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Higher Education Systems and Institutions, Brazil

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Without Abstract

Synonyms

[Structure of higher education](#); [Expansion](#); [Financing](#); [Trends](#)

Definitions

The structure and organization of higher education system and institutions in Brazil.

Brief History

In Brazil, the introduction of a higher education system occurred later than elsewhere in the Americas, where the first universities were already established in the sixteenth century. Brazil remained a Portuguese colony until 1822, and formal education was the responsibility of Jesuits dedicated to the Christianization of indigenous peoples and to the education of children from the dominant class in royal schools.

King D. João VI took the first initiatives in higher education during the period that the Portuguese royal family, escaping Napoleon's invasion, took up residence in Brazil (1808–1820). After 1808, higher education institutions were established in Rio de Janeiro (military engineering, medicine), Salvador (medicine), and Recife and São Paulo (law). The system of higher education implanted by the Portuguese Crown was structured according to the educational reform measures that had been introduced by the Marquis of Pombal, minister under King D. José I (1750–1777). The first and major impact of this reform was the expulsion of the Jesuits from the Portuguese empire and the reformation of the traditional University of Coimbra in Portugal (Oliven [2002](#)).

Thus, in Brazil, higher education followed the model of intermediate professional units that comprised the University of Coimbra. These units began to operate as independent schools to prepare

professionals for public administration, the military, engineering, medicine, and legal affairs. Latter in the nineteenth century, another major influence came from France with its secular institutions, the *Grandes Écoles*, which were aimed more at teaching than at research and whose organization was based on a lifelong tenure chair. From the colonial period until the proclamation of the Republic (1889), all Brazilian higher education was provided by the state, thus public.

After 1850 under Emperor D. Pedro II, Brazil entered a long period of political stability and economic growth, which led to a gradual expansion of its educational institutions and the consolidation of a number of scientific centers, like the National Observatory, the National Museum, and the Imperial Geological Commission (Schwartzman [1992](#)). Until the end of the nineteenth century, there were only 24 institutions of higher education, with about 10,000 students. In the first two decades of the twentieth century, this number grew to 133.

During the period of the First Republic (1889–1930), the public debate focused on the need to create universities. In 1920 the University of Rio de Janeiro was founded, joining already existing schools under the same administration. It continued to be elitist, aimed more at teaching than research, while maintaining its academic emphasis on the professions (law, medicine, engineering, etc.). The debate surrounding the formation of universities was intensified with the founding of the Brazilian Academy of Sciences (1916) and the Brazilian Association of Education (1924) (Oliven [2002](#)).

In 1931, the Getulio Vargas administration (1930–1945) carried out a broad education reform. The first university law was enacted and remained in force until 1961. Under this law, a university could be public (federal, state, or municipal) or private and had to include three of the following academic programs: law, medicine, engineering, education, sciences, or languages. In order to overcome the traditional isolation of different schools, a Provost's Office was to establish the administrative connection between these courses. In 1937 the University of Rio de Janeiro included the School of Philosophy and was henceforth called University of Brazil. This university was supposed to provide the model for all other higher education institutions in the country.

The period 1930–1950 was one of growth and diversification. The political and economic elites in the state of São Paulo, already the country's economic hub, maneuvered to keep their autonomy from the central government and in 1934 had created their own university. The spirit of a revitalized system of higher education became clear with the founding of the University of São Paulo and, especially, its Faculty of Philosophy, Sciences and Languages, which employed many foreign professors, mainly from Europe (Schwartzman [1992](#)). In 1946, the first (private) catholic universities were founded in Rio de Janeiro and in São Paulo. The next year, the Holy See granted them the title of Pontifical universities.

During the 1950s, Brazil experienced a significant political, economic, and social moment. There was a change in the structure of Brazilian society with the progressive consolidation of an urban-industrial society. In politics, an ideology of nationalist development was rising inspired by a model of import substitution and the creation of new urban jobs in both the public and private sectors. Scientists connected to the Brazilian Academy of Science actively engaged in the fostering of technological development in the country, and in 1948, the Society for the Progress of Science was founded, a nonprofit organization aimed at advocating scientific and technological advances and educational and cultural development. In 1951, the National Council for Scientific and Technological Development (CNPq) was founded to promote the development of scientific and technological research by providing grants to universities, laboratories, and research centers. Also in 1951, the Coordination for the Improvement of Higher Education Personnel (CAPES) was established to enhance the quality of human resources within the higher education system.

In 1961, the first education law (LDB – *Lei de Diretrizes e Bases da Educação Nacional*) was enacted. It reinforced the previous traditional model of a university loosely comprised of a set of

professional schools focused on teaching. It also maintained lifetime tenure of university-chaired positions. In the same year, however, the University of Brasilia was founded, and the national capital was transferred there from Rio de Janeiro, and this was the first university that did not follow the traditional model. Rather, its structure was integrated and flexible, organized in the form of a foundation, and departments replaced chairs (Oliven [2002](#)).

Thus, the decades of 1950 and 1960 were periods of great political and cultural effervescence with profound social changes and a rapid modernization of the economy. The political dialogue surrounding Brazil's pathway of development was becoming radicalized, and the military coup of 1964 introduced an authoritarian development strategy with a major emphasis on economic internationalization. It is in this political context that the policies on education were readjusted, especially those affecting higher education. The government sought to modernize higher education and reform the university system. The introduction of graduate programs (master's and PhD) was accompanied by policies intended to develop the human resources needed to meet the national technological and scientific needs. The 1968 University Reform Law established the university as the preferred model of higher education, thus isolating the independent professional schools. This reform affirmed the integration of teaching and research missions and introduced the autonomy of the university with its specified powers. In addition, the traditional chair system was replaced by the department model, full-time contracts for faculty members were adopted, regulations for graduate programs were introduced, and undergraduate instruction shifted to the credit system (Schwartzman [2013](#)). Even if it aimed to become a general guide for the Brazilian higher education, this reform in fact impacted mainly the public universities and some Catholic universities (Cunha [1988](#)).

At this same time, enrollment growth opened access to higher education to middle-income groups. The Ministry of Education responded to the pressure for more places by allowing the multiplication of private independent schools with an exclusive teaching mission. In this sense, the 1968 Reform was paradoxical. On the one hand, it enabled the modernization of public universities under the ideal of large multifunctional institutions that integrated teaching, research and extension; on the other hand, it provided incentives for the expansion of the private sector, through a network of higher education for-profit institutions generally of lower quality (Durham [2004](#)).

A democratic government was restored in 1985, and in 1988 the new Federal Constitution was ratified (Brasil [1988](#)). The current structure of higher education in Brazil was formalized in the Federal Constitution of 1988 and legally recognized in the new education law (LDB) of 1996, under the auspices of the National Council of Education (Ranieri [2000](#)).

The Current Structure of Higher Education in Brazil

Brazil currently possesses a complex, diversified system of public and private higher education institutions (HEIs) that are officially classified according to two criteria – the administrative status and the academic organization (Neves [2002](#)). With regard to administrative status, HEIs may be public or private. Federal and state-public HEIs both offer tuition-free education, whereas municipal entities are organized as foundations and charge tuition. Private HEIs support themselves mainly by charging monthly fees, and they can be subdivided into community, denominational, not-for-profit, and for-profit. Community-owned HEIs appeared at the end of the 1980s as a specific model characterized as “public, non-state organizations.” They are strongly tied to their regions/local community oriented, focused on serving the region and the less endowed families, and are nonprofit. Denominational HEIs are maintained by religious organizations and are community-oriented and nonprofit organizations. The most important of these are the numerous branches of the Pontifical Catholic University, found in most Brazilian capitals. At the end of 1999, the government authorized

the introduction of private for-profit HEIs; they are subject to general commercial law with regard to fiscal and labor regulations (Sampaio [2011](#)).

The second criterion of classification is the academic organization that categorizes HEIs into universities, university centers, and nonuniversity institutions. Universities are required to engage in providing indicators of some research activity, teaching, and community outreach. At least one-third of their faculty must have a master's or Ph.D. degree, and at least one-third must be contracted full time. University centers are multicourse teaching institutions, which need not conduct research. They enjoy the autonomy to create new programs and new student vacancies. Nonuniversity institutions (including independent faculties, technological centers, and institutes) are in essence teaching institutions with no autonomy to approve new courses and vacancies; the National Council of Education must approve them.

Regardless of legal status and type of organization, all HEIs provide the same formal credentials. The standard 4-year undergraduate program provides the bachelor degrees; the 4-year teacher-training program earns the *licenciatura*. The technological courses, most of them lasting 3 years, can provide bachelor's, licenciatura, or technological degrees; the same happens with the distance courses, in different formats. At the graduate level, academic and professional master's programs have a duration of 2 years, and the doctorate is a 4-year program. The specialization programs (*lato-sensu*) vary in format, as to duration and type of course offered.

The Growth of Higher Education

The growth of higher education has not been the result of government planning but rather a function of the rapidly increasing demand for higher education mostly met by a dynamic private sector. In 2015, Brazil had 2,364 HEIs, of which 2,069 were private (87.5%) and 295 were public (12.5%). Among the private ones, 998 HEIs were for profit (42.1%), and 1,072 were non-profit (45.3%). The for-profit HEIs are primarily connected to one of the five large educational groups in Brazil traded on the national stock market – Estácio, Kroton (which are in the process of merging), Ser Educacional, Anima, and Laureate. Among the public HEIs, 107 are federal (4.5%), 118 state owned (5%), and 49 HEIs municipal (2.1%). Twenty-four HEIs are in the special category (1%). Of the total number of HEIs, 195 are universities (54.8% public); 140 are private university centers, and only 9 are public university centers; 1980 HEIs are independent faculties (83.7%), the great majority of them private (77.8%). Besides these, there are 40 technological institutes, all of them public (Table 1). **Table 1** Number of institutions and enrollments by type of higher education institution and administrative status (2015)

		Univer sity	Univer sity center	Indepe ndent faculties	Technologi cal institute	Total
Publi c	Institutio ns	107	9	139	40	295
	Enrollme nt	1,663,222	18,844	125,203	144,876	1,952,145

Private	Institutions	88	140	1,841	-	2,069
	Enrollment	2,609,933	1,338,958	2,126,261	-	6,075,152
Total	Institutions	195	149	1,980	40	2,364
	Enrollment	4,273,155	1,357,802	2,251,464	144,876	8,027,297

Source: INEP/MEC ([2015](#))

Academic quality varies widely between the public and private HEIs as well as within each category. The public federal and state universities can be very diverse. Some are outstanding as research universities, offering both teaching and research and maintaining high-quality graduate programs. The faculty members at these institutions are highly qualified with a doctorate and have full-time contracts. Other public universities are mostly oriented toward the undergraduates, where the faculty members usually have full-time contracts but fewer possess a PhD degree. Variation is even greater in the private sector. There are a small number of elite private institutions, including the Catholic universities and schools specialized in business and economics, which combine academic strength and institutional entrepreneurialism. On the other hand, there are many private mass-production universities and small independent faculties, and the vast majority of them are lacking in quality as defined by the low qualifications of the teaching staff and lack of proper learning conditions. Enrollment in undergraduate programs (excluding online until 2013) according to the type of administrative organization for the period from 1960 to 2015 can be seen in Figure 1 below. From 1960 to 1970, enrollment rose from 93,000 students to 425,478, and the percentage of students in public schools dropped from 56% to 49%. By 1975, undergraduate enrollment reached 1,072,548 students, with about 38% in public institutions. After a period of slow growth from 1975 to 1996, a rapid expansion of undergraduates occurred overwhelmingly within the private sector. For example, enrollments increased from 1,759,703 students in 1995 to 6,379,299 in 2010 and then 8,027,297 in 2015. The share of federal public HEIs in undergraduate education fell significantly, as total enrollments expanded. While the public sector remained limited in size because of its high costs and stronger academic requirements, the private sector rapidly responded to the growing market demand. As a result, today the public sector only covers 25% of the enrollments, the rest being concentrated in the private institutions (Fig. [1](#)).

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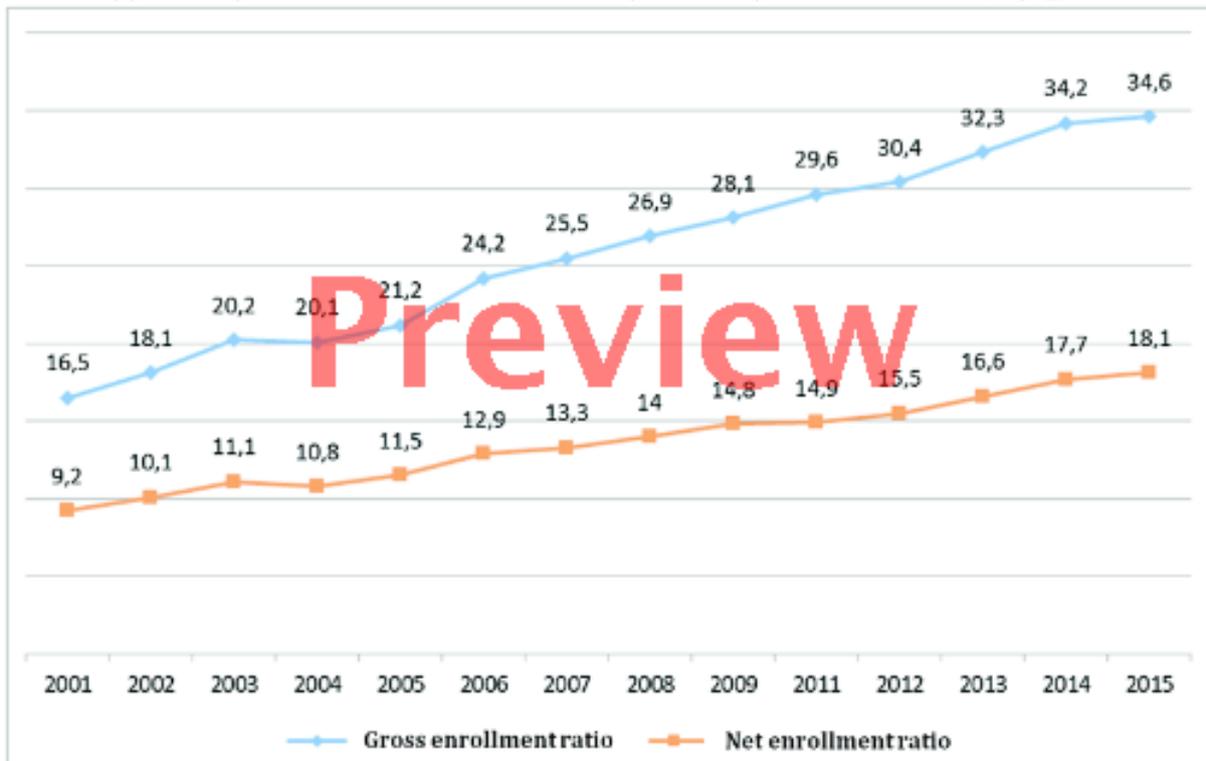
Fig. 1

Growth of enrollment in presential undergraduate courses according to administrative status (From 2013 it includes long-distance courses)

As Table [1](#) indicates for 2015, universities had 4,273,155 students (53% of the total); university centers had 1,357,802 students (14%); institutes of technology had 144,876 students (2%); and independent faculties had 2,251,464 students (28%). In recent years, distance learning has expanded rapidly in higher education. In 2006 it accounted for 4% of the undergraduate enrollment (207,206 students), but by 2010 it had grown to approximately 15% of total enrollments (992,927 students),

and in 2015, it represented 17% of the enrollments (1,393,752 students). Of all students enrolled, 57% are female, and for those who finish their programs, almost 61% are female. At most of the public HEIs, the courses are offered in the daytime, while in the private HEIs, 70% of the courses are offered in the evening.

Despite this rapid expansion, the net rate of enrollment (the percentage of the population in the age group from 18 to 24 enrolled in the level of education appropriate to their age group) remains modest at 18% in 2015. On the other hand, the gross enrollment rate (considering total enrollments at a given level of education over the population in the age group appropriate to this level) reached 34.6%, which suggests a significant number of adults seeking an undergraduate education (Fig. 2).



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Fig. 2

Growth of gross and net enrollment ratios in higher education in Brazil (2001–2015) (Source: INEP/MEC [2015](#))

The expansion of higher education has followed a pattern of strong emphasis on lower-cost programs, namely, those in the human sciences and applied social sciences. In Brazil, the professions are formally regulated, but there are many opportunities for public sector employment (and even private sector employment) for anyone with a higher education degree in any program. Brazil is a society in which the service sector predominates and in this context the preferred degrees in, for example, law and administration are seen as having wide applications and thus offer an attractive entrée into the job market. The great concentration of enrollment occurs in the social and applied sciences (41.6%). However, the transformation of Brazil's productive economy, together with positive economic growth experienced by the country between 2005 and 2013, has increased the demand for engineering and technical professional degrees. Enrollment in engineering programs more than doubled over the decade beginning in 2000 in response to market demand (Neves [2015](#)).

The total number of faculty working throughout the higher education sector in Brazil was 490,377 in 2015. At the public HEIs, 57.9% have a PhD and 28.2% a master's degree, while 13.9% have some sort of specialization. At the private HEIs, only 20.8% of the academics have doctorates, 48.2% have

a master's degree, and about 31% have some degree of specialization. At public HEIs, 83.8% of the teachers work full time, while at the private HEIs, only 24.9% of the teachers do. At the largest and most prestigious HEIs, the number of Afro-Brazilian professors, on average, does not reach 1% of the total faculty.

Through a deliberate public policy, Brazil has managed to consolidate a vigorous national system of graduate programs that currently covers all fields of knowledge. This success is due to conscious planning, uninterrupted public funding, and the institutionalization of a systematic evaluation process, as well as a policy that withhold public support for graduate studies abroad from the end of the 1980s up to 2010. The development of graduate education generated a profoundly influential renewal of Brazilian higher education and fostered the institutionalization of research activities within universities, especially in the public ones. The National Graduate Plans (PNPGs) were a crucial element in building the architecture of this system. They set the policy and goals for graduate education. From the mid-1970s up to the present moment, there have been five PNPGs.

The Coordination for the Improvement of Higher Education Personnel (CAPES), within the Ministry of Education, is the agency responsible for graduate education policy and for the expansion and evaluation of all graduate degrees throughout the country. CAPES has been responsible for the National System for the Evaluation of Graduate Education since 1976. Three axes characterize this evaluation: (a) it is done by peers recognized for their distinguished intellectual reputation; (b) it is meritocratic in nature; and (c) it associates acknowledgment with support, including scholarships for students. The evaluation assigns each program a score (1–5 for independent master's programs and 1–7 in the case of master and doctoral programs). Only programs that scored at least 3 in the evaluation carried out every 4 years are allowed to continue operational (Brasil [2016](#)).

In a system of higher education with a preponderance of private institutions, graduate education has been mostly concentrated at public universities since the beginning. In 2015 there were 3,841 master's programs with 149,316 students and 2,095 doctorate programs with 102,365 students. Of the master's degree students, a third received financial fellowship support, as did 42% of the doctoral students. Since 2013, about 50,000 master's and 15,000 PhDs have been completed annually (Brasil [2016](#)).

Regulatory Framework

The regulatory framework of higher education has undergone significant changes since the 1980s. The main instruments that define the structure and functioning of higher education are the Federal Constitution of 1988, the Law of National Education Bases and Guidelines of 1996, and the National Council of Education of 1995. Besides these, the regulation of Brazilian higher education is comprised of many decrees, administrative rulings, resolutions, transient rules, constantly changing tools for evaluation, and technical notes (Ranieri [2000](#)).

The Federal Constitution attributes a juridical identity to higher education. The Federal Constitution guarantees didactic-scientific, administrative, financial, and patrimonial management autonomy for the universities (actually there is no financial autonomy in the public universities, except for the three universities owned by the State of São Paulo). It also imposes tuition-free education at the public HEIs and the use of tax revenue to maintain and develop public education; and it guarantees private enterprise participation in the supply of higher education within the limits of the law but forbids the use of government resources to fund private institutions. However, the constitution does permit public funding for community-owned, confessional, and not-for-profit institutions. There is a constitutional provision establishing that the federal and regional governments should expend at least 18% of their

tax revenues in education. In the case of the federal government, almost 70% of these resources are spent in supporting the federal sector of higher education (Brasil [1988](#)).

The education law (LDB) defines goals and the general framework for courses and programs, the types of HEIs, and the competencies of the government agencies. The law also determines the range of university autonomy. Brazil, being a federal state, has HEIs under control of the federal, state, or municipal levels. The federal system includes those HEIs maintained by both the federal government and the private sector. All such public federal and private institutions are subject to the laws and regulations of the Ministry of Education and the National Council of Education. The state and municipal HEIs are outside the purview of the federal system. However, they are still subject to federal laws and standards, when they apply for federal public resources, like scholarships and research funds (Brasil [1996](#)).

The main government agencies which coordinate, control, regulate, and evaluate the public federal and private system of higher education are the Ministry of Education (MEC) and the National Council of Education. Two other important agencies in the sphere of coordination and evaluation of higher education are the abovementioned Coordination of the Improvement of Higher Education Personnel (CAPES) and the National Institute of Educational Studies and Research (INEP), in charge of performing evaluation of both the undergraduate courses in the federal and private sectors. Through these agencies, MEC retains the prerogative for formulating policies, development and support programs, regulation, inspection, and evaluation models. It is also responsible for funding all the federal public HEIs and the inspection and evaluation of the federal and private HEIs. This form of coordination centralized under a single-state agency has existed since the first colleges were established in the country (MEC [2016](#)).

The powers of the National Council of Education are normative and deliberative. The Council of Higher Education advises MEC, helps elaborate the National Plan of Education and its implementation, analyzes issues regarding the application of legislation, and approves the by-laws of universities and community colleges. The approval of statutes for non-university institutions is a task that pertains solely to MEC.

In 2003 the government established the National System of Evaluation of Higher Education (SINAES) to define the national process of evaluation for undergraduate courses and to monitor the academic performance of undergraduate students. In Brazil, there is no accreditation of HEIs, but regulation, based on evaluation processes. SINAES is an integrated system responsible for coordinating evaluation procedures comprising the Institutional Evaluation, the Evaluation of Undergraduate Courses, and the National Exam of Student Performance (Barreyro and Rothen [2014](#)). There is a regulatory tradition that heavily burdens the courses and HEIs. Courses are authorized (in the case of institutions that do not have university autonomy) and approved (which makes the diploma issued by the institution legal), and the HEIs need an institutional certification to operate. Approving a course or certifying an institution, as done in Brazil, is not an accreditation but rather a regulatory act that only serves to legalize the course and the institution.

Financing

According to data from OECD (2013), Brazil invests a total of 10.7% of its GDP in education (all levels). Out of this total, 20% of the resources are allocated to higher education. Among the funds invested in higher education, 45% are private and 55% are public.

Financing of higher education is different between the public and private sectors. The federal institutions are maintained with funds from the National Treasury. These institutions offer tuition-free education at undergraduate and graduate levels, and only 3.5% of their revenues comes from other

sources. The Ministry of Education establishes individual budgets for each federal university based on the previous year's allocation of specific budget items, covering expenditures on personnel (active and retired), current expenditures, and investments. The distribution of these funds traditionally follows a historical matrix in which the most important item is personnel – i.e., the faculty and staff payroll (Chaves [2015](#)).

State-owned HEIs also offer tuition-free education at undergraduate and postgraduate levels. For almost all state-owned universities, the main sources of revenue of these institutions are the budget allocations in state budgets, which usually follow the historical matrix, as described for the federal universities. The São Paulo state universities are funded by a fixed percentage (11%) of the state main tax revenue, a tax imposed over all goods and services traded inside the state. These resources are transferred en bloc to the universities, and the institutions have autonomy to decide where it will be used. The municipal HEIs are funded with money from the municipal budgets and from tuitions charged for education.

It is important to note that higher education funding does not cover the direct costs of research, nor is usual for HEIs to reserve funds for covering other costs of research than human resources. Funding research, both in public and private sectors, is done by federal and state level specialized agencies, usually through competitive tenders and calls. Some of these tenders focus thematic areas; others cover more broadly research in all fields of knowledge. These agencies also offer a number of competitive scholarships for academics and students interested in engaging in research.

In the private sector, funding comes from tuition charged for education. Tuitions vary significantly depending on the region, on the type of course (medicine, dentistry, and engineering are more expensive, while management, economics, pedagogy, and social sciences are less expensive), and on the type of institution (university, university centers, and independent faculties). However, there are many indirect sources (fiscal and social security exemptions and tax waivers, the ProUni- University for All Program) of public funds for private HEIs and direct sources (educational loans/FIES). The expansion, and even the maintenance of the current level of enrollment in the private sector, has only been possible due to the existence of these modalities of public funding for the private sector. The main public programs for student funding at the private sector are a student loan program with preferred interest rates (FIES) and the scholarship-based University for All Program (ProUni). Both help finance higher education tuition for low-income students at private HEIs (Neves [2009](#)).

In Brazil, the private sector grew as a demand-driven sector, receiving students with poorer academic profile that are not prepared to pass through the demanding entrance examinations in the public sector. In this scenario, student loans under reduced interest provided by the federal government, known by the acronym FIES, and the scholarships provided by the abovementioned federal program ProUni are an essential instrument for students from low-income families to have access to higher education. In 2014, about one-third of the university students enrolled in the private sector benefited from some type of public financing. About 41% of the students enrolled in undergraduate courses had financing from FIES and 22% from ProUni scholarships. The expansion and even the maintenance of the current level of enrollment in the private sector have only been possible because of these modalities of public financing (INEP [2015](#)).

Contemporary Trends

In Brazil in the last 25 years, governments have formulated higher education policies in the form of ad hoc measures and programs targeting specific issues within the system of higher education:

(a)

Access to higher education was expanded mainly by FIES and ProUni programs. Since 2009, access to entrance positions in the federal universities, in many state universities, and in some private institutions is organized through a national exam offered once a year, known by the acronym ENEM (Exame Nacional do Ensino Médio) and the Unified Selection System (SISU). ENEM was launched in 1998 to evaluate the performance of students finishing high school and indirectly measure the performance of high school learning. From 2009 onward, it was linked to SISU and became the major national exam for access to higher education.

(b)

A mandatory policy of affirmative action for federal institutions reserving 50% of all entrance positions in the public universities for students from public basic education (which in Brazil attend mostly children from low-income families), with a proportional distribution of the places children from Afro-Brazilian families, and indigenous.

(c)

Public and institutional level policies aimed at internationalization are a novelty in Brazilian higher education. Up to the beginning of the 2010s, this issue was a target for science and technology policies but hardly a preoccupation for university authorities. It was only in 2011, with the launching of the Science without Borders program, which target sending 100,000 students abroad, that universities attention was directed to this area. In most universities, especially in the better endowed private HEIs, internationalization is usually understood as supporting students' internship abroad. A number of institutions have also plans for attracting foreign students. Only a small number of universities understand internationalization as the integration of their research effort into international networks, by improving the infrastructure and supporting research groups in relevant areas so that they can attract doctoral students and postdocs. The motivation is derived both from government incentives, particularly initiatives within the sphere of cultural and academic diplomacy, and the exposure of the university authorities to the international debate created around the dissemination of the international rankings of excellence and the "world-class universities".

However, no matter how narrow one understands internationalization, there are many obstacles to overcome. The data of the last census of higher education (2015) show that so far there are very few foreign students at Brazilian HEIs. Brazil has 15,605 foreign students at the HEIs, of which 174 different nationalities represent only 0.2% of the total enrollment. This number comprises, basically, students from Portuguese-speaking African countries and from South American countries. CAPES and CNPq, federal agencies, and many state level research agencies, the FAPs, maintain programs to support academic exchange and studies abroad, especially at the graduate level. Nevertheless, from the end of 1980s up to 2011, most of the academic exchanges were confined to postdoc internships and senior academics already established in secure positions, mostly in the public sector. Undergraduate scholarship was something not heard of, and graduate education demand was supposed to be answered by domestic programs. Studies abroad were expensive, and the agencies maintained that the domestic system of graduate education was of enough quality for the demands of qualification coming from the university system. These policies made Brazil a highly closed system. In 2011 this picture changed with the launched of the Science without Borders Program, by the federal government. The program had a goal of supporting internationalization of the Brazilian universities, through the international mobility of undergraduate and postgraduate students in science, engineering, and technological fields. Of the 100,000 scholarships awarded between 2011 and 2016, about 79% were intended for undergraduate students. Aside from the fact of being highly expensive,

the program had some problems, mostly because it was centrally implemented, counting with a small participation of the universities. The program was closed in 2016. However its main legacy is a new institutional awareness regarding the internationalization of higher education (MEC [2016](#)).

Mergers in the Private Sector

In the 1990s, the horizontal expansion of the private sector prevailed, through the increase in the number of small- and medium-sized institutions. Since 2005 there is a movement to concentrate the market mergers of educational groups and HEIs (Sampaio [2011](#)). The activities encompass the purchase, sale, and merger of HEI and the organization of new companies with shares on the stock exchange. By opening their capital, streamlining costs, and employing vigorous marketing, they demonstrate a clear tendency toward more entrepreneurial management. Operating publicly in the stock exchange and attracting international investors, the education groups control several HEI and now account for about a third of total enrollment in the private higher education sector in Brazil (Corbucci et al. [2016](#)).

Concluding Remarks

In the last 40 years, the HE system in Brazil has been built a public/private dual system. In the public side, all HEIs are basically funded by the state, while in private education, all costs are paid by students or their families. While public universities traditionally were more selective and tended to cater for the best students from middle-class families, the private HEI were mostly composed of nonuniversity demand-driven institutions catering for children of low-income families that could not afford to be prepared to face the highly difficult entrance examinations organized at the public sector. However, the recent trends blur these traditional lines of divide: first, there is a differentiation inside the private sector with a new profile of HEIs targeting students from affluent families. These elite private institutions are more entrepreneurial and offer some innovative programs tailor-fit to special niches in the job market. On the other hand, the affirmative action policies adopted in the public sector broadened access to public sector. Finally the interlinking between public and the private sector is reinforced by the new mechanisms for supporting access to higher education through the enlarged private sector, as described above.

Finally, one should note that the growth of enrollment is evident in Brazilian higher education; however, it is insufficient when faced with the size and expectations of the Brazilian population. The persistence of enormous social inequalities in terms of access and permanence at the higher education level remains an urgent challenge. Thus, the great recurrent challenges are to manage the expansion of enrollment with democratization of access and diversification of supply in order to meet the demands of the economy and society and to guarantee the excellence of the training offered with an adequate financing equation for expansion.

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