue at their expense (Green, Marmolejo, & Egron-Polak, 2012). Another important concern is the issue of quality. Many countries regulate their higher education activities and quality domestically but do not assess foreign higher education providers (Marginson & Van der Wende, 2009).

In the global rankings arena, one of the main concerns is that instead of reducing the gap between top universities and the rest, they end up making it bigger. Given the importance that global rankings are recently getting, it is necessary to objectively analyze their effects. Latin American institutions are not out of the global rankings game, recent research shows that “the ‘Matthew Effect’ has been present in Latin American higher education in several aspects that range from students’ access and participation to financing; nonetheless, the worldwide rankings accentuate some of these situations” (Maldonado-Maldonado & Cortes, p. 174, 2017). Since LAHEIs have an important tradition of social service and culture dissemination, it is reasonable to reflect about the consequences of the lack of indicators related to these important aspects of Latin American university missions.

Summary

Globalization has introduced a new mindset in universities. Towards the advancement of a knowledge-society, universities play a key role in providing technology and human resources for this society. The global component of universities is expressed through internationalization,

which should be analyzed based on economic and political forces as well as national and regional characteristics.

Although Latin American higher education institutions have many challenges, neo-liberal governments with a high-market orientation have advanced structural adjustment policies. In this context, the ideal of universities being linked “as much to the constitution of democratic identities as to the production and reproduction of knowledge for the purpose of increasing productivity, would be considered a romantic posture” (Torres & Schugurensky, 2002, p. 450). Internationalization in Latin America responds to economic and political forces while trying to reach world-classness.

While the world assumption of world class university resides in a Westernized model of a research university, some researchers mention existing market-like behaviors in institutions-labeled with the world-classness distinctive. At the same time, the behaviors responding to this tendency in Latin American higher education institutions remains ignored. The latter is of increasing concern given the actual tendencies in which entrepreneurialism intersects with internationalization at in US public universities in the form of acquisitions and mergers (Deschamps & Lee, 2014).

More recently, Latin American countries are accumulating huge reserves of foreign currency thanks to the worldwide thirst for commodities like copper, iron ore, soy beans, and sugar. The latter has allowed Latin American countries (especially Brazil, Mexico and Chile) to launch an unprecedented series of programs focusing on the internationalization of their education (Downie, 2011). Brazil is the leading country on taking internationalization at a big scale.

With new big plans of internationalization in mind, universities in Latin America need to find partners with whom they can collaborate in order to make their internationalization objectives be feasible. For instance, although the number of students from Latin America in the US still lag way behind students from Asia, most Latin American students and faculty going abroad prefer the US (OCDE, 2013). Even though there is an increasing preference for the US, Latin American universities have an old tradition of interaction with European countries that still remains active. Recent research has found that international offices in the U.S. are engaging in new entrepreneurial activities such as delivering credit to foreign students, nurturing international alumni, and more actively pursuing established activities that generate revenue but still prioritizing the students' academic experience (Deschamps & Lee 2014; Green et. al 2015). Even though empirical research has been done describing Latin American universities' partnerships and agreements (Kohen, P. H., 2011; De Wit, 2005; Bruner, 2002; Gacel-Ávila, J. 1999), the new conditions in which universities in Latin America are interacting are novel. Moreover, past research has not described the ways in which institutions are shaping, modifying and directing their partnerships based on their internationalization strategies. Two new contexts have then arisen. First, these conditions are the increasing push of their federal governments towards the internationalization of the education in the Latin American universities agenda thanks to the financial support that is being offered. Second, the entrepreneurial behaviors in which their preferred foreign providers are engaging. In the light of these new conditions, it is important to have a clear understanding of the conditions in which partnerships are being established and what are the consequences of these partnerships in the shaping of the “*Universidad Latinoamericana*” at the beginning of the new century.

Statement of Purpose

The purpose of this research is to examine how political and economic forces are influencing internationalization activities at a major public Brazilian university and a research university in the Southwest of the United States. This study advances the field of higher education's theoretical understanding of the geopolitical transaction resulting from the interaction of the forces influencing changes in internationalization activities in these countries, this transaction involves money and prestige. It gives practitioners, faculty and administrators a clearer picture of how internationalization strategies are changing given new global circumstances involving money and prestige.

Theoretical Framework

Academic Capitalism

Developed by Sheila Slaughter, Larry Leslie, and, Gary Rhoades, this theory explores the marketization of higher education in the 20th and the beginning of the 21st century (Slaughter and Rhoades 2004). As public funding for higher education decreases, institutional behaviors are beginning to be guided by economic rationales (Slaughter and Leslie, 2007). It is important to point out that marketization does not mean privatization; Slaughter and Rhoades (2004) rationalize institutional behaviors through the redefinition of operations and activities. U.S. institutions are seeking for resources since they have experienced a contraction in their public funding.

Academic capitalism is an evolving theory and could be applied in a global scale. Academic capitalism has amplified its scope over time, as new characteristics of nations' economics evolve and the relationships between the nation state, public institutions and private sector strengthens

with the incorporation of neoliberal policies. Slaughter and Leslie (1997) captured new tendencies of globalization and neoliberal policies, then, characterized academic capitalism as the participation of postsecondary institutions and faculty in market and market-like behaviors to secure external funds as public funding decreased. These authors centered the discussion of academic capitalism on the allocation of funding by higher education institutions as a complex process in which faculty have to compete for external resources. The activities that faculty and departments had to develop are strongly tied to the market. Then, research needs to be aligned to market demands. The later would translate into patents, technology transfer and marketable knowledge production in order to secure external funding. In addition to these new behaviors, political changes were implemented in order to allow institutions to become more entrepreneurial. Slaughter and Leslie (1997) suggest that higher education was then embedded in behaviors that narrow the space between higher education goals and the market.

Later, Slaughter and Rhoades (2004) reinforced the theory of academic capitalism introducing “new economy” into play. The new economy “treats advanced knowledge as raw material that can be claimed through legal devices, owned and marketable as product or services” (Slaughter and Rhoades, 2004, p. 5). The authors define neoliberalism as “not on social welfare for the citizenry as a whole but on enabling individuals as economic actors.”. This definition place individuals, such students, as economic actors. By introducing this definition, they rationalize the regime of academic capitalism in which knowledge is legitimized as it serves the market. This regime also includes not only institutions and faculty but also students and university professionals – managers, administrators, etc. – as active actors in the regime of academic capitalism. An important insight of the new perspective is that the institution gets involved in all kinds of activities related to the market and for-profit schemes. The latter includes

activities such as internationalization, student services and instruction. The authors highlight university revenue-oriented activities at higher education institutions that driven behaviors that look out for new networks to expand marketization capacities, these include but are not limited to (new circuits of knowledge, interstitial organizations, networks that intermediate between public and private sector, expanded managerial capacity).

Slaughter and Rhoades (2004) argue that academic capitalism values knowledge privatization and profit driven behaviors. The intense interaction of two higher education systems such as the Brazilian and the US ones is worth analyze under the lenses of academic capitalism. Given entrepreneurial behaviors adoption by international offices in the US and the great investment the Brazilian government does favoring STEM fields internationalization processes, these two countries manage to be embedded in the regime of academic capitalism in different ways.

CHAPTER 3: METHODOLOGY

The purpose of this research was to examine the political and economic forces influencing Brazilian and US higher education internationalization activities. The changing internationalization strategies and activities are considered in the context of pressures at the federal, state, and institutional levels. This study sought to understand a new geopolitical transaction emerging as evidenced by changes in internationalization activities in these countries.

In this Methodology chapter, I present the research questions guiding this study, review my research design and why a qualitative approach was chosen. I then review my theoretical framework, describe my sites and samples, and explain how my data was collected, coded, and analyzed in relation to my selected theory. This chapter ends with my positionality in relation to this study, and the limitations of this research.

Research Questions

The guiding research question of this study is “What political and economic forces are influencing Brazilian and US higher education international activities?” Some examples of international activities, as elaborated in Chapter Two, are mobility programs for students and faculty, institutional partnerships management, and research activities abroad (Knight, 2004, p. 20). More specifically, this research addresses the following questions in Brazil and the US:

- What political and economic forces are influencing the internationalization of higher education in Brazil and the US?
- How have the strategies of internationalization changed in Brazil and the US?

- How is higher education in Brazil addressing their educational and world reputation goals?

The question of “What political and economic forces are influencing the internationalization of higher education?” investigates political and economic drivers altering US and Brazilian internationalization strategies. The question of “How have the strategies of internationalization changed?” provides an understanding of how internationalization activities are evolving and explains a major geopolitical transaction emerging from the changes in internationalization activities in both countries. The third question; “How is higher education in Brazil addressing their educational and world reputation goals?” elaborates on the objectives of world-class pursuit and education-based missions of universities. In order to analyze the data, I used academic capitalism and its various analytical approaches to analyze the Brazilian and US cases.

Research Design

This research used a multiple case study design in the qualitative tradition. This study intends to decode the dynamics of internationalization activities change in public universities influenced by political and economic forces in Brazil and the United States. The behaviors of international offices, colleges and departments are determined and influenced at the federal, state and institutional levels. This multiple case study explored the processes that influenced internationalization activities in international offices, colleges and departments in Brazil and the United States. I conducted semi-structured interviews and document analysis as described by Maxwell (2005) and Creswell (2014).

Analytical Framework

Academic capitalism explores the marketization of higher education in the late 20th and

early 21st centuries. I used this framework to analyze the data obtained in this study. U.S. institutions are seeking resources since they have experienced a contraction in their public funding. One way to obtain such resources is through internationalization activities and everything that comes along or can be profitable out of these activities. Academic capitalism suggests that international offices, colleges, and academic departments are becoming more entrepreneurial. Moreover, academic capitalism can explain one side of an emerging geopolitical transaction. Universities in the US provide prestige and quality in exchange for economic resources given their recent entrepreneurial behavior. Nevertheless, academic capitalism provides a more profound and complex view of this transaction. As Brazilian universities modify their behaviors regarding international activities depending on government policies and its political and ideological alignment (right or left), academic capitalism can explain the intentions of the right government to generate revenue from graduate education in Brazil, while the left government would focus its internationalization efforts in building capacity through social entrepreneurial behaviors as well as build institutional prestige in the region.

Academic capitalism helped me identify behaviors that showed a strong tendency towards an academic capitalist model in Brazilian higher education. Since higher education in Brazil is conceived as a public good and public universities charge no tuition or fees, internationalization activities and behaviors identified in Brazil, as described by Slaughter and Rhoades' (1997), fall into entrepreneurial behaviors as a direct result of globalization—having forces, either encouraging or discouraging those activities. Driven by a neo-liberal economy that values knowledge, Brazilian higher education is becoming more entrepreneurial and acquiring market-like behaviors as an effort to keep up with global trends in terms of knowledge production and quality assurance. Various layers of this theory helped me explain the

internationalization activities in the US and Brazil in the last ten years. In Brazil, internationalization activities changed from international mobility access for undergraduates in public universities to restricted funding for graduate education in highly ranked institutions in the US and Europe.

The various layers that academic capitalism offered to analyze the data for this study helped me describe the emerging geopolitical transaction between Brazil and the United States and its complexity.

Site and sample

Sixteen university personnel were interviewed between October 1st, 2016 and March 1st, 2017, eight in Brazil and eight in the United States. In this multiple case study, personnel were interviewed from international offices, colleges, and departments in a public research university in Brazil in the state of Sao Paulo and a public research university in the Southwest of the United States. In the case of the Brazilian institution, every college has its own international office and a centralized office that oversees and manages internationalization aspects at the university level. Personnel of the colleges and central office were interviewed. Seven colleges and the central international office at the Brazilian institution were represented in this study. Different personnel in charge of international activities were interviewed in the United States, including faculty and senior administrators.

For practical purposes the term “International Officer” (IO) was used to refer to the personnel in charge of international activities. In Brazil, every college international office is lead by the president of the college “international commission.” This commission is in charge of strategic initiatives and operational aspects regarding internationalization. The president of such

commission could be a faculty member or some designated administrative personnel. Institutions in the US and Brazil give different titles to the role of personnel overseeing international activities. This is why the term “International Officer” was used to refer to professionals in charge of internationalization activities and could include faculty. These professionals were faculty members or senior administrators. Contact with Brazilian IOs was made through a fellowship research internship in the state of Sao Paulo during the fall of 2016. Contact with US IOs was made through my professional network. I used the snowball sampling method, which yields a study sample through referrals made among people who share or know others who possess some characteristics of research interest (Biernacki, P., & Waldorf, D. 1981). Thus, interviewees were asked to recommend other points of contact in both countries.

A sample was obtained through typical case sampling in the case of Brazil and intensity sampling in the case of the United States. Typical case sampling was used in Brazil because it creates a sample that represents average members of the population being studied, (Marshall & Rossman, 2006, p. 71). Since the university studied in Brazil had an international office per college this was the most accurate approach. Intensity sampling was applied in the case of the US since US institutions’ international officers carry on diverse titles at different levels. Moreover, the level of specialization of their activities makes this method a better fit that allows to select a small number of rich cases that provide in depth information and knowledge of a phenomenon of interest (Marshall & Rossman, 2006).

The interviews were performed in two phases; the first phase was performed from October 1st to December 1st of 2016 in Brazil, and the second phase was performed from January until March 1st of 2017 in the United States. All of the interviews were conducted by me, in person, and in the interviewees’ native language; Spanish, Portuguese, and English. The use of

the interviewees' native language was important to provide clarity, accuracy and reliance of the data. Interviews were then translated to the English language. A coding system was used in order to keep the identity of the interviewees private. I used the acronym IO (International Officer) followed by the consecutive number in which the participants were interviewed.

This research also included examining documents and webpages of the international offices in which IOs work. Brazil and US universities webpages and documents were analyzed to provide information that allowed this research to triangulate the data provided in interviews. Examples of documents that were examined were calls for faculty and students, international institutional partnership reports, memorandums of understanding templates, strategic plans, publically reported data, internal manual processes for internationalization activities, institutional statutes, and marketing materials.

Data collection

This qualitative design utilized two tools: semi-structured interviews and content/document analyses. In-depth semi-structured interviews were conducted to collect data. Semi-structured interviews helped uncover the participant's view of the phenomenon of interest (emic perspective) and does not respond to the researcher's point of view (etic perspective) (Marshall & Rossman, 2006). Interviews were recorded and then transcribed. They lasted, on average, about 45 minutes. Interviewees were asked to provide documents called "chamadas"³ partnership reports, memorandums of understanding, strategic plans, internal manual processes

³ "Chamadas" is a term used in Brazil to call documents released by international offices to students and faculty that contain information and requirements to enter a contest in order to get a scholarship to go in a Study Abroad Program (short-term and long-term). Most of them are research focus. The funds are provided by universities, federal and state agencies, or banks.

for internationalization activities, institutional statutes of international activities, and marketing materials. Each of these tools provided an opportunity to identify emerging trends throughout the research process (Corbin and Strauss, 2008). The OECD *Education at a Glance 2017* report, and *Panele de Controle do Programa Ciência sem Fronteiras* were used to collect publically reported data on international students and all data related to the Science Without Borders Program respectively. The “*Panele de Controle do Programa Ciência sem Fronteiras* provided real-time data related to the Science Without Borders Program, such as the number of students receiving scholarships, countries to which such students were sent, students' states and universities of origin, etc.

Data Analyses

Editing analyses was applied to the transcribed interviews. Editing analyses allows categories of meaning to emerge out of the data collected during interviews, rather than applying pre-determined categories to the data (Marshall & Rossman, 2006). Recommendations by Corbin & Strauss (2008) and Maxwell (2005) were also used to develop coding strategies. I used academic capitalism as the theoretical framework to develop codes as well as analytic tools for qualitative research (Corbin & Strauss, 2008).

I raised concepts out of the data that helped in the coding process. Codes “represent an analyst's impressionistic understandings of what is being described” in the interviews (Corbin & Strauss, 2008, p. 8). With time and immersion in the data I was able to group data into concepts and develop codes using analytic tools.

I used “dimensional analysis” as an analytical tool. This provided me with a perspective to select items from the data once I identified data told a very compelling story (Schatzman,

1991). The latter helped me sequence the items from the data. I identified two different stories in the data. Under academic capitalism, US higher education institutions showed a high engagement in entrepreneurial activities given economic constraints. This helped me create codes related to economic drivers, entrepreneurial behavior, and institutional forces influencing internationalization strategies. On the other hand, Brazilian institutions were engaging in prestige pursuit through the use of rankings. Given the rise in economic resources and political forces encouraging internationalization activities, the Brazilian case provided contrast and the chance to establish a comparison between the two higher education systems regarding internationalization activities.

In order to put together the story data was telling, I used “questioning” as another analytical tool. Specifically, I focused on the theoretical questions type. These type of questions help the researcher make connections (Corbin & Strauss, 2008). Since there were two phenomena taking place, I applied this analytical tool to deepen the relationship between the US and Brazil internationalization activities change.

Documents obtained and web pages were analyzed using content analyses. The document analyses component helped me understand the formal conditions, statutes, status, and discourse of the internationalization activities carried out within the universities. The latter resulted in a robust understanding of the themes emerging from the data (Maxwell, 2005). Documents and webpage analysis helped get across regional and geopolitical hub concepts given the use of time related words by the interviewees that had to do with the amount of Latin American students in their university. This later led me to look at public reported data, specifically, the OECD *Education at a Glance 2017* report. This data was used to contrast the share of international students of some countries (more specifically, Latin American countries) with Brazil.

Data obtained in interviews, document and webpage analysis were paralleled and contrasted to identify common themes. Data was triangulated to help answer the research questions of his study.

Codes

I used the following main codes to organize and analyze the data obtained in the interviews: federal forces, state forces, economic drives, institutional changes, entrepreneurial behaviors, regional hub, and global rankings. Additional sub codes were used to further analyzed the data and better answer the research questions. The codes were not predetermined and emerged during the translation as well as transcription processes.

The use of academic capitalism was an effective tool to identify codes related to emerging entrepreneurial activities in Brazilian higher as well as identify government priorities according to ideological positions in a neoliberal knowledge economy government environment. Developing countries such as the BRICS are experiencing similar economic growth circumstances. Additionally, the federal implementation of the “new Brazilian development policy” and the halo internationalization activities the federal program SWB left, let me elucidate the main codes: Federal Forces, State Forces, Economic Drives, and Institutional Changes.

In the case of data obtained in the US, academic capitalism theoretical framework let me develop the codes related the state funding decreased phenomena and the subsequence entrepreneurial behaviors adopted by US higher education institutions. The main codes that came from this analysis were economic drives, institutional change, and entrepreneurial behaviors. After I triangulated data and applied the analytic tools mentioned in the data analysis section, I

elucidated the geopolitical transaction and the story data was telling; a transactional exchange between the two countries and its complexity.

The primary research question of “What political and economic forces are influencing Brazilian and US higher education international activities?” was addressed through the following codes: Federal Forces, State Forces, Economic Drives, Institutional Changes, and Regional Hub. The sub-question “What political and economic forces are influencing the internationalization of higher education in Brazil and the US? were addressed by the codes Federal Forces, State Forces, Economic Drives, Institutional Changes, and Global Rankings (for the Brazilian case only). The code institutional changes addressed the sub-question “How have the strategies of internationalization changed in Brazil and the US? Finally, the sub-question “How is higher education in Brazil and the US addressing world rankings through internationalization activities?” was addressed by the Economic Drives and Global Rankings codes.

Validity

Triangulation, by using multiple data sources, strengthen the validity of the results of a study (Creswell, 2003; Marshal & Rossman, 2006; Corbin and Strauss, 2008). Additionally, contrasting content of interview responses, webpages, and documents helped to have a deep and broad understanding of the data. Personal biases may have affected the research are identified and addressed in the positionality section.

Ethical considerations

Since I conducted interviews, federal law required that I submit a research design and interview protocol to the Institutional Review Board (IRB). The IRB granted me approval to conduct my research. The IRB review approval helped me assure that the interview protocols

and recruitment methods posed minimum risk to the interviewees that decided to participate in this study.

Limitations

Limitations of this study include, but are not limited to: conceptualization of internationalization from a Latin American and US perspective, this may vary according to the priorities of the countries being studied, an examination of the internationalization from the point of view of international offices alone, and the limited number of countries and universities chosen to participate in the study.

Some interviewees might not have been comfortable enough explaining the dynamics of their international offices, specifically when talking about economic and political matters. In order to address this limitation, I performed the interviews in the IOs native language. This could lead participants to feel more comfortable and be able to express themselves with clarity and confidence. Also, assured to all interviewees that their answers were not going to be used beyond the scope of this study without their permission.

Another limitation to this study is the data collection. Data on internationalization was collected from two universities, that, even though one represents the biggest investor in internationalization in the Latin American region, it does not represent the region as a whole. Also, the higher education systems in each country differ in the type of institutions and internal characteristics. Brazilian higher education system is diverse and student enrollment is bigger in the private sector. In addition to this, often internationalization activities occur without the involvement of international offices. Then this study represents most of the role of internationalization activities influenced by economic and political forces in Brazil and the US

but not all.

Positionality

As an international graduate student in the U.S. raised and born in Mexico City, I have experienced both, the Mexican and U.S. higher education systems. Mexico City as a cosmopolitan city and important financial, cultural, and educational center in the world, receives an important amount of international students mainly from Europe, North America and Latin America. The opportunity to work with these students has given me a broader perspective of the experiences of these students in their countries and as international students in Mexico. Being able to be awarded a scholarship for an internship in Brazil gave a broader perspective of access to resources available regarding the Brazilian higher education system. In the US, I work in a public research university located in the southwest, very close to the Mexican-U.S. border. In this university, I work in an office that coordinates research and internship programs for top undergraduate and graduate students from Latin America. This office develops comprehensive programs and partnerships with higher education institutions and science and technology councils in Latin America for the advancement of research projects and mobility of faculty and students. My experiences after being immersed in both “worlds” the U.S. and Latin American (having lived in Brazil and having experienced the Mexican higher education system), make me realize interactions, cultural differences, and willingness in both sides to build relations. I recognize the complexity of the scenario that a globalized education presents for both sides, given the differences in both societies.

CHAPTER 4 FINDINGS

This study seeks to answer the primary research question, “What external political and economic forces are influencing Brazilian and US higher education international activities?”

More specifically, this research addresses the following questions in Brazil and the US:

- What political and economic forces are influencing the internationalization of higher education in Brazil and the US?
- How have the strategies of internationalization changed in Brazil and the US?
- How is higher education in Brazil addressing their educational and world reputation goals?

To answer these questions, I first explore how political and economic forces are changing the internationalization strategies in Brazilian and US higher education. With this foundation in place, I identify and discuss a major geopolitical transaction as a result of this interaction; money for prestige. Out of the major forces encouraging changes in internationalization activities in the United States and Brazil, I highlight two; state funding decrease and world rankings respectively. I close with an analysis of institutions balancing educational and reputation priorities and goals. I present the analysis of each research question contrasting Brazil and the US findings.

Research question 1. What political and economic forces are influencing the internationalization of higher education in Brazil and the US?

An understanding of the economic and political forces that influence internationalization in Brazil and the US can help to understand its development and behaviors.

For the Brazilian case, there are three primary forces that are motivating changes in internationalization activities: 1) public policies of the federal government, 2) institutional

internationalization strategies, and 3) institutional search for prestige seeking to ascend international rankings.

Political and Economic Forces

Due to historical, political, and economic aspects, a great share of the support that universities receive for internationalization activities comes from the federal government. This support from the Brazilian federal government is a result of the so called "new Brazilian development policy."⁴ Most of the interviews conducted in Brazil indicated that the federal government had an influence over the increase of internationalization activities of their units. IO3 clearly stated "I think the federal government had a lot of influence" when asked about the reported increase in internationalization activities. International Officers at the institutional level perceived the great influence of the federal government push towards increasing internationalization as well as the various layers in which other countries have shaped international activities with the support of the Brazilian federal government. As IO6 stated, "We were born international, this institution was created with the help of scholars from France, the United States and Germany. We have always been international and the federal government knows that." IOs recognized the international nature of their institution as well as the great influence of other countries in the foundation of international activities. Additionally, the federal government had a greater input at a macro level; especially bringing together investments directed to increase collaboration with certain countries, one of those countries is the United States.

⁴ Science and technology were linked to innovation in order to achieve socially defined goals including active investment in global capitalism. (BRASIL, 2006)

One of the reasons the federal government has so much influence over the internationalization activities of Brazilian higher education institutions has to do with the historical influence of the United States in the policies and financing of Brazilian internationalization programs. This influence has political and economic origins dating back to the post-World War II period until the beginning of the XXI century. IO7 recognized the specific influence of the federal government on the financial support of an internationalization program of which he was part:

All of those [internationalization] programs started from the Brazilian government, in 1998, 1999 and 2000 there was a program in which the government sent students to the United States (mainly), France and Germany. That program began our internationalization. The Brazilian [federal] government organized it. The University did not have any influence on that.

The latter quote reflects a direct intention of the Brazilian federal government to build capacity abroad. IO7 stated that there was a special emphasis and a high amount of resources available from the Brazilian federal government to send professors and students to the United States.

Even though the years in which this program was run marked the end of the 20th century, the influence of the United States in the internationalization of science has been operating in Brazil since the mid-twentieth century. A clear example of this direct influence is the Rockefeller Foundation, based in the US, whose financial support for Brazil's scientific development increased between 1955 and 1960:

In addition to the direct contribution to the control of tropical diseases, the Rockefeller Foundation had a great impact on the Brazilian scientific community by exporting technological capacity and models of American institutions in addition to having allowed a significant group of Brazilians a direct exposure to the American scientific and educational environment. In more specific terms, the Foundation served as a fundamental instrument in the process of replacing France by the United States as the place where Brazilian scientists are headed in search of education, inspiration, and models. (Schwartzman, 2001, p. 246).

These examples show the degree to which the federal government implemented policies and funded programs towards the growth of internationalization and mobility with great emphasis in sending students and professors to developed countries, especially the United States. Although international officers in this study reported great investment and growth for internationalization in the past five years, this strategy has been ongoing since the last half of the 20th century.

In addition to federal policies and investment, state funding and politics have a certain degree of influence over the activities of internationalization in Brazil. As IO1 asserted “the state government invested a lot, that is why we are the best compared to the rest of the Brazilian universities.” The share of investment from state governments in internationalization activities are tightly linked to politics. IO3 affirmed, “the rector is chosen by the governor of the state, so if the governor belongs to the right then we anticipate expense containment and things like that. If it is more of the left wing we will probably have more investment.” State politics play a fundamental role in budgeting for internationalization activities although the highest share of investment comes from the federal government.

The Brazilian Economic Bonanza

The degree to which the federal government encourages internationalization is affected by the budgetary health of the nation state. According to the OECD (2017), Brazil has moved up the ranks of the world's largest economies. This economic growth, alienated with the "new Brazilian development policy", was directly tied to universities' internationalization activities support. The impact of the economic push towards increasing internationalization was recognized by almost every interviewee. All of the interviewees confirmed that the economic growth helped increase outbound mobility. Nevertheless, IO6 described a broader impact of the healthy Brazilian economy:

We went up in the rankings, we became more international in publications, the number of international mobility in Brazil increased. Our economy changed in seven years.

Economy pushes everything. Brazil changed in some economic sectors for better.

This quote is important given that IOs identify rankings as a significant factor in internationalization. In this way, their international activities and rankings are influencing the priorities their offices will set. The conceptualization and influence of rankings is important and will be discussed later in this chapter.

Political and Economic Forces in the US

An understanding of the economic and political forces that encourage internationalization in the US can help to compare, contrast, and understand its development and behavior to Brazil in recent years. Three primary forces are motivating these internationalization activities in the US are: 1) decrease in state funding 2) institutional change of internationalization strategies to generate revenue, and 3) more intense international collaboration in research.

Decrease of state funding

There is a funding phenomenon in the United States that has characterized its higher education system in the past 20 years. There have been cuts in state funding for public colleges and universities that has brought consequences at various levels. Most of the interviews conducted in the United States highlighted this phenomenon as an important player in their internationalization and professional activities. IO8 clearly stated "This is a public research university and it is strained for funding." One of the main consequences of state funding cuts in the United States is that tuition has increased and harmed students' educational experiences by forcing faculty reductions, part-time faculty hires, and increased self-funded units.

Since state funding cuts have not stopped, US higher education behaviors are changing as public universities in the US increasingly engage in entrepreneurial behaviors (Slaughter & Leslie, 1997). Entrepreneurial behaviors are manifested through stronger connections between universities and the corporate sector and the commercialization of knowledge, goods and services produced by universities (Slaughter & Rhoades, 2004). At the institutional level, changes have manifested in creating more managerial professions, increasing the marketization of university services and self-funded units, and pushing revenue at the expense of domestic and international students. The increasing entrepreneurial activities of US HEIs have been seen in international offices and as discussed further, even in internationalization activities held by academic departments.

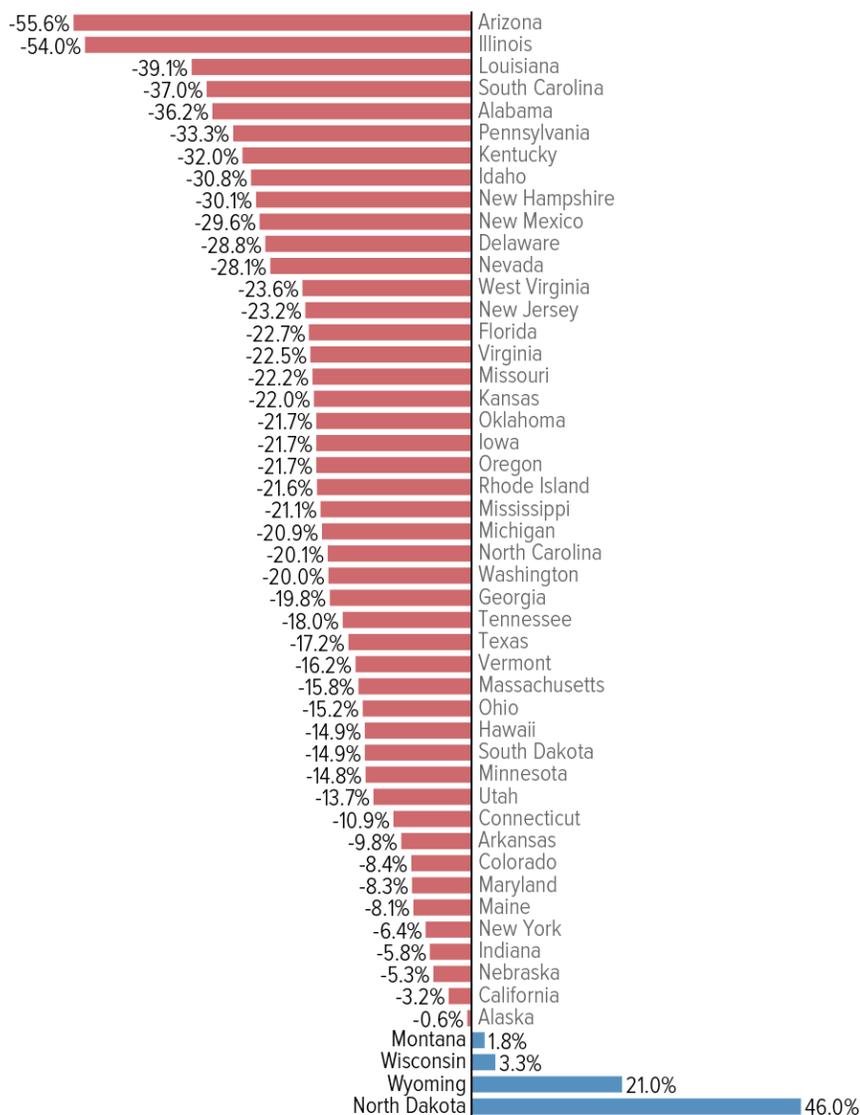
According to the US Center on Budget and Policy Priorities, in total, after adjusting for inflation, funding for public two- and four-year colleges is nearly \$10 billion below what it was just prior to the 2008 recession. Since this recession, state funding has decreased all over the US. Some states have especially had the most concerning practices, per-student funding in nine states

— Alabama, Arizona, Idaho, Illinois, Kentucky, Louisiana, New Hampshire, Pennsylvania, and South Carolina — is down by more than 30 percent since the beginning of the 2008 recession. States are spending an average of \$1,598 or 18 percent, less per student than before the recession. Public colleges and universities across the country have increased tuition and adopted financial models to generate revenue to compensate for declining state funding and rising costs. Annual published tuition at four-year public colleges has risen by \$2,333 or 33 percent, between 2007/2008-2015/2016 school year. In Arizona, published tuition at four-year schools is up nearly 90 percent (Center on Budget and Policy Priorities).

Since the start of the recessions and the following years, US states have cut higher education funding severely. These cuts were the result of decisions made to deal with the revenue collapse caused by the economic downturn that initiated in the US. State policymakers relied overwhelmingly on spending cuts to make up for lost revenues. The State of Arizona has shown an increased behavior of cutting spending per student after the recession (Graphic 3).

Graphic 1. Percent change in state spending per student, inflation adjusted, 2008-2016

(Center on Budget and Policy Priorities).



Departments and colleges have adopted some behaviors in response to reduced state funding and the adoption of academic capitalist behaviors. International offices and academic departments, especially in STEM, have been aware of such changes. The activities that international offices

engage in the US differentiate from those adopted in other countries and have evolved over just the past decade. International officers and faculty members are changing behaviors and the way they approach internationalization activities. IO14 asserted, “faculty members are looking for new ways to generate revenue out of their activities, [faculty member] just developed an international program that was very costly for the [international students].” A major change in the way international offices approach faculty shows a deep engagement in behaviors that look for funding sources.

Academic departments have taken specific approaches towards internationalization activities as well. As recent budget cuts have reduced departments budget significantly and departments show high willingness to make profit out of any academic activity, including international activities. IO12 explains, “We found that some colleges on campus wanted to charge really high departmental fees [for Study Abroad Programs].” Even though study abroad programs do not represent a main revenue activity for academic departments, the fact that they start seeing them as such might change the approach of those departments towards these kind of programs and change their focus as a source of revenue. IO8 explained,

If you run this [a] faculty lead study abroad program you might be able to have a departmental program fee that will help offset maybe you are hiring a half time person a coordinator to help run this program so I think there are opportunities through our student mobility programs for the departments to not go into red and maybe even, make a small profit.

IO8 did not state that every department looks for profit when having a faculty-led study abroad program, but his office is providing leadership in moving the initiative forward. IO8 even

explained they had to regulate the fees some departments were charging students given the great disparity between academic departments.

Most IOs stated that the conversations with faculty members are changing into more complex and intricate ways to perform such activities. IO12 clearly asserted that the main reason discussion with academic departments have changed is state funding cuts, “I feel the conversation has shifted partly because of strains in revenue streams.” In this sense, not only have mobility programs turned towards revenue generation, but also research activity. IO14 went further explaining the dynamics of research activity in the revenue side for international collaborations,

Regarding that [international research collaboration] ... for every grant that they process there is an indirect cost that goes back to the administrative unit that is processing it, which in this case is the research office so the bigger the grant the bigger amount of money they get from processing those grants. So, they are rewarded in that way.

This quote is an important indicator of the university central administration’s increasing desire to make profit out of international research collaboration.

Some faculty members in academic departments look for new ways to access global grants. Academic departments explore collaborations with universities abroad not only because of pure scientific inquiry or professional networks, but also because some countries offer unique funding opportunities focused on investment in mobility and collaboration with foreign universities. IO11 asserted, “Part of the conversations I have with faculty are ways that they can find new revenue streams for their own work, for their research or for their academic programs from external sources.” The search of global grants is even more evident when faculty members

target specific regions in which they know governments provide financial resources more easily through mobility programs or well established international fellowships. IO11 elaborated,

I just see people being... I don't know is wise is the right word or not, but they have better access to what's being done in other countries and therefore they are trying to create opportunities for those researchers to work together. I have conversations with faculty and they are talking about research... they definitely are asking me if I know of any new revenue sources.

Since the birth of the first universities in the world, academics were looking for forms of international collaboration. This new paradigm then changes due to the interest arising from seeking funds. A new player is added in the international research collaboration. The concept of incentivizing international collaboration through funding is important and will be discussed later in this section.

Science Without Borders

Science Without Borders (SWB) represented the biggest expansion of the internationalization of higher education in Brazil. This program served as a milestone in the history of higher education in Brazil. SWB was an important highlight in the change of internationalization activities in Brazilian higher education institutions mentioned by every interviewee in Brazil.

Science Without Borders in Brazil

In the context of the “new Brazilian development policy” pursued by the federal government, president Luiz Ignacio Lula Da Silva (2003-2011) prioritized the inclusion of science and technology in the public policy agenda. This new paradigm configured diverse

actions which incorporated educational and technological innovation policies, public-private partnerships, and networks of national and international cooperation into the national strategic agenda (Lei de Inovação Tecnológica, 2004)⁵. As a consequence of the latter incorporation, policies of international cooperation, and training of human resources abroad, were integrated to the national postgraduate system within the 5th National Graduate Studies Plan (NGP, 2005-2010). Finally, a special monitoring committee recommended the addition of a special chapter to the National Graduate Studies Plan. This chapter outlined new actions related to the internationalization of higher education. The latest addition to this chapter was the foundation of the SWB Program (Plano Nacional de Pós-Graduação 2011-2020, 2011).

SWB represents a milestone in the internationalization of Brazilian higher education institutions not only because of its ambitious objectives, to send 101,000 students abroad, but also because of the high financial investment in the program:

Before SWB program, CAPES already predicted in its 2010 Strategic Plan, as one of the central focus, the promotion of the internationalization of Brazilian higher education. In 2012, in the context of the SWB, the structure of the International Relations Board is created, with a significant increase in personnel, allocations and budget (from approximately 30 million dollars in 2010 to 260 million dollars in 2012). Not only was this increase reflected in the SWB program in its first two years, but also in the expansion of international research projects (CAPES, 2013, p.10-11).

Almost every IO openly recognized the importance of SWB in the increase of international activities in their offices. For IO5 the “Science Without Borders era was a period

⁵ The so called Technological innovation law let partnerships between universities, public research centers and businesses to support Brazil industrial development

that altered the panorama a lot. The number of exchanges increased a lot.” Given the amount of resources allocated to this program, the increase in student mobility was expected. Nevertheless, it surpassed almost every expectation at the institutional level.

According to the latest review of the public SWB control panel, until October of 2017⁶ a total of 92,880 scholarships had been released. Most of those scholarships were granted at the undergraduate level, with a total of 73,353. In the original proposal of 2011, the undergraduate scholarships were estimated to reach 32,4% out of the 101,000. Nevertheless, the most recent data shows that 78.97% of the scholarships were directed to the undergraduate level, more than double of what had been planned. At the graduate level, the total number of scholarships was 18,248 representing 19.64% of the total number of scholarships awarded. This number represents almost one third less scholarships awarded directed to graduate studies than the original plan proposed of 57.7%.

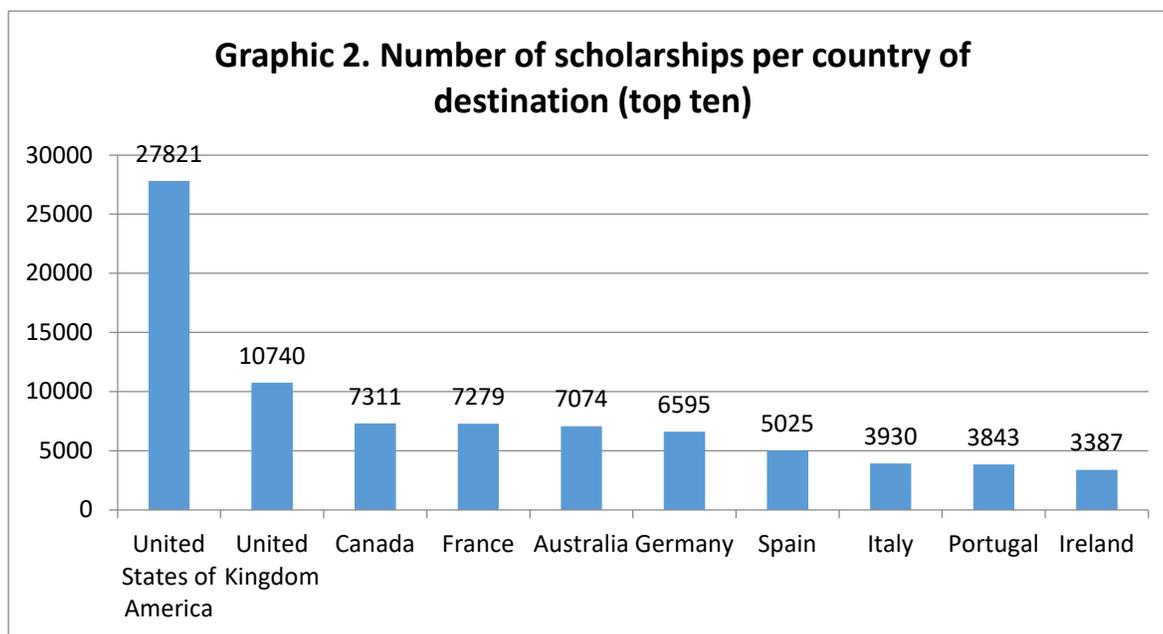
Table 2. Number of scholarships awarded per type, Science Without Borders Program.

Category	Number of Scholarships
Undergraduate Study Abroad	73,353
Visiting Doctoral Studies	9,685
Post-doctoral Training	4,652
Full PhD	3,353
Special Visiting Researcher (to Brazil)	775
Full Master	558

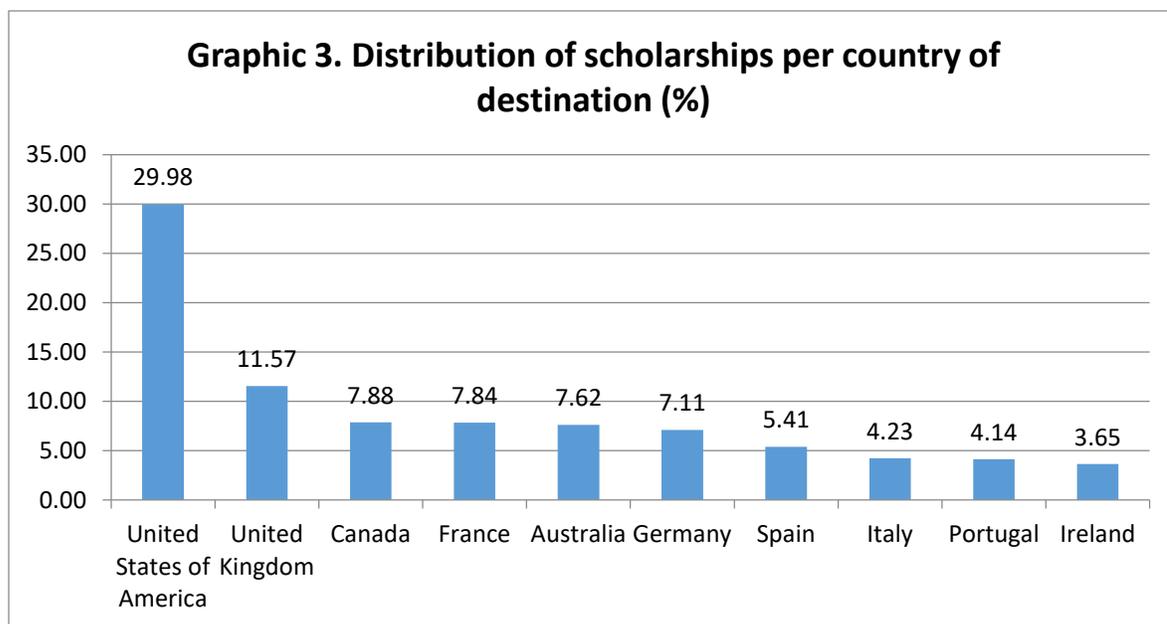
⁶ SWB control panel shows raw data related to the SWB program.

Talented Young Scientists (to Brazil)	504
Total	92,880

SWB represented the program with the highest output of Brazilian college students (Graphics 1 & 2). The main beneficiary of this program was the United States. The United States received almost one third of the total students sent abroad by SWB with a total of 27,821 students at the undergraduate and graduate level. Further analysis of this data will be presented in the discussion section.



Graphic 2. Total number of scholarships awarded per country (all types). Science Without Borders Program.



Graphic 3. Percentage distribution of scholarships awarded per country (all types). Science Without Borders Program.

Science Without Borders in the US

One of the major efforts of the US in terms of internationalization of higher education within the Latin American region is the “100,000 Strong in the Americas” Program. This program was launched by US president Barack Obama in 2011. The objective of this initiative was “To underscore the critical relationship between broader educational opportunity and greater regional prosperity. Expanding study abroad opportunities for students, our future leaders and innovators, strengthens bi-national relations and better prepares young people for the 21st century global workforce” (US Department of State). At the mobility level, the objective of this program was “to increase educational exchanges in the Western Hemisphere and strengthen U.S. relations with the countries of the Americas through student mobility” (NAFSA). Even though interviewees did not mention getting a grant from this program, this has been one of the leading efforts of the US federal government to strengthen internationalization activities with the Latin American region with a high economic-oriented objective.

According to the US Department of State, the program's ambitious objective of 100,000 students moving in both directions by 2020 is based on the Western Hemisphere representing a thriving market of nearly a billion people and the growth of middle class by 50 million in the last decade. The program is heavily founded and regionally focus in financial terms. The rationale of of this program regional focus is the following:

By 2060, the population in the Americas is projected to be greater than that of China, and more deeply linked to the U.S. by trade, culture, and family ties than any other region. Against this future landscape, 100,000 Strong will deepen relationships across the Hemisphere, enabling young people to understand and navigate the rich tapestry of shared values and culture and lead the process of greater commercial and social integration key to our region's long term security and prosperity.

According to the latest review of the program public site until October of 2017, a total of 9 million dollars have been invested in "Public-Private Commitments" to support grants for the development of joint projects between HEIs in the US and Latin America. This budget is far behind the near 300-million-dollar investment the Brazilian federal government launched in 2012 in the context of the creation of Science Without Borders.

Benefits for the US.

In March 2011, US President Barack Obama began a journey in South America. Beginning in Brazil, the US president looked for partnerships which would foster internationalization of higher education in the Americas. Those visits had the objective to promote the 100,000 Strong in the America Program. Four months after the official US president visit to Brazil, on June 26th of 2011, Brazilian president Dilma Rouseff launched SWB. To the

eyes of the US government, SWB complemented the recently launched US mobility program. Roberta S. Jacobson, Principal Deputy Assistant Secretary for Western Hemisphere Affairs in the Obama administration made the following remarks about SWB,

We welcome President Rouseff's Science Without Borders Initiative, a perfect complement to 100,000 Strong in the Americas. We are working diligently with Brazilian partners to expand opportunities for Brazilian students and welcome them to our campuses. We have put into place a framework that spans educational advertising, consular services, and English language programs to prepare these students to go to the United States. We are proud that the United States was the first country to work with our Brazilian counterparts to welcome the first group of Science Without Borders students last January, over 650 of them and we look forward to receiving thousands more.

Jacobson was welcoming the Brazilian students and opening doors to one of the major investments a foreign government had ever made to support student mobility towards the US. According to the US Bureau of Economic Analysis (2016), the economic impact of all Brazilian students on the US economy was significant. The Brazilian students contributed an estimate of \$408 million (tuition, fees, and living expenses) in the peak year of the program, 2014/2015, when the US hosted the highest number of SWB students. This number is part of the near 30.5 billion dollars' international students represented for the US economy in that same period.

Brazilian student mobility to the US significantly increased during the golden era of SWB. When SWB was launched, there were 8,777 undergraduate Brazilian students in the United States, by 2014/2015 there were 23,675, up 78.2% from the previous year. By that same academic year, Brazil was the sixth leading place of origin for students going to the United States. From academic years 2010/2011 to 2014/2015, the influx of Brazilian students to the

United States increased 170%. IO12 recognized the protagonist role of Brazil in that academic year, “Brazil is important ...well until recently they have all these political issues... There were many Brazilian students, it was a boom.” Interviewees in the US recognized the role of the Brazilian government internationalization policies. Although they did not refer directly to SWB, the high number of Brazilian students in the US was nurtured by SWB. Some IOs recognized the high investment of Latin American countries in student mobility programs. As IO9 explained,

One of the things that limits internationalization is that NSF or the European Union they want to retain the funding here in the country, in contrast let me talk about specific countries like Brazil or Mexico that have a strong policy to support students to Study Abroad. That facilitates the contacts you know... the fact that other countries do not have that and there aren't funding available well.. There are few grants.

IO9 expanded by recognizing the importance some governments put into Study Abroad Programs in Brazil and Mexico. This is not a random perception, both are the main economies in Latin America and stand out from other countries in the same region given their economic dominance. IO10 highlighted, “Brazil and Mexico are very different [than other countries in Latin America], they are very strong economically ... in addition to this they have decided to put a lot of money in education at all levels.” The relationship of US and Latin American HEIs is strong given economic and political efforts on both sides, even though, financial resources put into internationalization efforts are much higher on the Latin American side.

Research question 2. How have the strategies of internationalization changed in Brazil and the US?

Institutional Changes in Brazil

SWB turned into a two-pronged program at the institutional level in Brazil. One side represented the indirect push towards internationalization activities at all institutional levels. The other side was the over control of the Brazilian federal government in managing students abroad, leaving institutions in a secondary place and out of any control over the students' host institution or curriculum abroad. Since SWB was the most efficient output engine for undergraduate and graduate student mobility, consequently, even after the golden era of the program, SWB indirectly fostered internationalization initiatives that continue to be carried out by colleges and departments.

In addition to student mobility, SWB represented a unique opportunity for Brazilian students and institutions to get visibility around the world. This visibility was primarily in STEM fields. In the era of SWB (2013-2016), all program beneficiaries belonged to STEM since this program was born in the scope of science and technology development. The latter resulted problematic for departments and colleges outside of STEM which were totally excluded from the program. IO1 clearly summarizes these two program characteristics described above, "Communication and Arts were not contemplated by Science Without Borders, but the visibility of investment that the government was giving for exchange made people search [Brazilian higher education institutions] more." This visibility had some consequences at the institutional level, it reinforced the support given to STEM fields by the federal government and made the central administration of the university give more resources to STEM fields for internationalization activities. Moreover, the visibility included those colleges and departments that sent more

student abroad and left those in the social sciences and humanities with less chances to increase internationalization activities.

SWB indirectly promoted internationalization activities and students' inquisitiveness in regards to mobility. Nevertheless, SWB resources were exclusively allocated to STEM leaving other colleges to figure out ways to supply students' interest without the support of SWB. International offices started looking for more partnerships and mobility programs outside SWB. This process was well assimilated by international offices, as IO2 affirmed, "There was a big criticism for leaving humanities apart but you could understand a little bit, we took advantage of our partnerships to help our students." At the end, institutional efforts were made so disciplines outside of STEM could accommodate students' interest in mobility.

The international visibility that SWB brought to Brazilian institutions was a highlight of the program in the eyes of the institutions. Consequently, international offices started getting more attention from potential new partners. As IO4 asserted, "Science Without Borders made other countries to look at Brazil, they realized the quality of the research we do here." Not only did SWB provide a big outbound opportunity for students, it also provided an opportunity to see Brazil as a big player in the international education scene.

In addition to enhancing partnerships for those colleges that were left out of SWB, institutions answered to the internationalizations push in different ways. One of the main initiatives was to standardize and formalize international activities. As IO1 affirmed:

We began to computerize things in a bigger scale. That was fundamental for the change in our sector. There was a standardization of our work, so now we have a systematization of the agreements and how we transmit that information to professors.

In addition to the automation of processes, international officers began more structured planning and early internationalization awareness campaigns for students. IO2 affirmed, “We began to have periodic meetings with the students. So, every beginning of the year, with the incoming freshmen we do a meeting to explain what we are and do”. More student awareness and automation of processes were big changes in Brazilian international offices.

SWB received some criticisms from the institutional perspective. Since the program initiative came directly from the federal government, institutions were left out of the program planning and constituency. This was the main criticism of the program at the institutional level. Institutions then had to deal with three main issues: credit validation, student enrollment control and partnerships management with foreign institutions. The first issue was clearly exemplified by IO4, “Many times, we deal with students that took classes [abroad] that had anything to do with their field of study in Brazil, and still had to validate those credits here.” The issue of students’ local enrollment was recognized by IO4, “in some cases, the student got the acceptance letter and did not notify anyone that he went to do the exchange, the federal government had the hegemonic control of the program.” Finally, IO6 recognized the lack of understanding of existing partnerships from the SWB stakeholders as follows:

Faculty members who were responsible for the mobility got a little nervous. If the program were to use their existing academic partnerships that would have saved a lot of money because they wouldn’t have to pay tuition and reinforced the academic partnership.

Institutions in Brazil then, had to deal with all of the issues related to SWB program execution. The federal government implemented a “program representative plan”, having a representative of the program on site in every public higher education institution. Nevertheless, the truth was that

institutions took over. Partnerships were enhanced and a “new” international interest in Brazil was the aftermath of the program at the institutional level. Institutions had their own internationalization strategies and used the SWB program to pursue them.

Institutional Changes in the US

In contrast, the change of internationalization activities in the US higher education involves a variety of entities at the institutional level. Given that the United States is a major receptor of international students, international offices, colleges and departments oversee activities that include partnership management, outbound and inbound mobility programs, faculty-led programs, global programs, dual degrees and research grant seeking, most of the time, having specialized staff members dedicated to develop such initiatives. Since internationalization traditional activities have already been described as to increasingly be revenue oriented (Deschamps & Lee, 2015) I will focus on two dominant activities that have emerged from the US interviews I conducted at the institutional level. These activities are 1) creation of short Masters programs that are less research based and 2) seeking of global grants.

As I already discussed, internationalization activities have gained complexity as state funding has decreased and internationalization activities have evolved beyond mobility. IO10 recognized the complexity of such activities when dealing with faculty members projects, “Conversations that I have with partners and faculty are much more complex. Now they are talking about things like sandwich programs, or service learning, or co-op programs and so... the conversation has evolved into a much more -I would say- intricate level.” The complexity of internationalization activities is a highlight of the evolution of practices in the United States and the expanding needs of their international partners. The change in internationalization strategies in the United States have to do with creative ways in which universities find ways to identify

new revenue streams. Also, IOs indicated that communication technology progressions have improved their tasks and advanced synergies with faculty members in terms of international activities.

The Use of Technology and Global Research

IOs also mentioned communication technology as one of the major players in advancing internationalization strategies. Communication technologies have changed the vision of various aspects of human life. IOs recognized the use of communication technology as one of the great drivers advancing internationalization activities in their daily tasks. IO12 asserted, “people are trying to advance their work and faculty and scholars are much more savvy or maybe even technology is helping them become more savvy about what people in other countries are doing.” The wider use of the internet in a wider range of the world’s territory have provided faculty and scholars a wider vision of what kinds of research are being held in certain areas of the world. IO13 explained the role of technology in fostering global connections:

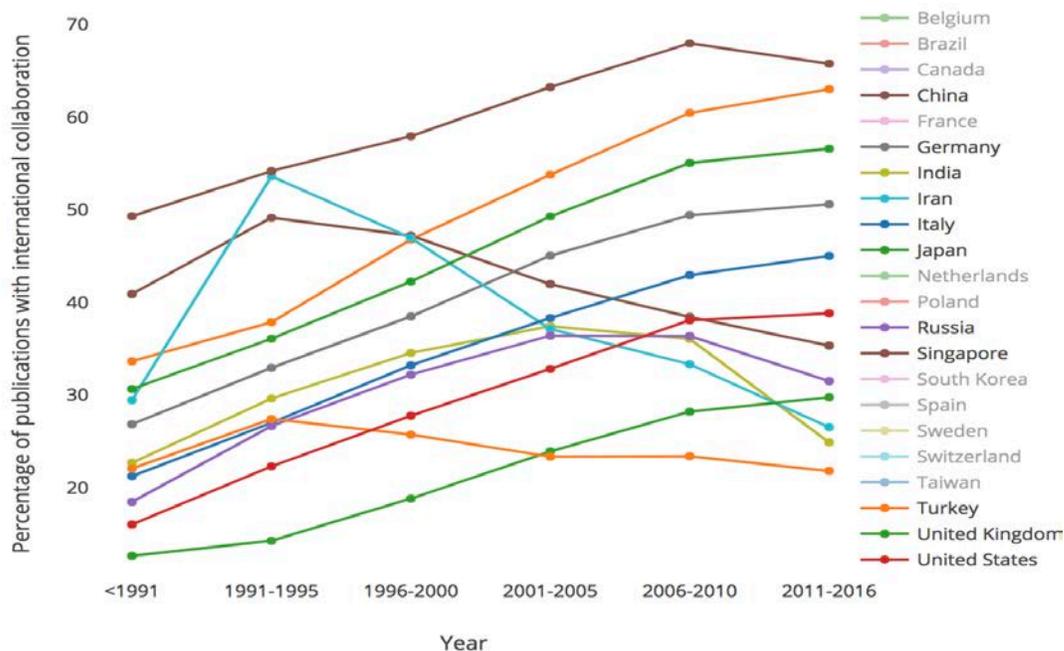
So, a lot of things were still done with fax and mailing things and written letters, you know type letters with carbon paper you know... still being used when I first got here I have documents from that era and that was still kind of the mode and email existed but it wasn’t as common as it is now, then fast forward ten to fifteen years and we are just much more advanced as a society through the use of technology and it’s really helped us to create stronger global networks.

As IOs expressed, it is easier to find common research grounds and contact faculty in distant countries and then initiate collaboration.

Globally, international research collaboration has become the norm. Forty-three percent of all global papers published in the past five years were written by international research teams. According to Research Gate (2016), 31.13% of total publications in the US are international collaborations. In Brazil, the percentage is 27.82. These indicators are important since the US leads the world number of publications and Brazil does for the Latin American region. The percentage of publications with international research collaboration in the US have increased from 16.08% in 1991 to 38.85% in 2016. In the case of Brazil, the increment was from 20.70% to 28.75% in the same period (Graphic 4). While looking for international research collaborations, US faculty members increasingly look for those global oriented grants. As IO11 stated, “They look to be more competitive if they are working with a strategic partner in another country. So, a lot of the grants that I see are globally oriented. Some of them even say, it should be interdisciplinary and multi institutional.” Some IOs explained that certain units are oriented towards international research grants and this is a major direction their strategic plans mandate.

Graphic 4. Percentage of country's publications with international collaboration

(ResearchGate GmbH, 2016)



Change in Masters' Degrees

The competitive market for international students is motivating universities to implement creative ways to recruit international students. Academic departments have entered the game and looked for international students' financial resources. The modification of practices to attract international students have modified important features of the constituency of Master degrees, especially in STEM fields. IO9 explained how an academic department in STEM changed their Master program so that it became more attractive for international and local students:

A big change that I see is major, and I know this is going on in the United States, is Masters degrees in engineering. Tuition is going high, everything's so expensive, people can't afford it. So there are some programs that are being offered that you can finish in three semesters or two semesters. Those are non-thesis masters, before all of the masters

[in our department] were Master thesis and now we have a high diversity of Masters in order to increase [international student] recruitment.

IO9 went on explaining that this model has benefited the program in terms of financial resources.

IO10 explained that short master programs help departments in two ways, bringing money to the department and selecting PhD students for their doctoral programs:

In many developing countries... for example China and India, five years ago all of those students needed financial support but recently they do not need financial support. We have benefited from that because it has given us the chance not only to bring more money to the program but also to have something like a screening and we have invited them to come and do the PhD.

This analysis is interesting given that academic departments have perceived the increase in purchasing power of students from certain countries and have identified a way to take advantage of these international students' wealth. IO10 even mentioned they push students to finish fast, "Masters in Engineering are evolving too.... that's research worth it. They are turning into less research based, so that they can finish fast." The change in the type of Masters' degrees in Engineering is a direct affront against the research nature some master degrees. Colleges have come up with new ways to recruit international students through their master programs. IO12 asserted:

There has been something that has helped a lot in some colleges, [STEM college] has decided that in order to increase the number of Master students they have established tuition waivers, that makes the program more competitive because they only pay part of

the tuition. Since [international] students can pay out of pocket, that makes the program more competitive

One of the main reasons to waive international students' tuition in Master degrees is the change in the kind of funding international students hold. IO13 explained, "Before 2008 almost of all our students were fully funded in their graduate program, after 2008 there has been less research money, many things have been going on. Now the masters [international] students that we have are self-funded and the PhD's half funded." This change has open the space to take advantage of the fast track no research Master degrees but still have PhD students to perform research half supported.

Research Question 3. How is higher education in Brazil addressing their educational and world reputation goals??

The Power of Rankings

Over the past forty years, university rankings have increasingly taken a protagonist role in the institutional behavior of higher education institutions around the world. Evolving from a relative unpretentious measure form of comparison to being a tool for institutional strategic planning with impacts on institutional funding and public policy.

Rankings represent a significant emergent "alternative economic force" that has important implications at the institutional level. IOs pointed out three main areas in which rankings have increasing influence: 1) partnership building, 2) research activities and, 3) institutional behaviors. Not only do rankings influence at the institutional level, but also play a significant role in geopolitics at the regional level.

The Influence of Rankings in Strategic Partnerships

As I have already discussed in this chapter, international student mobility grew in Brazil modifying institutional internationalization practices. Federal financial support and SWB were the main output engine for this modification. Consequently, Brazilian higher education increased international visibility. The visibility that Brazil had brought along an important emergent force, the invasive global ranking system, as IO6 explained:

SWB was just when the world started looking at Brazil. For example, at [College of Architecture] we were fifth in one of the rankings worldwide. This is a possibility to call for international faculty and do international agreements. I mean... that was due to Brazilian education popularity.

IO6 went on to explain that rankings played a significant role in internationalization activities since Brazilian HEI's gained visibility and began being contacted by institutions around the world.

Rankings started playing a meaningful role establishing new partnerships. International offices began adopting practices that helped them make "better choices" when establishing partnerships with foreign HEIs and new institutional practices were established. The standardization of international activities included initiatives that required a committee analysis before establishing new partnership agreements. Since the inception of SWB, it became a norm that colleges had an international committee in charge of analyzing international activities. One of the functions of these committees was to evaluate new partnership initiatives. IO2 expanded on how rankings were a fundamental part of a new partner assessment:

We have a protocol that we follow when a new institution contacts us. We have a committee. The president of the commission leads the meeting. We have certain criteria to evaluate our partners. We include rankings in our evaluation protocol. Faculty members, I would say... everyone consider rankings.

These kind of practices, institutionalized at the department level involved faculty and administrators. As IO2 clearly affirmed, “We have an evaluation template. So when the [partnership] proposal comes, I send that template to our counterpart. I send a questionnaire with some questions, for example rankings, Times Higher Education and others...” Most of the interviewees affirmed that rankings played a big role when choosing a new partner, even when faculty members were involved. IO6 addressed this dynamic, “They [rankings] have classificatory effects I would say. For example, in order to establish an agreement with a foreign institution, most of the times professors are the ones who contact them first. Then I have followed up meetings with them. Most of the times they really consider the institutional position in rankings.” Rankings were included in evaluation protocols in almost every international office when faculty members were involved. IO6 mentioned, “Faculty members are interested in the quality of institutional research that is why we consider rankings a lot... that gives you a sense of the institution.” Research emerges as an important when choosing whom to collaborate.

Research and Rankings

Knowledge transfer has become a fundamental component of wealthy economies for economic and social development. Research universities play an important role in these wealthy national innovation systems. Moreover, since the publication of the first international ranking of universities by Shanghai Jiao Tong University, more systematic ways of classifying world-class

universities have appeared (Salmi, 2009). This trend has been pushing some international offices set priorities based on the value of research in rankings schemes.

Being a research university in the global ranking system is a two-way avenue. As I already explained, international officers institutionalized a series of conditional requirements that included ranking positions in order to establish new partnerships with foreign institutions that contacted them. At the same time, this behavior persisted when Brazilian departments and colleges looked for partners abroad. As IO6 clearly noted:

We look out the entire world for research collaboration. We are at front in Latin America and one of our pillars is research. It is something interesting this thing about research.

Why? If they [foreign institutions] look for us that situates us in the top of the rankings and being in the top of the rankings make people look for us.

Rankings and research activities have a high influence in the eyes of faculty when considering new research initiatives or first contacts that could led to research collaboration later. IO2 affirmed that considering rankings to initiate first contact with an institution has increased during the last five years, “We consider those [ranking] positions a lot in order to initiate an agreement initiative with [foreign] institutions, even when they want to collaborate with our faculty members.” Thus, research emerges as one of the most important factors into the ranking arena. Especially in academic disciplines with greater financial support.

IO’s expressed the institutional provision to support STEM over other disciplines in regards to international research collaboration. The exclusive support that STEM received in the case of SWB was a mandatory feature of the program. Nevertheless, institutions followed a similar pattern. There was a shift in internationalization strategies that ended up favoring STEM

fields over other disciplines, especially in financial support. Allocating financial resources to such disciplines was a mean to increase international collaborations and publications. Thus, those collaborations would add up to climb up the international rankings. This trend can be understood as “coercive isomorphism, which “results from both formal and in-formal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function” (DiMaggio and Powell 1983, p 150). As IO7 clearly asserted:

Peer reviewed publications are very good for international cooperation. Therefore, if you see some rankings, we are on top regarding research and, research involves publication. We are on top in the case of business schools and even more in the case of administration and management as well as in STEM. Publication is happening all the time at this institution in those disciplines.

These IOs are advocating for a stronger international collaboration support in research, IOs can champion faculty internationalization activities and encourage their departments through stipends for faculty willing to work on international research collaboration. This perspective brought an institutional shift towards activities that favored the institution chances to scale up in rankings.

Institutional actions to engage faculty members in international collaboration included financial incentives to teach in English, increase financial resources for international travel and international research projects. IO5 explained:

If we go on offering [English] language courses, exams, try to foster the production of faculty abroad, which motivates professors. For example, we have some projects going

on. Some grant programs were directed to professors that do [research] proposals with foreign institutions or to negotiate academic agreements, new partnerships. There is that, professors acting the way you expect. All the rankings consider the production of professors in the international arena, not only local. So there are a series of actions being taken.

IO5 affirmed that internationalization activities were enhanced while giving rankings an important place. Those activities would have to be performed collaboratively with highly ranked institutions. The latter discovered a high interest to collaborate with highly ranked institutions [most institutions in the top 20 of most of the world rankings are located in the United States or Europe (Hazelkorn, 2017)].

Rankings were not mentioned in the interviews I conducted in the US with the exception of one IO stating it was not an important issue when dealing with international partners. Certainly, rankings in the United States play an important role in the higher education arena since they were publicized. Nonetheless, for the purpose of this chapter, rankings are discussed in the section concerning Brazil since rankings were a major issue IOs identified when dealing with partnerships, unlike in the case of the US. The rationale of the interaction of both will be discussed in Chapter 5.

Brazil, a Latin American Regional Hub

The United Nations reports that Latin America added 90 million people to an emerging middle class from 2000-2012 due to decade's economic boom (United Nations, 2017). In Latin America, per GDP increased by 50 percent between 1990 and 2013, before beginning to decline in 2014. Moreover, as of 2016, Latin America's middle class accounted for 35 percent of the

total Latin American population – an increase of 14 percent over the past decade. An economic recession in a number of Latin American countries in 2015 and 2016 has stalled this progress, although modest economic growth is expected to resume in 2017. In spite of the economic growth and deceleration of some Latin American countries, Brazil is the seventh economy of the world and the largest economy in Latin America (OECD, 2017).

The Brazilian economic bonanza and subsequent economic crisis presented two different scenarios in terms of internationalization activities in Brazil. At the governmental level, the fallout of the economy and political commotion brought budget constraints but left a renovated internationalization halo in institutional culture. Until 2014, the Brazilian government had invested intensely in innovation. This investment was strongly tied to internationalization favoring STEM fields. The number of scientific publications by Brazilian scientists surged, international research collaboration expanded, and public science budgets reached record highs in 2013 (Massarani, 2013). But over the following three years, Brazil's science budget was reduced by more than 40 percent, and funding dried up at both federal and state levels (Brasil, Edital, 2016). Despite Brazil's recent economic downturn, "the long-term outlook for outbound mobility from Brazil is promising" (World Education Services, 2017). According to a UNESCO report, outbound international mobility among degree-seeking students remained relatively stable between 2011 and 2016 and a recent survey by the Brazilian Educational and Language Travel Association (BELTA) found that the number of Brazilians studying abroad even increased by 14 percent between 2015 and 2016 (mostly in STEM fields).

Given the importance of Brazil as an emerging world power and despite Brazil's recent economic downturns, Brazilian higher education institutions are an attractive destination for international students in the Latin American region. IO's in most colleges recognized that Latin

American students make up the majority of international students in their colleges. As IO8 asserted, “To be honest, the highest number of [international] students that we receive are from Latin America, most of them from Mexico, Colombia, Peru, Chile and Venezuela”. Compared to other important economies in the region, Brazil stands out regarding the share of international students by level of tertiary education. 8.4% of all students in tertiary education in Brazil are international students (OECD, 2017). This number is significant if we compare it to other Latin American countries, like Mexico or Chile, where the amount of international students in tertiary education represents just 0.3% in both cases. Even though Mexico is the second largest economy in Latin America, in terms of international student mobility, Mexico “is recognized as a country with little reception of students from other countries” (Maldonado-Maldonado, 2016). The United States is the top country of origin of international students in Mexico followed closely by Europe⁷, and then Brazil stands out in terms of inbound student mobility within the region. In fact, 37% of international students in Brazil come from neighboring countries⁸ (OECD, 2017).

Data presented in table 2 suggests that Brazil holds a leadership position in the Latin American region regarding the share of international students, especially at the graduate level. International students represent 22.4% of all graduate students in Brazilian HEI. This number is significantly higher compared to the 2.6% and 8.4% of Mexico and Chile respectively. IO’s affirmed that their graduate programs are increasingly receiving students from Latin America. IO7 affirmed that at the graduate level “There were few students from Europe, North America and Oceania. There were more students from Latin America. We did perceive that change.” Most IO’s suggested that there was a big shift in the place of origin of international students in STEM

⁷ Maldonado Maldonado, Patlani, 2017

⁸ Neighboring countries are considered those with land or maritime borders with the host country.

fields. IO7 affirmed, “The highest number of students that we get from abroad come from IPN (National Polytechnic Institute - Mexico), since they are a reference in STEM education in Mexico.” According to the OECD, international graduate students in STEM, business and administration majors represent 22% of the total enrollment of Brazilian HEI. The fact that Brazilian HEIs have a great shared of international students, especially in graduate programs, situates Brazil in a critical position regarding internationalization activities in the region.

Table 3. Share of international or foreign students by level of tertiary education (%) (Education at a glance, OECD, 2017).

Country/Educational level	Total tertiary education	Short-cycle tertiary programmes	Bachelor’s or equivalent level	Master’s or equivalent level	Doctoral or equivalent level
Brazil	8.4	4.6	6.2	12.4	22.4
Mexico	0.3	0.0	0.2	0.7	2.6
Chile	0.3	0.3	0.2	1.3	8.4
Spain	2.7	5.0	0.8	7.1	M
Portugal	5.0	3.0	2.9	6.1	21.2
US.	4.6	2.2	3.8	9.5	37.8
OECD average	5.6	2.5	4.3	11.5	25.7

Several IOs mentioned the importance of University of Sao Paulo in the Latin American region. They recognize the institutional leadership as one of the main drivers of the institution. Moreover, IO’s affirmed that one of the objectives of USP is to increase their protagonist role in Latin America. IO6 affirmed, “The objective of USP in my opinion is to be protagonist in the region in Latin America”. Not only do IO’s recognize the leadership position of USP within the

region, but also they discussed the importance of USP as a reference center in terms of research capacities. IO6 clearly asserted, “[USP] becomes better known as a reference center, as a center of excellence.” As IO’s recognized their ties and output within the Latin American region, they also recognized institutional efforts are not necessarily tied to strengthening relationships with Latin American institutions. IO5 affirmed, “Taking about Latin America... I have been in conferences in Latin America and I have seen that our interests are related to those of our Bolivian, Paraguayan, Chilean, Venezuelan brothers... and sometimes we do not get closer, we do not talk to each other and I think that is very bad”. Interviewees showed a disconnection between the protagonist role of USP in Latin America and the institutional actions and strategies towards advancing those connections and agreements.

As I already discussed in this chapter, IO’s reported an increase of internationalization strategies at the institutions level. Whether supported by federal programs or institutional initiatives, partnerships increased. Even though IO’s reported a high number of international students from Latin America and official data demonstrates a protagonist role of Brazil in the amount of inbound international students from this region, especially at the graduate level (STEM and business) most of the agreements of USP are not with Latin American HEI’s. USP’s International Cooperation Agency official webpage states, “Internationalization is one of USP’s guidelines. The University believes it is of utmost importance to establish partnerships with organizations of various countries, so as to create new integration bonds and to maintain the already existing ones.” Even though this statement advocates for fostering partnership with various countries, most of the international agreements with foreign institutions are established with countries outside the Latin American region. HEI’s in France, the United States and Portugal hold the top three countries with whom USP hold agreements. Most IOs expressed the

fact that USP needed to have relationships with other “centers of excellence” around the world. Recognizing their leading role in the region, IOs made clear how they look for approximations with institutions with the same caliber of research reputation within their colleges. As IO4 stated, “I think that they [institutional stakeholders] required the university look for a bigger approximation to other knowledge centers of excellence.” Recognizing this university as a center for excellence in research, IO3 affirmed, “USP has a prominent research position worldwide. So, to that extend, we should have an approach with other institutions like us.” Institutional initiatives and the number of agreements established with countries around the world demonstrate that approximation with institutions of excellence in developed countries, especially the United States, the United Kingdom and France is preferred.

Table 4. Number of international agreements by country (in order of highest numbers)

Latin America								
Country	Colombia	Chile	Argentina	Mexico	Ecuador	Venezuela	Bolivia	Panama
# of partner institutions	74	46	30	25	12	3	3	2
Other countries								
Country	France	Portugal	US	Germany	United Kingdom	Canada	China	Australia
# of partner institutions	164	115	114	81	65	59	49	20

(<http://www.usp.br/internationaloffice/index.php/convenios/instituicoes-conveniadas/>)

International offices looking for partnerships with highly ranked institutions was already discussed in this chapter. In the pursuit prestige, IO's made it clear that their offices were prioritizing some countries over others looking to increase their international activities,

Our focus, (that is what we perceive) is not Latin American countries anymore; I can say that... the focus now are rankings, top universities that are not in those countries. Now Germany, France, European countries and the United States, Canada, more developed countries... that's it. We perceived that from the calls.

IOs reported a trend in institutional funding allocation. AUCANI (central internationalization agency at USP) started directing fellowships and other initiatives to develop countries. IOs evenly reported calls for international undergraduate mobility fellowships that restricted students to go to Latin American countries. This trend is reflected in the number of agreements USP has with institutions in Latin American countries compared to those with developed countries. Colombia, Chile, Argentina and, Mexico are the top four Latin American countries that hold agreements with USP. Nevertheless, all of those combined only equal the total number of agreements USP has with France. The United States is the second in the list with 114 agreements.

There are no Latin American countries in the top 10 receiving countries of SWB students. Once again, SWB served as a great facilitator to establish agreements with institutions in developed countries. IO's reported great increase in approaches they had with institutions in the US and the UK. Even though IO6 recognized having a high number of Latin American students, they barely mentioned willingness to look strongly for partnerships with Latin American

institutions. Instead, those efforts were focused on the United States and the United Kingdom.

IO6 elaborated,

In addition to the United States, in the past three months we have signed agreements with English universities. We did not have many possibilities with them in the past. They did not know our students' academic standing. I think that with Science Without Borders... that [program] certainly helped international institutions to look at us in a different way. I think doors were open through SWB, Brazil began to be seen academically better. That worked very well.

SWB situates the program as a partnership facilitator with developed countries. In addition to institutional support, federal programs and financial support greatly benefited internationalization activities and deeper interaction with highly ranked universities. On the other hand, Latin American HEI's increasingly started to send students to Brazilian institutions. Which have a total international student enrollment of almost 25% in doctoral programs and 8.4% total, greater than any other country in Latin America. Of those students, 37% come from neighboring countries.

External Political Forces: Companies and Non-Profit Organizations

The forces encouraging internationalization not only included those at the federal, state, and institutional level, they also included private institutions. IO's reported an interesting way in which the private sector could participate not only in internationalization activities but also in other areas in public higher education institutions. Increased private sector participation in internationalization activities has important strategic implications for universities. The theory of academic capitalism explains that groups of actors using a variety of resources create new

circuits of knowledge that link higher education institutions to the new economy. Actors also use state resources to enable interstitial organizations to emerge that bring the corporate sector inside the university and create new flow of external resources (Slaughter & Rhoades, 2004).

Interviews with IOs surprisingly manifested different ways in which the corporate sector emerged as an active participant either bringing external financial resources to fund international activities or directly funding students for Study Abroad programs.

One of the main tendencies IOs identified was the corporate sector-growing tendency to participate in university activities and specifically international matters. This is an interesting finding since a high coercive governance in terms of funding has characterized Latin American HEIs. After the Bologna process, most Latin American universities acquired a high level of autonomy. With neoliberal state and federal governments, the participation of the corporate sector is increasing. As IO5 explained, “We have an incentive for internationalization from the private sector... So I think that companies, institutions, agencies will favor internationalization more than simply the money the university has reserved for that.” IO5 explained how they have seen a major shift in the last five years regarding the direct participation of the corporate sector in the university. There are two angles to this participation. IOs in the social sciences and humanities were barely aware of this phenomenon. On the other hand, IOs recognized that in disciplines like STEM, economics, and business administration, the private sector participated more.

Colleges in which private sector participation had an important influence were specifically the polytechnic school (STEM), economics and business. IOs explained that certain companies favored internationalization activities, especially in the area of economics and engineering since alumni had a great connection to these companies. IO asserted, “They

[companies] promote actions to allocate money, they know students from this university go and study abroad. They want to finance that.” At the end, the private sector is increasingly participating in STEM and business administration. This effort reinforces the public investment that the federal government puts into these fields.

According to IO’s answers, there were two sides regarding private sector participation in internationalization activities. As I already discussed, social sciences and humanities denied the participation of the private sector in internationalization activities in their colleges with the exception of banks. IOs insisted in to differentiating the participation of the corporate sector in the social sciences and STEM. As IO6 stated,

We have investments here... for colleges that are more related to technology, business or engineering, because they are closer to banks and industries. The College of pharmacy as well because of the pharmaceutical companies, they want to do that and at the same time they do not... it depends. If you take sociology... that is another story.

IOs in STEM, economics and business administration accepted the participation of the private sector and even described a mechanism in which businesses and colleges together circumvent an institutional restriction that prevents public universities to directly receive money from businesses or private companies.

In regards to the participation of banks, essentially, the function of these financial institutions in partnership with the colleges and departments was to facilitate loans to fund students’ mobility programs. These loans were advertised as “scholarships” for the students. Most IOs clearly explained that the main role of banks was financing some of the mobility activities for undergraduate students. IO2 explained that the university had an agreement with the

central administration of international affairs. IO2 deepened in this matter, “[Bank] ends up being a reference. They can have diverse criticisms but it is nice to see the number of scholarships they give. Well... most of them focus on credits.” IO6 explained that institutional support for undergraduate mobility programs was decreasing. Then, institutional efforts were made in order to launch calls with the participation of banks. This way, students could have the chance to be awarded “scholarships” via loans for mobility purposes. The public coverage in the golden era of SWB allowed private financial institutions an expanded market space to finance international undergraduate student mobility through credits. Pairing with the central institutional internationalization office, the number of public and institution funds were reduced and loans increased.

The second side in the way in which the corporate sector increased participation in internationalization activities (the first is the participation of banks) consisted of an interesting model that puts together three agencies: the university, the corporate sector and NGO’s. In 2011, a group of alumni created the “Escola Politécnica Endowment” with the goal to gather additional resources from alumni and companies for the Polytechnic School (Escola Politecnica, 2011). In 2014, the Endowment merged with another alumni fund called “Amigos da Poli”, with the merger, the name “Amigos da Poli” remained along with the resources nested by both, and they are now unified. The purpose of this merger was that the amount of resources would increase to more than 2 million dollars and the strategy of attracting donations would be strengthened (Escola Politecnica, 2014). This model is supposed to act out of the internal decisions of the university and not interfere in departments autonomy. According to the foundation,

The proceeds from the donations will be invested in financial assets. The resulting gain will be applied to educational projects developed by students, faculty or staff. The projects supported will be selected by means of a public notice, published annually.

Some of the resources of the so-called “Poli Endowment” were directed to internationalization activities and then other colleges that had strong relationships with the corporate sector adopted this model.

The “Endowment model”, created after US models, which was the first “Escola Politécnica Endowment” established, is described below:

The Polytechnic School launched the seed to create a culture of educational philanthropy in Brazil. An endowment fund is in operation in order to raise donations for the School.

The strategy, already adopted by universities like Harvard and Oxford, aims to ensure the excellence of teaching and research in the long term.

This model was initially launched by the Polytechnic School (STEM) and later adopted by the College of Medicine and the College of Economy and Business Administration. IOs expressed that students, faculty members, and administrators in these colleges had great sense of pride about the endowment model. IO5 stated, “We have the endowment, I don’t know if you have heard about it. That model was established here, in the Polytechnic School and then spread out to other colleges, like the College of Medicine I would say, and everyone likes it. It’s a matter of pride.” Currently, this model is very well known and well-supported by students, staff and faculty members.

The endowment model initially established by the Polytechnic School adopted an “Americanized model” since its conception. The model was established after the example of

Harvard University and other US universities. Nevertheless, given some issues related with legislation, the institution had to “educate” the endowment participants as well as manage ways to increase resources for their colleges through the endowment. As described in the “Poli Endowment” report (Escola Politecnica, 2011) to the university community:

One of the obstacles of the endowment diffusion in Brazil is the lack of specific legislation that facilitates its creation. Because of lack of knowledge of its advantages, here in Brazil the endowment is “crawling.” Some foundations seek to maintain a technical reserve invested to ensure the continuation of their activities, regardless of their maintainers, but few actually apply the available knowledge about the operation of the endowments.

The process in which specific colleges received money was described by IO6, “The money comes from the company through the foundation so the foundation transforms the money and that is how they can give it to us as a donation.” Some of the activities funded by the endowment include mobility programs for undergrad and graduate students, faculty exchange programs, and business internships. When asked about how IOs envision the endowment activity in the future they asserted this would increase in the upcoming years. IO6 explained “In the case of this college there is a part of it [money directed to internationalization activities] that we use from the endowment. I see that movement coming up more frequently in the future.” If this tendency continues, the private sector would be financing a big part of the internationalization activities. Not only because endowment donators would increase but also because banks already finance a big part of mobility programs for undergraduate and graduate students. All of these activities are being performed in a public university that has no tuition or any other fees charged for the students

CHAPTER 5: CONCLUSIONS AND IMPLICATIONS

The influence of political and economic forces on higher education internationalization activities in Brazil and the United States have mostly been studied separately. In the last ten years, new political and economic conditions have shaped changes in internationalization activities and strategies in higher education institutions in these countries. The US and Brazil, being the biggest economies in North and South America respectively, have experienced unprecedented political and economic changes that have implications for universities, students, and the local and international communities they serve. On the one hand, Brazil experienced the biggest expansion in internationalization of higher education in Latin America given its economic bonanza. On the other hand, due to state funding cuts, US higher education institutions are becoming more entrepreneurial in the nature of their internationalization activities. This study explores the resulting effects of such conditions. The changes of internationalization activities in these countries in the last ten years is explored by the primary question of “What political and economic forces are influencing Brazilian and US higher education international activities?” Three additional sub-questions expanded upon this main research question:

- What political and economic forces are influencing the internationalization of higher education in Brazil and the US?
- How have the strategies of internationalization changed in Brazil and the US in the last ten years?
- How is higher education in Brazil and the US addressing their educational and world reputation goals?

Summary of the Findings

My findings presented three different forces influencing Brazilian and US higher education internationalization activities: 1) public policies of the federal and state governments, 2) institutional internationalization strategies, and 3) institutional search for prestige.

The first force, public policies of the federal and state governments, considered those that either encouraged or discouraged internationalization activities. The first major force influencing internationalization activities in the case of Brazilian higher education is the federal government. The great financial and policy supporter of higher education internationalization in Brazil is the federal government. This study found that federal allocations were the main engine for the development of internationalization activities of all kinds in Brazilian higher education. The main activity promoted by the federal government is mobility. They do it through programs for faculty and students mainly in STEM fields. The hosting countries of such faculty are the United States, France, and Germany. During the last ten years, a special emphasis was put in the form of scholarships to train faculty and graduate students in the United States. This was done through a mechanism call “chamadas.” A term used to refer to public opportunities for faculty or students to access financial resources to study or perform research abroad. *Chamadas* have been a popular resource for faculty and students through federal agencies that promote scientific development in Brazil as well as at the institutional level. IO’s referred to the great share of federal resources put into faculty mobility programs.

Former president Barack Obama made an effort to foster internationalization activities between the US and Latin America. In 2011, the US department of state launched the program “A 100K Strong in the Americas.” The objective of this program was to increase mobility within the region, having at least a 100,000 students going in both directions by 2020. A 9-million-

dollar investment was put to fund paired internationalization projects between institutions in the US and Latin America. The program has a strong emphasis on strengthening the economic ties of the region with little emphasis on cultural and human development. In addition to the lack of assessment for the efficiency of this program beyond numbers, what represents the most visible effort of the US to engage in internationalization activities with the Latin American region presents the current climate of extreme nationalism, racism, and xenophobia. Especial emphasis has been done against the people of Mexico and by extend, Latin America. The investment that this program has done until now, differs substantially in budgetary terms from the effort of the Brazilian government in the same direction. This effort is the Science Without Borders program, launched in 2011, which represented an investment of 260 million dollars.

The amount of investment some Latin American countries were able to put in place into higher education internationalization had not been seen in the region before. This was the case of Brazil. Not only did Brazil achieved rapid economic growth since the beginning of the 21st century and subsequent years, but also increased human development for the most disadvantaged population. In the government of Lula da Silva (2003-2011), important changes in public policy implemented a neoliberal model that got the inclusion of science and technology development into the public agenda. He prioritized the inclusion of science and technology in the public policy discussion and enacted reforms that connected scientific development and the private sector into a social development plan for the country. This plan included economic development for historically disadvantaged regions and populations. The plan was part of the “new Brazilian development policy” and was directly tied to universities’ internationalization activities. Lula da Silva successor, former president Dilma Rouseff supported these policies and implemented more specific actions for internationalization of higher education. In 2011, she announced the student

mobility program Science Without Borders. This represented the major internationalization effort in the region and one of the biggest at a global scale.

Science Without Borders represented a milestone in higher education internationalization in Brazil. The objective of this program was to send 101,000 students abroad with shared investment from the federal government and the private industry. This study found inconsistencies between the initial objectives of the program and its outcomes. The original plan favored graduate over undergraduate mobility. Nevertheless, undergraduate mobility reached almost 80% of the scholarships awarded while graduate mobility represented nearly 20% of the total amount of scholarships provided by the program. The program is getting close to its initial objective of sending 101,000 students abroad missing around 20,000 students. At a global scale, the main beneficiary of the program in terms of hosting institutions and number of students was the United States. Almost 30% of the students awarded with scholarships went to a US institution to completed at least one year of undergraduate studies and a research or industry internship. For the United States, this program represented a peak in the number of Brazilian students in the country. It also contributed to more than 408 million dollars in the peak year of the program 2014/2015. In this year, Brazil was the sixth leading country of origin of international students in the US. SWB not only represented a singular federal effort in terms of internationalization and a great experience for the students. For Brazilian institutions, the program represented a turning point in the reconfiguration of its internationalization activities. This important changes will be discussed later in this chapter.

At the state level, this study found that existing forces actually discourage internationalization activities. In the case of Brazil, the financial support given to institutions depends on the party governing at the time. IOs affirmed that left governments provide more

resources than right governments. Although this is not the main force influencing internationalization activities in Brazil, it has a level of influence at the institutional level in terms of budgetary concerns. Depending on the chosen rector state governments allocate less or more money to internationalization activities. In Brazil, state funding does not represent the main force influencing internationalization activities but it plays an important role in terms of financial support aimed to students, especially at the undergraduate level. In the case of the United States, the influence of state funding decline has a direct influence over the changes in international offices activities, departments and colleges. State budget constrains are the main influential force causing changes in the nature of internationalization strategies in the US. This study confirmed past studies reflecting the increasingly entrepreneurial nature of university internationalization activities. This study found two main changing factors in the way departments and colleges approach international activities; mobility programs and research activities have turn towards revenue generation.

The second part of my findings examined how institutional internationalization strategies have changed over time. For both countries, there have been changing strategies and activities in different ways. In Brazil, although institutions had little control over the program conditions or participants, SWB represented an important input in the following capacities: it amplified the institutional support towards internationalization, it also led to the standardization and formalization of international activities, and finally, it enhanced institutional capacity to build new partnerships. Since SWB was a popular international mobility platform mainly for undergraduate students in STEM, institutional support increased for those students left out of the program and strengthened the support for STEM. Disciplines left without institutional and program support reinforced existing partnerships to better respond to students' inquisitiveness

regarding international mobility. The Brazilian government succeeded by supporting STEM students while institutions supported the rest of disciplines by enhancing partnerships and taking advantage of the institutional apparatus. Given the increased demand for international activities, not only at the student level, but also from faculty members, higher education in Brazil succeeded implementing strategies to standardize and formalize internationalization activities to be able to serve both populations. This led to better strategic planning and execution of internationalization activities. A lesson learned from institutions after realizing they were left out of the student management of SWB grantees was to build stronger systems to control for student credits and scholarships.

In the case of the US, the main changes at the institutional level were the creation of short Masters programs that are less research based and faculty seeking for global grants. IOs mentioned a higher level of complexity in joint projects with faculty members regarding international activities. The main change in internationalization strategies in the US is the new “generating revenue” component of internationalization activities. This is an important shift in the way US colleges see international education. This study found that new communication technologies favored information availability regarding global research opportunities. In addition to look for internationally funded opportunities and collaboration, this study found that some colleges have adapted new practices to attract international students. By modifying the constituency of master degrees, departments make them less research based and fast track (two years). Departments then seek for international student who are able to pay out of state tuition to bring resources to the department and this also function as a recruitment tool to retain talented students for PhDs. At the doctoral level, students from certain countries bring their own funding.

The aftermath is that colleges bring money by creating fast track master degrees and recruit the most talented doctoral students for their programs, a win win equation for the US departments.

Finally, and unexpected finding of this research involves the raising importance of global rankings in internationalization activities and strategies, strongly underscored in the Brazilian case. The revitalizing internationalization wave that SWB brought to higher education in Brazil brought also global rankings as an alternative force influencing partnership building, research activities, and institutional behaviors. The visibility that SWB gave to Brazilian higher education carried out new opportunities for institutions to build new partnerships, yet, partner institutions entered into a well-structured evaluation system grounded on rankings. Rankings began to play a meaningful role establishing new partnerships in international offices, departments, and colleges. The standardization of international activities in Brazilian higher education included initiatives that put rankings in a preponderant position to decide which institutions were worth collaborating with. In addition to partnership building, rankings influenced research collaboration in Brazil. This study found that faculty in disciplines with high financial support – STEM, business, and economics- considered rankings as one of the main features associated to institutions they would collaborate with or not. Collaborating with highly ranked institutions was considered a motivation and input to scale up in global rankings by these same colleges and departments. This logic made institutions put practices in place that favored courses offered in English, economic incentives for faculty members for short-term programs and a general institutional strategy to pursue collaboration with highly ranked institutions. While Brazilian higher education was strengthening relationships and collaboration with highly ranked institutions mostly based in the US and Europe, Latin American graduate students increasingly filled spaces in Brazilian universities. An increase in the number of international students was

reported by IOs and a recent OECD (2017) report shows that Brazil shares the highest amount of international students at the graduate level, reporting more than 20%. Most of these students from Latin America. Brazilian higher education may wanted to attract student from the North, but in exchange they are getting students from Latin America.

Contribution to the Literature

Through this study, I wanted to understand how political and economic forces are influencing internationalization of higher education in Brazil and the US. My findings suggest that federal and state policies shape how internationalization is changing in Brazil and the US respectively. Due to remarkable economic growth, the Brazilian government increased financial support to internationalization creating the program SWB. This program favored undergraduate student mobility to the US mainly, and brought a renewed set of strategies, behaviors, and activities at the institutional level. The halo of internationalization that SWB represented increased institutional support towards internationalization activities, such activities went through standardization and formalization processes, and finally, partnerships with highly ranked institutions increased. On the other hand, continuous state funding cuts in US higher education suggest that opportunities for revenue are shaping internationalization activities in this country. My findings also revealed the increasing importance of global rankings in Brazilian internationalization activities, especially at partnership building and research. The resulting interaction of these settings is a geopolitical transaction, money for prestige.

My research has implications for practice and contributes theoretically to literature in higher education. On the theoretical side, this study offers a clear understanding of the important role that economic and political factors play in the internationalization of higher education in Brazil and the United States. In the case of Brazil, the unprecedented economic growth they had

during the last decade and the adoption of neoliberal policies changed significantly the nature of internationalization activities in their institutions. Although studies have discussed what represents the biggest asset of Brazilian and Latin American effort in internationalization, SWB, studies had not rationalize the resulting effects of the program at the institutional level and its significance at a global scale.

Brazilian universities hold an international nature since their creation, especially federal and state universities. The Brazilian federal government allocated funding to build capacity abroad since the last half of the 20th century. They continued growing international programs for faculty and students with a special emphasis on sending students to the United States. When Lula da Silva, a president who belonged to a worker's party with left ideology enhanced policies that favored industry and university bonds, it ended up favoring the historical relationship Brazil had with the United States. The latter has could be translated as new colonialism given the big influence people trained in the US bring to the Brazilian academia, leadership elites, and private industry. Future studies on the effect of new colonialism needs attention, especially in a country with one of the highest inequality rates in the Latin American region.

Not only does federal policies influence internationalization activities, but also, state policies play an important role. While federal policies support internationalization activities offering a high amount of funding, state policies may not support these activities. In the case of Brazil, shifting parties in at the state level have great influence over money allocations for internationalization activities. Brazilian HEIs are at the mercy of the ideology of origin of the party ruling the state. Left parties are expected to spend more financial resources in internationalization activities than right parties do. There is an interesting cohabitation of ruling parties at the state and federal levels. When Brazil experienced its 20th century economic

bonanza, federal policies were oriented to support internationalization at a big scale trying to favor as much students at public universities as they could. Once the right party started ruling funding cuts reduced support for students at the undergraduate level and the program restricted the support to graduate students. It is worth highlighting the social advancements the left governments reached for Brazilian marginalized populations even offering international experiences for students that, otherwise, could not have a chance to access. Consequently, the outcomes of internationalization depend on political inclinations. The left tries to benefit students with internationalization experiences while the right inclines to build capacity abroad.

In both cases of my study, Brazil and the US, politics play a significant role influencing internationalization activities. In 2011, Brazil created one of the major internationalization programs in Latin America, SWB managed to offer full scholarships to almost 95 000 students. One third of those students went to US HEIs. Almost 80% of these students were undergraduate. While US HEIs are engaging in entrepreneurial activities at the core of their international offices, developing countries like Brazil, hold constant economic growth that let them spend large amounts of money in internationalization programs. One of the main consequences of SWB at the institutional level is that it brought a highest interest in internationalization, visibility for Brazilian institutions and fostered partnerships. Additionally, Brazilian institutions looked for highly ranked institutions, bringing into play a new alternative economic force, prestige. The resulting geopolitical transaction, money for prestige, is not as simple as it appears. Since global rankings gained popularity, these have become an indicator of institutions' quality, mainly in research and teaching. Although some global rankings have controversial methodologies and their indicators represent westernized university values, until now, the more serious and methodology rigorous list institutions with high quality research indicators. The rationalization

of the geopolitical transaction found in this study should not be simplistic. As Brazilian efforts to build capacity abroad implies investing a lot, they expect to get the best knowledge and innovative research trends for their own economic and industrial development. The exchange of money for prestige then goes beyond and captures not only an interest for prestige, but also quality. Then, both nations benefit from each other. Moving beyond a country based explanation; the geopolitical transaction of money for prestige highlights the role of academic capitalism at a global scale.

My research contributes to the development of academic capitalism theory at a global scale and with an atypical actor, Brazil. This neoliberal country named its biggest internationalization effort as Science Without Borders. The intention of the program is imprinted in its name, STEM were prioritized as the core mission of the program, send students abroad and “strengthen and expand the initiatives of science and technology, innovation and competitiveness through international mobility of undergraduate and graduate students and researchers.” As Slaughter and Rhoades (2004) have explained, the regime of academic capitalism favors knowledge as a marketable output of universities. Their connection to industrial development and knowledge regarded as a commodity explains the exclusive support that STEM fields received in SWB program. In the pursuit of marketable knowledge and nation development under a neoliberal model, the Brazilian government sent almost 30% of SWB fellows to the United States and other 11% to the UK. Canada France and Australia represent the other top five destination of SWB students. All developed countries. The latter may imply an operation of a colonial version of academic capitalism.

As I already mentioned, one of the main consequences of the program was to foster institutional efforts towards internationalization. Nevertheless, these efforts were inclined to

collaborate with highly ranked institutions. Higher education in Brazil not only engaged in academic capitalism by sending students to countries where this regime reigns, but also by pursuing institutional prestige and conditioning their partnership building with highly ranked institutions. Although these actions involve treating education as a private good, these efforts are cast as serving the public good. Which in part, the Brazilian government achieved by offering scholarships to students in all regions of Brazil in public universities. Moving beyond a country-based perspective of this geopolitical transaction, exchange of money for prestige, is important to analyze the impact of academic capitalism at a global scale. Although this study analyzed two countries, one would expect such transactions to happen in other regions of the world. An understanding of how academic capitalism influences regional hubs, intersects with issues of prestige and global rankings requires researchers to broader analyze political and economic forces at a global scale and their impact within national higher education systems.

This research also expands academic capitalism in Brazil given the consequences of political and economic forces at the institutional level. In both cases, Brazil and the United States, features of academic capitalism characterized the changes in activities in HEIs. In Brazil, the standardization and formalization of internationalization activities increased the managerial capacity of the university. Having an international office in each academic department exemplifies the increased of managerial professions, a core characteristic of academic capitalism. Perhaps, the most interesting example of the adoption of academic capitalist characteristics is the implementation of an endowment model directly imported from the US. In the case of the United States, the most notorious examples of the influence of academic capitalism is international grant seeking and Master degrees modifications to attract more international students and increased department revenue. It is important to recognize the propagation of entrepreneurial practices not

only in international offices, but also in academic units. This research expands upon academic capitalism theory by exemplifying the regime of academic capitalism at a global scale with consequences at the institutional level.

Implications for Practice

This study has revealed a geopolitical transaction given political and economic forces influencing internationalization activities in Brazil and the United States. This interaction involves political matters as well as those related with prestige and global rankings. The international education community as well as policy makers and stakeholders, especially in the Latin American region, must consider this. Prestige and global rankings have become a hot topic recently. Little research has been done in the Latin American region regarding the issue of prestige and global rankings. The concerns regarding the raising importance of global rankings and prestige have various layers. Perhaps one of the main concerns have to do with new forms of colonialism. Ranking systems favor practices that imply westernization and even Americanization of higher education. While HEIs in Latin America should ensure high quality for their students and faculty abroad, they must recognize what they get in return, how the capacity building can really help overcome regional problems and increase efforts to overcome the main issues in the region, economic inequality, poverty, and corruption, among others. While getting the best of the best-ranked universities and in entering the worldliness race, Latin American HEIs must not forget their historical mission of serving the public good, marginalized populations, and nation building. Also, see their increased protagonist as an opportunity to challenge Western-centric curricula, theories, and issues. Brazilian HEIs must stand for solving regional common problems given the high demand of graduate education by Latin American

students. HEIs involvement in global rankings should not diminish the interregional support much needed in Latin America, given the shared issues of the region.

HEIs in Latin America and the US should adapt to new regional and international economic and political circumstances. HEIs in Latin America should consider US international offices entrepreneurial practices and ensure the students and faculty they send to this, and other developed countries get the experiences they deserve. At the same time, joint research projects for the advancement of local communities should be prioritized. US HEIs should act to avoid degrading universities internationalization goals to merely economic ones. US colleges and universities should embrace internationalization strategies more humanizing and Latin American HEIs must demand it if they prioritize interactions the US.

In addition to HEIs in Latin America and the US, professional bodies such as NAFSA or FAUBAI (Brazilian Association for International Education) could play an important role developing best practices concerning international education, revenue-generating activities, prestige and global ranking management. Professional bodies across the continent should serve as the main promoters of new ways of international cooperation with a higher level of social justice. International offices and HEIs would benefit from guiding regarding ethical considerations and information about current trends in international education given new circumstances at the international level. This would better inform governments and organizations that may take action in international education programming. Recently, the Brazilian government announced a new edition of Science Without Borders. This type of forums would inform of better ways to manage the program and the assessment of the beneficiaries, including institutions and students.

A final implication of this research impacts university presidents and provosts in both countries. Many universities in Latin America are prioritizing internationalization activities in search of better academic and research opportunities for their faculty and students mostly in developed countries, and as this study shows, mainly in the US. Presidents and provosts in both countries must dialogue to find a common concern that incorporates a new paradigm of what internationalization should be for both sides. Cooperative research, student mobility and other ways of internationalization should go beyond dollar exchange and prestige pursuit. Internationalization should mean cooperation for indigenous population development, solutions for common global concerns, community development and directing efforts to better the lives of those marginalized populations that do not even have access to higher education.

Implications for Research

This research has shown a geopolitical transaction resulting from political and economic circumstances in Brazil and the US. The money for prestige transaction presented in this study goes beyond traditional transactions as it involves a recent alternative economic force, prestige. Global rankings and prestige are of raising concern in HEIs around the world given the importance of their influence. Rankings are important not only because they inform students, researchers and institutions about the “best universities” in the world, but also because they have implications in public and financial resources. The geopolitical transaction undiscovered in this study might have consequences at the institutional and regional level. Furthermore, research should be conducted in other regions of the world where similar interactions could be taking place. Future research should focus on the consequences of these interactions at a global and national scale.

This research provided an insight of institutional practices configuration given the raising importance of global rankings. Changing practices and strategies based on prestige may have consequences at the institutional level. Implications for institutions, students and faculty members need to be addressed in future studies. Global rankings have different indicators to rate institutions. Universities in top positions are considered world class universities, and many institutions look for that distinction. Further research should seek to understand the consequences of world-classness pursuit in Latin America. Of especial concern in the Latin American region is the fact that most indicators in global rankings share a westernized vision of the university. The consequences of world-classness pursuit in Latin American institutions should be addressed in the eyes of the traditional community-serving mission that has characterized Latin American universities.

Future research should address the motivations and changing behaviors of US universities regarding the increasing entrepreneurial nature of their internationalization activities. The new conditions in which internationalization activities are evolving, not only in international offices but also in academic departments should be a matter of concern in the international education community. Given the declining tendencies of international student enrollment in the United States and the anti-immigrant climate, competition for the resources these students bring will intensify. It is unclear whether the adoption of entrepreneurial behaviors will interfere with the educational mission of US universities. Additionally, an in-depth analysis of funding mechanisms, new internationalization activities, and international research collaboration would allow for a better understanding of how internationalization activities are being carried out in the US. Given continuous economic strains and the open adoption of an entrepreneurial model in

regards to international education, a better understanding of geopolitical interactions with different regions should be addressed.

International education is changing rapidly given new political and economic circumstances around the world. Forces influenced by neoliberal ideals are shaping internationalization activities in higher education institutions worldwide. Academic capitalism seems to be a guiding regime not only for the United States but also in other important economies. New ways of colonialism are finding ways in strong economies in the world, like Brazil. The operation side of a colonial version of academic capitalism is introducing new forces shaping internationalization activities, such as rankings and prestige. If this regime continues, new mindsets and priorities will be established to develop internationalization activities. Stakeholders, leaders, practitioners, policy makers and educator should raise their voice in order to incorporate the less favored populations into these activities. Latin America as well as other regions in the world face inequality, poverty, environmental and other important issues that ultimately, could be helped resolved through innovation and research. The alignment between entrepreneurial and educational priorities might not be in conflict. Internationalization activities in HEIs around the world should recapture the educational mission of universities and re-humanize this activity that has favored the most privileged over time. It is time to incorporate new standards or indicators of world-classness that comprises social inclusion, equality, and civic engagement.

APENDIX A: INTERVIEW PROTOCOL

English Interview Protocol

This survey is part of a study designed to explore how the internationalization activities of Brazilian and US public universities is changing. Your responses will not be used beyond this study without your permission. This study is entirely voluntary. The identity of interviewees and their institutions will not be publically reported. You may withdraw from the study at any time.

Thanks for participating.

1. EN. What are your main responsibilities at the institution _____? / ESP.

¿Cuáles son sus principales reponsabilidades en _____?

If the main responsibilities are other than internationalization, focus on her/his international responsibilities.

2. EN. Define the international activities for which your office is responsible. / ESP.

Especifique las actividades internacionales de las cuales su oficina es responsable

- a. EN. Are the international activities that you just mentioned/described changing or have they changed during the last five years? How would you describe these changes? / ESP. Las actividades que acaba de descrinir están cambiando o cómo han cambiado en los últimos cinco años?

- b. EN. Who or what factors fostered the changes of the activities in your office? / ESP. ¿Qué factores o quiénes promueven los cambios en las actividades en su oficina?

3. EN. Who do you see as the main actors shaping the changes in your office now? /
ESP. ¿A quiénes ve como los principales actores que están gestando las transformaciones o cambios en su oficina ahorita?

4. EN. How do you anticipate your office's international activities changing in the coming five years? / ESP. ¿Cómo vislumbra los cambios que se darán en su oficina en los próximos cinco años?
 - a. EN. Who or what do you think will influence the majority of the activities and strategies in your office? / ESP. ¿Qué o quienes cree usted que influenciarán la mayoría de las actividades y estrategias de su oficina?

Probe -> If universities in developed countries are not discussed; ask if external motivations play a role in changing activities.

5. EN. How do you contact the universities that you intend to have relations with for the first time? / ESP. ¿Cómo contacta a las universidades con las que pretende colaborar por primera vez?
 - a. EN. Do universities in industrialized countries contact you first? If so, what are the conditions to collaborate in both cases? / ESP. ¿Las universidades de los países industrializados lo contactan primero? si es así ¿cuáles son las condiciones de colaboración en ambos casos?

6. EN. What are the conditions that you and the universities you contact establish to collaborate with you? / ESP. ¿Cuáles son las condiciones típicas bajo las que se establecen entre usted y las universidades con las que colabora?
 - a. EN. How do you negotiate the objectives of your office in contrast with the

objectives of your counterpart? / ESP. ¿Cómo negocia con los objetivos de su oficina en contraste con los objetivos de su contraparte?

7. EN. What conditions generally prevail in new projects between you and the university you collaborate with? / ESP. ¿Qué condiciones prevalecen generalmente en nuevos proyectos de colaboración entre ustedes y la Universidad con la que colaboran?
 - a. ENG. How do you or your supervisor consider funding petitions or a new collaboration project when a representative of a university in a developed country presents the project directly to you in person or via email? / ESP. ¿Cómo considera usted o su supervisor las peticiones de fondos o nuevos proyectos de colaboración cuando un representante de la Universidad del país desarrollado la presenta directamente en persona a usted?
 - b. EN. Who are the main players when negotiating new collaborations with a university? / ESP. ¿Quiénes son los principales jugadores cuando se negocian colaboraciones con alguna Universidad?
8. EN. How is the funding for new projects negotiated between you and the universities in industrialized countries? / ESP. ¿Cómo se negocian los recursos para nuevos entre ustedes y las universidades de países industrializados?
 - a. EN. Have you identified any kind of entrepreneurial activity in the universities that you collaborate with in industrialized countries? / ESP. ¿Ha identificado alguna vez alguna actividad emprendedora o de promoción en alguna Universidad con la que colabore en países desarrollados?
9. EN. To what extent do you consider local (national and local community needs) when

considering doing a partnership? ESP Hasta que punto considera las necesidades locales, nacionales e internacionales cuando realiza un acuerdo o una colaboración?

- a. Can you give me examples of international activities in which you have addressed local community needs? ESP. Me puede dar ejemplos de colaboraciones en las que haya habido alguna repercusión en la comunidad o se haya atendido alguna necesidad de la comunidad?

10. What factors do you consider when choosing an institution you want to partner with?

11. EN. What are the main positive and negative aspects that you see when collaborating on new projects with universities in developed countries? / ESP. ¿Cuáles son los principales aspectos positivos y negativos que usted percibe cuando colabora con universidades en países desarrollados?

- a. EN. What are the main positive and negative aspects that you think institutions in developed countries see when collaborating with your university? / ESP ¿Cuáles son los principales aspectos que usted cree las instituciones ven cuando colaboran con su Universidad?

Portuguese Interview Protocol

Esta pesquisa faz parte de um estudo destinado a explorar como as atividades de internacionalização das universidades públicas brasileiras e americanas estão mudando. Suas respostas não serão usadas além deste estudo sem sua permissão. Este estudo é inteiramente voluntário. A identidade dos entrevistados e suas instituições não será divulgada publicamente. Você pode se retirar do estudo a qualquer momento. Obrigado por participar.

1. Quais são as suas principais responsabilidades em _____?

2. Especifique as actividades internacionais em que seu escritório é responsável.
 - a. As actividades descritas acima estão mudando ou como eles mudaram ao longo dos últimos cinco anos? Como você descreveria essas mudanças?
 - b. Que fatores ou quem promovem mudanças nas actividades em seu escritório??
3. Quem são vistos como os principais atores que estão crescendo transformações ou mudanças em seu escritório agora?
4. Como você vê as mudanças que ocorrerão em seu escritório nos próximos cinco anos?
 - a. O que ou quem você acha que mais influenciam as actividades e estratégias de seu escritório?
5. Como você entra em contato com as universidades com quem você quer colaborar pela primeira vez?
 - a. As faculdades nos países industrializados contatam primeiro vocês? Em caso afirmativo, quais são as condições para a cooperação, em ambos casos?
6. Quais são as condições típicas sob estabelecidas entre você e as universidades com as quais trabalha?
 - a. Como negociar com os objectivos do seu escritório em oposição aos objetivos de sua contrapartida?
7. Quais são as condições geralmente prevalecentes em novos projectos de colaboração entre você e da Universidade com quem você vai colaborar?

- a. Como você avalia o seu supervisor as solicitações de fundos pra novos projetos colaborativos quando um representante do país desenvolvido se apresenta a você diretamente?
 - b. ¿Quénes são os jogadores diretores quando as parcerias são negociados com as universidades?
8. Como negociam os recursos para projetos novos entre você e as universidades dos países industrializados?
- a. Alguma vez você já identificou qualquer atividade ou promoção empreendedorista em uma universidade com a qual colabora dos países desenvolvidos?
9. Em que medida considera as necessidades locais, nacionais e internacionais ao fazer um acordo ou colaboração?
- a. Você pode me dar exemplos de colaborações em que tenha havido qualquer impacto na comunidade ou tenham frequentado alguma necessidade da comunidade?
10. Quais são os fatores que você considera ao escolher uma instituição com quem pretende cooperar?
11. Quais são os principais pontos fortes e fracos que você percebe quando se trabalha com universidades de países desenvolvidos?
- a. Quais são as principais características que você sente quando as instituições estão colaborando com a Universidade?

APENDIX B: CODES

The following codes and sub-codes were used to organize the information obtained in the interviews performed.

Political forces

- Past
- Current
- Left
- Right

Economic Forces

- Federal funding
- State funding

Institutional Strategies

- Change over time
- Influential
- Students
- Faculty
- Institutional (internal)

Rankings

- Protocols
- Importance
- STEM
- Prestige

Science Without Borders

- Students
- Institutional changes
- Economic factors

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