

The Influence of Stock Exchange Companies in the Quality of Brazilian Higher Education

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ABSTRACT: *In Brazil, an increasing 75 percent of Higher Education is currently controlled by private entities, from which nearly 70 percent is owned by stock exchange companies, which have become prominent over the past two decades. However, there is little information on whether the presence or absence of stock exchange companies affected the quality of education. Therefore, this article investigated the education quality assessment system, the National Higher Education Assessment System (SINAES), and the National Student Performance Exam (ENADE). We also conducted in-depth interviews (N=9) with experts on the subject and grasped relevant nuances. Findings pointed out evidence that the entry of stock exchange companies did not improve the quality of higher education over the past decades. (i) Low remuneration of professors, (ii) more significant concern with the number of enrollments and not graduating students, (iii) more significant concern with returns for shareholders instead of the quality of education standards, and (iv) absence of a regulatory agency for the sector were some of the shreds of evidence pointed out as causes for the poor influence of the stock exchange companies in quality of the Brazilian Higher Education, discussed in this work.*

KEYWORDS: brazilian higher education; quality of education systems; national agency for higher education.

INTRODUCTION

This article investigates whether publicly traded companies' participation influenced the Brazilian higher education evaluation system. (Sgussardi, 2014), which aims to measure quality, influencing the models of operation of Higher Education Institutions (HEIs), leading to a proposal to create the National Agency for Higher Education (NAHE) as a contribution to the decentralization of the Brazilian system.

The work bridges a research gap in Brazilian Higher Education, and its contribution, according to Corley and Gioia (2011), can be understood as (i) incremental and (ii) theoretical. Incremental because it adds new perspectives to the existing epistemology on the theme and theoretical because

it investigates, according to Whetten (1989), the time and contextual factors that delimit the boundaries of generalization and contribute to the increase in extension of the theory.

The Evaluation evidence an instrumental profile, aiming to expand and improve the quality of institutions, in addition to assisting in the allocation of resources, to policymakers in the definition of public educational policies (Polidori, 2009) and the control of expansions of courses and entry of publicly traded companies in Brazilian higher education (Curi, 2011; Keys, 2010). The evaluation of quality in the educational process is not a current theme. Still, it has been a critical factor in higher education in Brazil due to the new challenges imposed by legislation, the labor market, and technological advances. When well conducted, the external evaluation produces significant results, allowing higher education institutions to improve by comparing their performance with that of other similar institutions. Moreover, the assessment also informs students, their families, and future employers about the quality of the various courses; it allows the public sector to target its resources better and enables underperforming studies to be identified and closed or driven to adjust (Araujo, 2021).

The most remote literature already pointed to the maintenance of evaluation as a central aspect of educational policy, particularly in the production of improving the quality of education, to the extent that it could detect characteristics that would enable significant changes in the context of institutions (Franco, 2004; Pacheco; Ristoff, 2005). Furthermore, Cury (2003) said the evaluation would increasingly impact national education organizations.

In the educational arena, quality has become a subject of great importance in higher education since the 1980s, transmuted directly from the production and business area to this context (Newton, 2002). However, the expression “quality in education,” according to Davok (2007), admits various interpretations. Here, a quality education ranges from the one that enables the compelling mastery of the contents, or the one that allows the acquisition of scientific or literary culture, to the one that develops the ability to serve the productive system or even the one that promotes the critical spirit and strengthens the commitment to transform the social reality.

The practices of higher education evaluations, which aim to measure quality, influence the models of functioning of higher education institutions (HEIs). Their courses have taken a prominent place in the educational guidelines. Consequently, there is a consensus that higher education courses and other levels should be submitted to external evaluations. However, how this assessment should be made and how these results should be disclosed are still subject to controversy (Sampaio, 2014).

The Brazilian institutional evaluation system preserves a centralizing and controlling bias of the state for most of its history, which feeds the regulation of higher education by the public power, centered on the form itself (Andion, 2012). The government evaluates, regulates, and supervises courses and HEIs concomitantly, establishing a cycle that feeds back. The theme of evaluation of higher education in Brazil has been getting or taking shape for a few years, previously restricted to the control of the opening of courses and university institutions in the private sector since the public sector is directly regulated by the state and depends on its funding (Nunes, 2007).

In Brazil, the National Institute of Educational Studies and Research Anísio Teixeira (INEP, 2015), linked to the Ministry of Education (MEC), conducts the entire evaluation system of institutions and higher education courses, in addition to producing indicators and information system that subsidizes public policies and regulatory and supervision processes. This work ensures data transparency on the quality of higher education for society. In addition, the National System of Evaluation of Higher Education (SINAES) conducts evaluations of institutions, courses, and students (Sampaio, 2014). This work is done through the on-site assessment of the National Examination of Student Performance (ENADE), which evaluates the performance of undergraduate students and the professional profile of each course concerning the curricular contents, skills, and competencies acquired throughout the training. The course graduates participate in ENADE, taking a general training test and specific training and answering a student questionnaire. Participation in the exam is mandatory for students to grade. In addition, other indicators are produced from the on-site evaluations carried out by the expert committees of the Bank of Evaluators of the National Higher Education Evaluation System (BASIS).

This evaluator database comprises higher education teachers trained to evaluate institutions and higher education courses. The evaluations aim to verify teaching dimensions, especially those related to didactic-pedagogical organization, tutorial faculty, and infrastructure, as stated in the Institutional Development Plan (PDI) and the Pedagogical Course Project (PPC).

Finally, this article addressed in detail (i) the quality standards of Brazilian Higher Education (how the education is measured, what are the standards, and by what means the Ministry of Education evaluates the quality and performance of education in Brazil); (ii) the ranks of higher education in Brazil, highlighting the stock exchange companies influence in the quality of education. Items (i) and (ii) were accomplished through archival research on the Government database. (iii) how the stock exchange companies influence the quality of higher education in Brazil. Ultimately, item (iii) was accomplished through in-depth qualitative interviews with education experts, as described exhaustively in the upcoming section.

METHODS AND RESEARCH LIMITATIONS

This article addresses the influence of the stock exchange companies on the quality of Brazilian Higher Education through qualitative research. The inductive rationale and interpretivistic approach were applied to the study through multiple methods approach, combining (i) archival research and (ii) qualitative in-depth interviews, whereas the secondary data from the Brazilian Ministry of Education database and the primary data were collected from N=9 experts in the sector. The interviews are supported by Goffman's dramaturgical theory (1959, 1961), in which parties act in the social interactions (e.g., interviews) as a drama. Furthermore, the raw data were transcribed, coded, and analyzed, as described in the following paragraphs.

Firstly, a purposive sampling strategy was adopted because we believe the quality of the answers is more relevant than their quantity for this research. Moreover, some aspects and nuances of the quality of Brazilian Higher Education cannot be assessed through a Likert scale or any other statistical

approach. Therefore, this exploratory research intended to grasp some nuances and subjectivities of the entrance of the stock exchange companies regarding the quality of Brazilian Higher Education once these companies are not even listed among the 30 highest-ranked quality index IGC currently (see Table 1). Therefore, we decided to investigate through qualitative inquiry why such companies had a poor performance in the quality of education over the past two decades.

Secondly, a Research protocol was designed containing warm-up questions and a semistructured questionnaire with four open questions as follows: (i) What were the factors that, in your opinion, contributed to the entry of stock exchange companies into Brazilian higher education? (ii) How, in your opinion, did the market react to the entrance of these companies? (iii) How do these companies currently position themselves in the market? (iv) What is the impact of these changes on the quality of higher education? The interviews were designed to take 45 min to one hour. Furthermore, all the interviewees were assured: (v) the confidentiality of information disclosure for ethical purposes; (vi) the freedom to interrupt the interview at any time, without any justification; (vii) access to data transcription; (viii) formal quotation acceptance.

Thirdly, N=9 experts in Brazilian Higher Education were chosen, abiding by the following selection criteria: (i) all interviewees should have had at least five years of previous experience with Brazilian Private Higher Education; however, six interviewees - three professors and three managers (66 percent of the total interviewees) had had more than 20 years of experience in higher education, when the interview took place; (ii) all interviewees should have had experience with Stock Exchange Companies that entered the Brazilian Higher Education; (iii) all interviewees should be Brazilians; (iv) all interviewees should be alternatively (a) professors; (b) faculty members including managers or (c) students. The N=9 interviewees hereafter referred to as I1 to I9 were invited face-to-face followed by e-mail invitation, with a 100 percent response rate. Finally, in the interviews, three interviewees were professors, three faculty members, and three students, attending all criteria established. The rationale behind the requirements is to avoid elite bias (Myers, 2007) and to present different and richer perspectives on the phenomenon under investigation.

Then, data were collected via synchronous chat meetings and video recorded via the Zoom® virtual chat platform. Primary data were collected in Brazilian Portuguese, the native language of all the interviewees, and then transcribed and translated into English. The interviews were performed in quiet places, mostly from home offices. Direct contact with all the interviewees was avoided due to the sanitary restrictions regarding the coronavirus pandemic, currently in the third variation. Therefore, there were no significant distracting noises or eventualities registered, such as interruptions, for instance. Moreover, the interviews lasted 45 minutes on average, as planned.

Next, the raw data was coded in waves, following Miles, Huberman, and Saldaña (2014) and Saldaña (2013). Next, (i) Structural, (ii) description, and (iii) in vivo coding were applied to the raw data. The interviewees (I1 to I9) authorized direct citation, preserving their identities for compliance and ethical reasons. Finally, the raw data were analyzed through content and cluster analysis, following Girbch (2012) and Miles Huberman and Saldaña (2014).

In addition, this research is limited to the Brazilian Private Higher Education, associated with the entrance of the stock exchange companies. Therefore, Brazilian public, fundamental or middle education, and private higher education in different countries are not part of this research and should be investigated in separate studies. Before discussing the influence of the entry of the stock exchange companies on the quality of Brazilian private higher education, it is necessary to disclose how the quality evaluation process works. Therefore, the following section addresses the National Higher Education Assessment System (Sistema Nacional de Avaliação do Ensino Superior - SINAES), including (i) regulatory aspects, (ii) evaluation, and (iii) regulation process.

NATIONAL HIGHER EDUCATION ASSESSMENT SYSTEM (SINAES)

In this section, we analyze the regulatory aspects; Evaluation and regulation process, and the organizational structure for the review of the Brazilian Higher Education Assessment System (SINAES), as illustrated in Figure 1, as follows:



Figure 1 SINAES. Source: Brasil, 2009, p.147

Observe in Figure 5 that all institutions aforementioned are subordinated to the Ministry of Education, such as (i) SESu - Secretariat of Higher Education, responsible for planning, guiding, coordinating, and supervising the national higher education policy; (ii) CNE –National Council of Education, which

mission is to democratically search for alternatives and institutional mechanisms that enable, within its sphere of competence, to ensure the participation of society in the development, improvement, and consolidation of quality national education; (iii) State Councils - State agencies responsible for defining standards that should be followed in the educational area. These standards must follow the guidelines proposed by the Ministry of Education (MEC) and the National Council of Education (CNE); (iv) INEP - The National Institute of Educational Studies and Research Anísio Teixeira has the mission to subsidize the formulation of educational policies of the different levels of government to contribute to the economic and social development of the country. In addition, (v) Capes - Coordination of Improvement of Higher Education Personnel has the task of supporting universities through their programs, expanding and consolidating *stricto sensu* graduate studies in all Brazilian states. Finally, observe that INEP is responsible for issuing the national education facts and figures annually. SINAES is also regulated by Ordinance No. 2051/04 (Brazil, 2004), consisting of three main components: (a) evaluation of institutions, (b) courses, and (c) students' performance, described as follows:

(a) Evaluation of institutions. The basis of SINAES is institutional evaluation in its internal (self-assessment) and external dimensions. The main objective is to verify how the HEIs are constituted and what capacity to serve the academic community in all its scopes, highlighting the self-assessment directed in each HEI by the Evaluation Commission (CPA).

(b) Evaluation of the courses. It consists of the external evaluation carried out by multidisciplinary teams of specialists, to which an institutional evaluator is joined. This axis articulates the regulatory processes (authorization, recognition, and renewal of praise). The evaluation of the courses is carried out by taking into account three dimensions: didactic-pedagogical organization, faculty members, and physical facilities.

(c) Evaluation of the students, carried out by the National Student Performance Exam (ENADE), provides information on the students' assessments, aiming at formulating public policies.

The main objectives of the evaluation involve improving the merit and value of institutions, areas, courses, and programs, aiming to improve the quality of higher education and guide the expansion of supply, in addition to promoting the social responsibility of the HEI, respecting the institutional identity and autonomy of each organization. The disclosure covers information instruments, such as census data, registration, and the Preliminary Course Concept (CPC), which evaluates the course on a scale from 1 to 5. Courses that obtain CPC 1 and 2 will be automatically included in additional audits (INEP, 2015). In the other cases, courses with a concept equal to or greater than three are eligible for additional audits. The courses with concept 5 are considered courses of excellence and reference. The grades are compiled of (i) ENADE concept (students' performance in the ENADE test); (ii) Indicator of Difference between Observed and Expected Performance (IDD); (iii) Faculty (information from the higher census on the percentage of masters, doctors, and work regime), (iv) Students' perception about their formative process (news from the ENADE student questionnaire) and the (v) General Index of Courses (IGC) that is constructed based on a weighted average of the grades of the undergraduate and graduate courses of each institution. Thus, it synthesizes the quality

of the same educational institution's undergraduate, master's, and doctoral courses in a single indicator. The IGC is published annually by INEP/MEC immediately after the disclosure of the results of ENADE.

Dimensions and leading indicators contained in the SINAES instruments:- These are the primary indicators used by SINAES: (i) didactic-pedagogical organization; (ii) faculty and mentoring; (iii) infrastructure; (iv) institutional planning and evaluation; (v) institutional development; (vi) academic policies; (vii) management policies; (viii) physical infrastructure, described as follows:

(i) Didactic-pedagogical organization: Educational context; institutional policies; course objectives; curriculum; teaching methodologies; student support; internship; teacher-student interaction; teaching and learning assessment; conformity analysis between PPC and DCN; participation in the creation of the PPC.

(ii) Faculty and tutoring: Analysis of the NDE (Structuring Teaching Center); performance of the coordinator; teaching degrees; teaching experience; the number of teachers; collegiate; and scientific, cultural, artistic, or technological production.

(iii) Infrastructure: Classrooms and teachers; various facilities; computer equipment; bibliography; periodicals; laboratories; ethics committees.

(iv) Institutional Planning and Evaluation: Institutional evolution; project and institutional self-assessment process; community participation in self-assessment; dissemination of self-assessment results; self-assessment reports.

(v) Institutional Development: Institutional mission, goals, and PDI; coherence between PDI and teaching, research, and extension; coherence between PDI and social inclusion, sustainability, diversity, economic and social development, affirmative actions, and internationalization actions.

(vi) Academic Policies: Teaching policies and academic-administrative action for undergraduate, graduate, research, extension, and dissemination of research; communication between the institution and internal and external community; student service program; follow-up of graduates; technological innovation and intellectual property.

(vii) Management Policies: Policy of teacher training of the administrative-technical staff; academic record; financial sustainability; institutional management; career plan and faculty management, and the relationships between them.

(viii) Physical Infrastructure: Administrative facilities; classrooms and teachers; auditoriums; CPA infrastructure; sanitary facilities; library; computer room; laboratories; space of coexistence and food.

The evaluation processes are coordinated and supervised by the National Commission for the Evaluation of Higher Education (CONAES), and the operationalization is the responsibility of INEP (2015). The HEIs use the information obtained with SINAES to guide its institutional effectiveness

and academic and social effectiveness, by government agencies to target the creation of public policies, and by students, parents of students, educational institutions, and the general public to guide their decisions regarding the reality of the courses and institutions. The evaluation results carried out by SINAES will support the regulatory processes, including Authorization and Regulatory Acts. The Authorization Acts are responsible for the HEIs' accreditation, working permit, and course recognition, while the Regulatory Acts aim to reaccredit HEIs and renew course recognition. Whether the courses present unsatisfactory results, referrals, procedures, and actions will be established with indicators, deadlines, and methods to be adopted. This initiative refers to a commitment protocol signed between higher education institutions and the MEC, which aims to overcome difficulties.

The Ministry of Education discloses the evaluation results of higher education institutions and their courses. As explained in the previous paragraphs, the disclosure covers information instruments (census, registration, CPC, and IGC data) and the concepts of evaluations for the acts of Renewal of Recognition and Reaccreditation (triennial cycle of SINAES – based on the courses contemplated in the ENADE each year). Brazilian higher education quality assessments are composed of (i) student and (ii) institutional evaluations. (i) The student evaluation is performed annually through the ENADE exam and is detailed in the next section. (ii) The institutional Evaluation is examined in the subsequent section.

STUDENT EVALUATION: ENADE AND THE QUALITY OF BRAZILIAN HIGHER EDUCATION

In Brazil, the National Student Performance Exam (ENADE), as previously pointed out, is an essential instrument for assessing the quality of higher education since it is an exam that “evaluates the performance of undergraduate students concerning the programmatic contents, skills, and competencies acquired in their education.” (INEP, 2015)

The examination assumes that no country develops without disseminating quality higher education to its population. Therefore, its advocates argue that it can be an inducer of improving the curricula of undergraduate courses, provided that the perception of its relevance is unstrained between students and institutions. It has been applied by the National Institute of Educational Studies and Research Anísio Teixeira (INEP, 2015) since 2004; ENADE is part of the National System of Evaluation of Higher Education (SINAES), which also composed of the Evaluation of undergraduate courses and institutional Evaluation. The results of ENADE, together with the answers to the Student Questionnaire, are inputs for calculating higher education quality indicators (INEP, 2015).

The ENADE Evaluation Cycle determines the evaluation areas and courses linked to them. The areas of knowledge for bachelor's and bachelor's degrees are derived from the table published by the National Council for Scientific and Technological Development (CNPq). On the other hand, the technological axes are based on the National Catalogue of Higher Technology Courses (CNCST) of the Ministry of Education (INEP, 2015). The legal basis of ENADE is given by Federal Law No. 10,861/2004 (Brazil, 2004), instituted by the National System of Evaluation of Higher Education (SINAES) determines that the exam is a mandatory curricular component of undergraduate courses

so that the evaluation and result will be expressed through concepts, ordered on a scale with five levels, based on minimum standards established by specialists from different areas of knowledge (Brazil, 2009). Thus, it is clear that the instrument, while proposing an evaluation of the HEI, also seeks to hierarchize them into levels, the so-called concepts, from which it would be, in this case, possible to know in what step the much-desired quality of Brazilian HEI.

According to the analysis of the curriculum matrix, ENADE aims to measure and monitor the learning and performance of students in each course during higher education. The exam considers some factors, such as the programmatic contents established in the curriculum of graduations, labor market needs; the minimum level of quality of a course; the minimum level of quality required by the MEC. These aspects show that the evaluation focuses on verifying each course's performance in a higher education institution. ENADE is usually held in November. Since 2004, he has been part of the undergraduate curriculum. If the student does not take the test, they will not be able to graduate. The exception is beset by those who cannot take the exam because they are out of the country or present a justification for misconduct, such as the health certificate. In terms of structure, the test has 40 questions and is divided into two parts. The first is called General Formation and presents ten questions (two discursive and eight objectives). It is applied to verify students' ethical profile and knowledge on several important topics, such as involvement with social aspects and human rights. In addition, the performance in reading and writing is checked. The second part of the test is the Specific Component, which has 30 questions, three discursive, and 27 objectives.

The results of The ENADE have an almost isolated weight in what it says to be the evaluation of the courses of the HEI because it is essential to define the Preliminary Concept of Course (CPC), a score attributed to graduation by mec analysts, and the result of the exam corresponds to 60 percent of the CPC of higher education courses so that the other 40 percent are measured from the didactic-pedagogical organization, available for the system and the qualification of teachers. Therefore, the ENADE score is the most critical parameter for defining Brazil's quality of higher education. Thus, by establishing this form of Evaluation, the Ministry of Education ends up making the ENADE a criterion for the newcomers in the Higher Education Course to choose which course/HEIs to look for because the result of such an exam is a reference for students to verify the outstanding faculty to study, considering that the image passes, that the exam provides not only to verify how students assimilated knowledge, but also how the institution organizes itself to offer a high level of learning.

The Institute of Educational Studies and Research Anísio de Teixeira (INEP) released on (23/04/21) the most recent result of the General Index of Courses (IGC), an evaluation of the Ministry of Education (MEC) that indicates the quality of Brazilian higher education institutions. Also known as "MEC Note," this index takes into account three distinct factors, they are: (i) average of the last three Preliminary Concepts of Course (CPCs) notes that evaluate the quality of the courses; (ii) average evaluations of stricto sensu graduate programs of the Coordination for the Improvement of Higher Education Personnel (CAPES); and (iii) distribution of students between undergraduate or graduate programs. Finally, the grades are distributed in concepts from 0 to 5, and the closer to note 5, the higher the institution's degree. Therefore, this is considered the complete indicator for assessing the quality of educational institutions.

Finally, HEIs (including all the stock exchange companies) are evaluated by SINAES in a more complex process, described in the following section.

INSTITUTIONAL EVALUATION: SINAES AND THE QUALITY OF BRAZILIAN HIGHER EDUCATION

SINAES proposes an institutional evaluation integrated by four instruments, condensed into four dimensions, including (i) self-assessment; (ii) external evaluation; (iii) Census of Higher Education (ETUC); (iv) registration of courses and institutions, described as follows:

(i) Self-assessment – conducted by the CPA (Own Evaluation Commission): each institution carries out a self-assessment, which is the first instrument to be incorporated into the set of mechanisms constituting the overall regulatory and evaluation process. The self-assessment articulates a reflexive study according to the general roadmap – proposed at the national level – plus specific indicators, pedagogical, institutional, registration, and census project. The self-assessment report shall contain all the information and other elements in the joint national-based roadmap, qualitative analyses, and administrative, political, pedagogical, and technical-scientific actions. These aspects should guide the evaluation process, identify the means and resources necessary for improving the HEI, and analyze correct answers and misunderstandings of the evaluation process itself.

(ii) External Evaluation: This Evaluation is made by external members of the academic and scientific community, recognized for their abilities in specific areas and broad understanding of university institutions.

(iii) Census of Higher Education: The Census is an independent instrument with great informative potential and can bring elements of reflection to the academic community, the state, and the general population. Therefore, it is desirable that census information collection instruments also integrate institutional evaluation processes, offering functional elements for understanding the institution and the system. Therefore, census data are also part of the set of analyses and studies of internal and external institutional evaluation, contributing to the construction of institutional dossiers and courses to be published in the Register of HEIs. The census is conducted and supervised by INEP.

(iv) registration of courses and institutions: according to the guidelines of INEP (2015) and CONAES are also collected and made available for public access to the information of the register of HEIs and their respective courses. This information, which will also be the subject of analysis by evaluation committees in internal and external processes, will form the basis for permanently guiding parents, students, and society on the performance of courses and institutions. Finally, Table 1 illustrates the results of the current IGC, as follows:

Table 1 *IGC results*

HEI	IGC (Continuous)	IGC (Grade)
UNIVERSIDADE FEDERAL DE SÃO CARLOS (UFSCAR)	4,058	5
UNIVERSIDADE FEDERAL DE VIÇOSA (UFV)	4,076	5
UNIVERSIDADE ESTADUAL DE CAMPINAS (UNICAMP)	4,425	5
UNIVERSIDADE ESTADUAL PAULISTA JÚLIO DE MESQUITA FILHO (UNESP)	4,1	5
FACULDADE DE MEDICINA DE SÃO JOSÉ DO RIO PRETO (FAMERP)	3,947	5
ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO (FGV-EAESP)	4,028	5
FACULDADE DE CIÊNCIAS MÉDICAS DA SANTA CASA SÃO PAULO (FCMSCSP)	3,96	5
UNIVERSIDADE FEDERAL DO PARANÁ (UFPR)	3,998	5
UNIVERSIDADE FEDERAL DE MINAS GERAIS (UFMG)	4,302	5
UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL (UFRGS)	4,3	5
UNIVERSIDADE FEDERAL DE SANTA CATARINA (UFSC)	4,141	5
UNIVERSIDADE FEDERAL DO RIO DE JANEIRO (UFRJ)	4,081	5
UNIVERSIDADE FEDERAL DE SÃO PAULO (UNIFESP)	4,165	5
UNIVERSIDADE FEDERAL DE LA VRAS (UFLA)	4,051	5
INSTITUTO TECNOLÓGICO DE AERONÁUTICA (ITA)	4,357	5
INSTITUTO MILITAR DE ENGENHARIA (IME)	4,459	5
FUNDAÇÃO UNIVERSIDADE FEDERAL DE CIÊNCIAS DA SAÚDE DE PORTO ALEGRE (UFCSPA)	4,028	5
FACULDADE JESUÍTA DE FILOSOFIA E TEOLOGIA (FAJE)	4,329	5
FACULDADE ESCOLA PAULISTA DE DIREITO (FACEPD)	3,958	5
UNIVERSIDADE ESTADUAL DO NORTE FLUMINENSE DARCY RIBEIRO (UENF)	3,966	5
FACULDADE DE DIREITO DE VITÓRIA (FDV)	4,169	5
FACULDADE DE CASTELO - MULTIVIX CASTELO	3,97	5
FACULDADES EST	4,199	5
ESCOLA BRASILEIRA DE ADMINISTRAÇÃO PÚBLICA E DE EMPRESAS (EBAPE)	4,42	5
FACULDADE DO ESPÍRITO SANTO (UNES)	4,129	5
ESCOLA DE DIREITO DO RIO DE JANEIRO (DIREITO RIO)	4,078	5
ESCOLA DE DIREITO DE SÃO PAULO (FGV DIREITO SP)	4,35	5
ESCOLA DE ECONOMIA DE SÃO PAULO (EESP)	4,779	5
FACULDADE SÃO LEOPOLDO MANDIC	4,148	5
FACULDADE FUCAPE (FUCAPE)	4,367	5

Source: INEP, 2020

Notes: Continuous IGC: this is the final score of the institution, with an average of all components that were evaluated (remembering that the institutions are assessed from 1 to 5, with 5 being the highest score); IGC grades: this note is the rounded value of the continuous IGC (which is the note that educational institutions disclose). When an institution results in a constant grade equal to or greater than 3.945, the IGC grade is rounded to 5.0. Conversely, with a score less than 3.945, the IGC grade is rounded to 4.0, and so on.

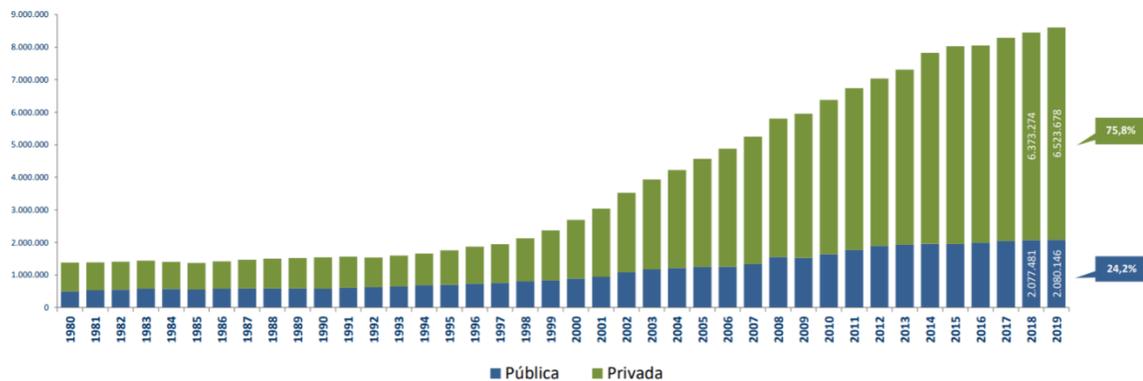
Observe in Table 1 that none of the top five stock exchange companies operating in Brazilian higher education are listed among the IGC top 30: (i) Estácio de Sá; (ii) UNOPAR; (iii) Anhanguera; (iv) UNIASSSELVI (IGC 3.0), and (v) UNICSUL (IGC 4.0). In sum, evidence points out that the stock exchange companies' influence on the quality of education is far from desirable.

Table 1, however, portrays only a snapshot of the current IGC, and its interpretation may lead to inconclusive understandings. Therefore, the analysis of other quality indicators over the past two decades, combined with the IGC and the experts' opinions, should provide a better view of the influence of the stock exchange companies in Brazilian higher education. Finally, in the next section, the evolution of the quality indicators over the past two decades is presented.

THE EVOLUTION OF BRAZILIAN HIGHER EDUCATION QUALITY INDICATORS OVER THE PAST DECADES

This section presents the results of the Higher Education Census (*Censo da Educação Superior*)¹ over the past two decades. The leading indicators analyzed are the number of (i) Enrollment², (ii) Admissions, (iii) Conclusions, and the (iv) profiles of the professors.³

First, the distribution of the (i) enrollments in Brazil from 1990 to 2019 is illustrated in Figure 2, as



follows:

Figure 2 Distribution of enrollments in Brazil. Source: INEP, 2020

Regarding the number of (i) Enrollments, note in Figure 6 the ever-increasing growth curve on the number of enrollments in higher education courses after 1998, when the Law of Guidelines and Bases - LDB (Brasil, 1996) was issued, allowing the entrance of the stock exchange companies in the Brazilian Higher Education.

¹ INEP - National Institute of Educational Studies and Research (*Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira*)

is an autarchy linked Ministry of Education in Brazil, responsible for the Higher Education Census.

² divided between private and public educational institutions.

³ also divided between private and public educational institutions.

Observe also that currently, the number of enrollments in the private institutions (green) represents 75.8 percent of the total, whereas the number of enrollments in public institutions represents 24.2 percent of the whole of approximately 8.6 million enrollments in the period.

Therefore, evidence was found to support the entrance and intense participation of the stock exchange companies in Brazilian Higher Education over the past decades, especially after the issuance of the LDB, in 1998, according to the Higher Education Census 2020. Regarding the number of (ii) Admissions and (iii) Conclusions. Figure 3 illustrates the following:

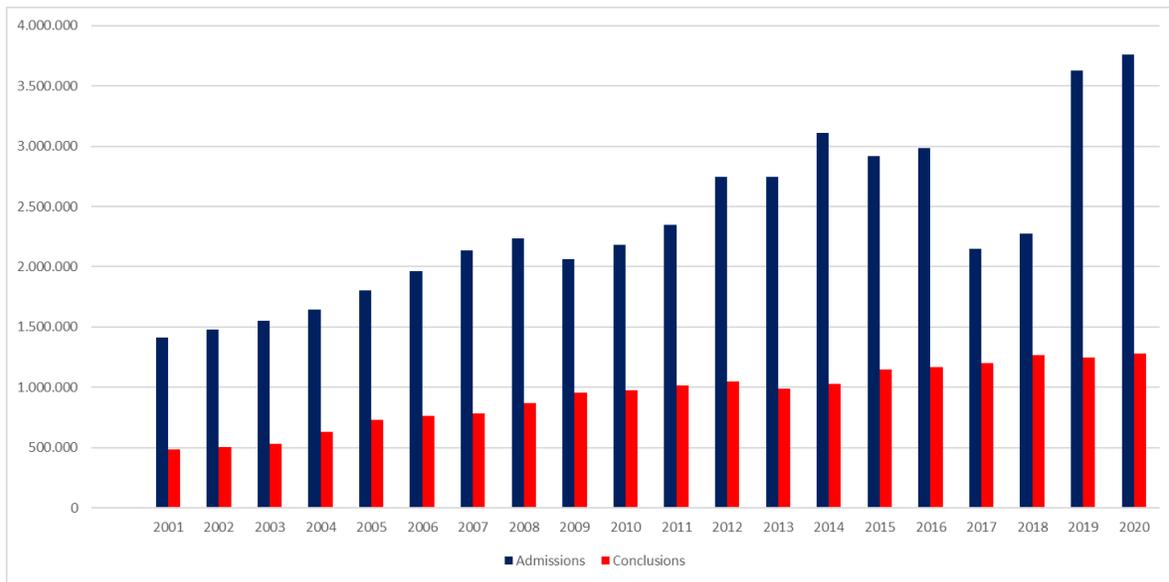


Figure 3 Admissions x Conclusions (2001 to 2020).Source: INEP, 2020

Note that Figure 3 illustrates one of the most crucial quality assessment indicators. The number of admissions versus conclusions indicates that approximately out of three admitted students, one concludes their courses, implying high evasion rates. The Brazilian Ministry of Education justifies the higher evasion rates in 2019 due to economic recession, where students have to drop out of survival courses, and in 2020 with the evasion highly influenced by the coronavirus pandemic (INEP, 2020). However, despite the official justifications, the evasion rate is a complex phenomenon that presents many other possible causes, not only the economy of sanitary but also the quality of the courses offered. One of the most vital indicators assessed by the Census (INEP, 2020) is the (iv) profile of the professors, which includes (a) public x private institutions; (b) gender; (c) age; (d) level of education, and (e) work regime, as illustrated in Figure 4, as follows:

Professors Attributes	Public	Private
Gender	Male	Male
Age	39	40
Level of Education	Doctorate	Master's
Work regime	full (40 h per week)	Partial (20h per week, or hourly)

Figure 4 Professors' attributes. Source: Adapted from INEP, 2020

Figure 4 shows that the level of education in private higher education institutions in Brazil is lower than in public institutions. Note that there are more professors with a doctorate in public institutions than in private ones, with the vast majority compiled by masters or specialists. Therefore, the quality of education is somehow influenced by the level of education of the professors from private institutions, as noted in the Census 2020 (INEP, 2020). Note that the work regime differs in public and private higher education institutions.

In addition, Figure 5 illustrates the evolution of the student-teacher ratio in both private and public higher education over the past two decades (2001 to 2020), as follows:

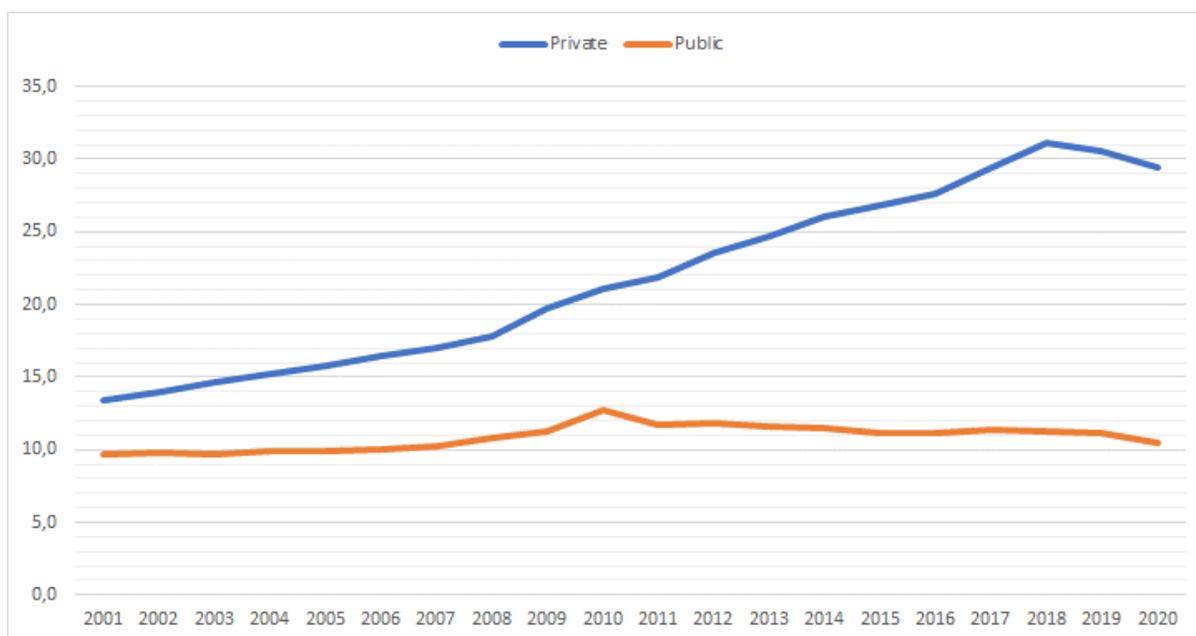


Figure 5 Private and Public Higher education Student-teacher ratio from 2001 to 2020.
 Source: Adapted from INEP (2020)

Observe in Figure 9 that the student-teacher ratio in public higher education remained roughly the same over the past two decades (8 percent increase), while in the private arena, the student-teacher proportion more than doubled (119.4 percent increase). Unfortunately, the Brazilian Higher Education Census (INEP, 2020) does not address the impact of the student-teacher ratio on the quality of Brazilian higher education.

Regarding the public arena, the professors are hired through competitive tendering, with very few public contests over the past decades (INEP, 2020). On the other hand, private professors are hired without public competition. Evidence was found to suggest that the quality of private higher education is somehow affected by the higher student-teacher ratio compared to the public one (see Figure 9).

Therefore, LDB (Brasil, 1996), allowing the entrance of stock exchange companies into the Brazilian private higher education, played a significant role in expanding the number of enrollments in the remote scenario. However, as depicted in Figure 5, the number of professors hired did not follow the expansion of the number of enrollments and admissions. In practice, private professors have more than twice the number of students to teach than twenty years ago.

The conclusions of the qualitative analysis indicate the following items as factors somehow affecting the quality of education in Brazil over the last two decades, such as (i) higher evasion rates. The reason lies in recent economic and sanitary factors; (ii) the professors from the private institutions have lower educational levels and workloads compared to the professors from the public institutions. The reason behind the lower level of education among private institutions is apparent: according to the Census 2020 (INEP, 2020), a professor with a doctorate has a higher salary than a professor with a master's degree; (iii) professors from private institutions work hourly or part-time, receiving lower wages in comparison to the professors from public institutions. Evidence was found that part-time professors have to work in more than one educational institution to balance their home budgets, with little or no extra time to study and raise their academic level; (iv) the private professors have to deal with an ever-increasing number of students per cohort in comparison to public ones, affecting somehow the quality of the private higher education, which impacts are not addressed in the Brazilian Higher Education Census 2020⁴.

Evidence was found to support that stock exchange companies in Brazilian higher education exert little influence on the quality of education. However, according to Costa (2014), some of for-profit HEI started to aim at reducing their annual costs, such as the (i) development of short programs to maximize profits; (ii) the evaluation of the faculty according to the needs imposed by consumers; (iii) the standardization of curricula; drop in investments in infrastructures, such as libraries, laboratories, and materials; (iv) the reduction in funding for scientific research, following a trend started in 1995, when Devry Group Inc. launched its IPO in the NYSE (Costa, 2014).

⁴ Census 2020 was published on 18 February 2022.

The Higher education Census (INEP, 2020) does not even include the stock exchange companies within the census, only the type of academic organization, such as universities or colleges. Therefore, evidence suggests that the stock exchange companies exert no direct but an indirect influence on the Brazilian higher education quality evaluation standards.

Finally, evidence suggests that for-profit organizations operating in Brazilian Higher education, including the stock exchange companies, drive their investments towards the shareholders' interests for profit maximization, not to improve the quality of education in Brazil, despite announcing the opposite (Araujo, 2021; Costa, 2014; Polizel and Steinberg, 2013; Sarfati e Shwartzbaum, 2013). The Brazilian stock exchange companies operating in Higher Education in Brazil are driven to present positive financial results to their shareholders (Araujo, 2021).

THE INFLUENCE OF STOCK EXCHANGE COMPANIES ON THE QUALITY OF THE BRAZILIAN EDUCATION IS FAR FROM ACCEPTABLE

Any organization, with or without profit, should always aim for more excellent attractiveness, seek greater profitability, optimize its resources and increase investments in the business itself. However, a concern arises when the priority of an open HEI is short-term profitability. When it comes to an educational institution with commercial values or market principles, situations such as: hiring and firing of employees of the institution based on market needs, recruitment of students for greater profitability, and creation of rapid programs to maximize the gain, assessment of the performance of teachers according to consumer demand, standardization of curricula aiming at economic efficiency, among others. Also, one way to quickly increase profitability is to reduce costs. However, reducing the costs of an HEI indiscriminately can also mean reducing: (i) infrastructure investments; (ii) investments for the proper implementation of the institutional development plan; (iii) promising research; (iv) incentives to qualify human resources, (v) investments in libraries, laboratories, equipment, and materials. That is, it reduces the quality of the institution.

On the other hand, an HEI is attractive to its investors if the number of students (tuition) and units increases. There is a common and indispensable factor for all of the above cases to remain truly attractive to their investors. If the bank, industry, office, or HEI fail to retain their customers, turnover will be very high; with this, the fragility with competition also grows, which may even lead to business failure.

Evidence points out a tradeoff in Brazilian private higher education, revealing an inverse proportionality between profitability and quality of education, to be investigated in future studies. Therefore, the investor should be concerned with quality information in addition to profitability information. Unfortunately, it is pretty complex for the investor to find quality data from an HEI. The number of higher education institutions has grown significantly recently, and the "certifications" to attest to their qualities are still very current. Such quality certifications are named after evaluation and are the responsibility of the Ministry of Education. The findings suggest the necessity for improvements in the quality of the education dispensed by the stock exchange companies in Brazil. However, how should these changes be implemented? To answer this and the other three crucial

questions, we interviewed nine experts in the sector, and the findings and analysis are detailed in the following sections.

WHAT DO THE EXPERTS THINK ABOUT THE INFLUENCE OF THE STOCK EXCHANGE COMPANIES ON THE QUALITY OF BRAZILIAN HIGHER EDUCATION?

The structure, process, standards, and index required for the quality assessment of higher education in Brazil were compiled and presented in previous sections. So far, evidence shows that the entry of the stock exchange companies into higher education did not significantly influence the quality of education in Brazil (see Table 1). However, the detailed facts only scratched the subject's surface because they do not answer some intriguing questions addressed in this section. Therefore, a qualitative inquiry was conducted with nine specialists in the segment through in-depth interviews to uncover powerful insights into the quality of Brazilian higher education. In addition, some puzzling remaining questions were addressed: (Q1) What factors contributed to the entry of stock exchange companies into Brazilian higher education? (Q2) How did the market react to the entrance of these companies? (Q3) How do these companies currently position themselves in the market? (Q4) What is the impact of these changes on the quality of higher education? In this section, the answers to the questions and subsequent findings are disclosed, analyzed, and further discussed. The interviews gathered (i) three professors, (ii) three students, and (iii) three faculty members/managers, as aforementioned. The interviews gathered 12,053 words and lasted 45 minutes on average. Table 2 illustrates the interview summary as follows:

Table 2

Interview summary

#	Cluster	Interviewee Code	Interview Duration (min)	Interview Language	Type of Interview	Recording method	Transcription	Quoting?	Disclosure information
1	Professor	I1	40	PT	Semi-structured	Zoom	yes	yes	yes
2	Professor	I2	45	PT	Semi-structured	Zoom	yes	yes	yes
3	Professor	I3	40	PT	Semi-structured	Zoom	yes	yes	yes
4	Faculty	I4	60	PT	Semi-structured	Zoom	yes	yes	yes
5	Faculty	I5	40	PT	Semi-structured	Zoom	yes	yes	yes
6	Faculty	I6	45	PT	Semi-structured	Zoom	yes	yes	yes
7	Student	I7	40	PT	Semi-structured	Zoom	yes	yes	yes
8	Student	I8	45	PT	Semi-structured	Zoom	yes	yes	yes
9	Student	I9	50	PT	Semi-structured	Zoom	yes	yes	yes
			405	45 minutes					

The word frequency distribution is displayed in Figure 6, and the word cloud is illustrated in Figure 7.

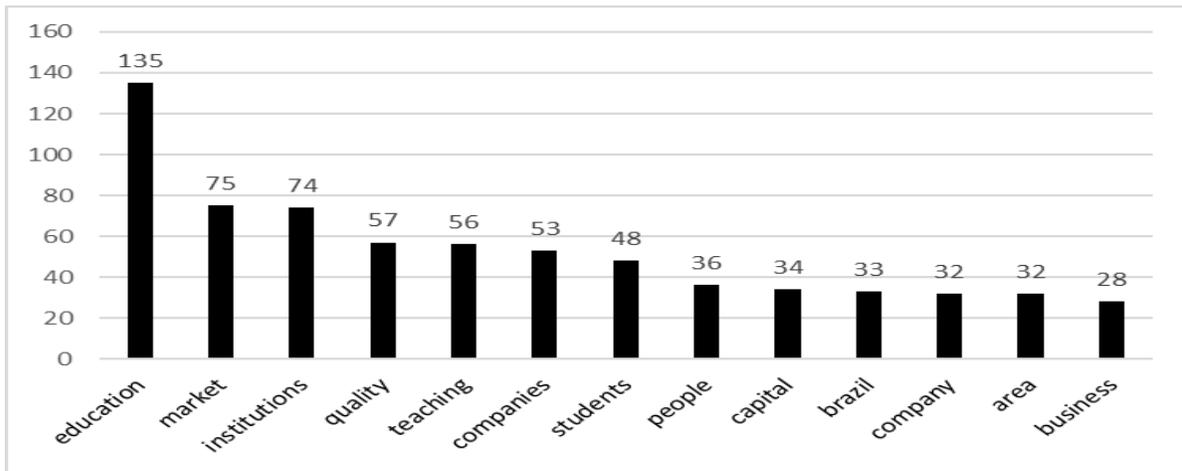


Figure 6 word frequency distribution. Source: database



Figure 1 Word cloud. Source: database

Observe in Figures 6 and 7 that the words “education,” “market,” “institutions,” and “quality” are the most frequent in the selection. The questions mentioned earlier (Q1 to Q4) were addressed through waves of coding (Miles Huberman and Saldaña, 2014), and an *Invivo* process coding (Saldaña, 2013) was applied to the raw data to honor the interviewee’s voice (Saldaña, 2013).

The question (Q1), What factors contributed to the entry of stock exchange companies into Brazilian higher education? Evidence suggests that two legal aspects facilitated the access of stock exchange companies into Brazilian higher education: (i) Brazilian Federal Constitution 1988 (Art. 209, Brasil, 1988) and the (ii) LDB (Brasil, 1996), such as

“Brazil had everything favorable. There was the LDB that mentioned private education. It already had the Federal Constitution, in Article 209 that said that teaching was free to private initiative and the process gained strength.” (I1)

One of the causes for such entry, as declared by I2,

“there was a significant expansion of these companies because there was a pent-up demand for vacancies in higher education,” the consequence, still according to I2,

“This growth was uncontrolled, causing losses to the quality of education.” Therefore, I2 also provided the answer for Q4 regarding the impact of the entry of stock exchange companies on the quality of higher education.

Evidence suggests the entry of the stock exchange companies into higher education as a consequence of large-scale privatization in the 1990s:

“Privatization in Brazil came in waves. First were the SOEs, banks, and S.A. companies (...). We had a time of solid privatization in Brazil. Even now, the movement has gained strength again.” (I3)

However, LDB is considered the ground zero for the entry of the stock exchange companies in higher education, according to I4:

“In the 1990s, the government’s need to supply Brazilian education substantially allowed President Fernando Henrique to create the Law of Guidelines and Bases, which was the watershed milestone of Brazilian education.” (I4)

Regarding the second open question (Q2), How did the market react to the entrance of these companies? Evidence suggests that the market absorbed the newcomers with mergers and acquisitions, according to I5:

“In the education market, those smaller maintainers, what they wanted most was an IPO process, because they knew that the big companies were coming, with excellent investment power, too much publicity, a lot of media use, which the small maintainer could not do. So everyone started wanting

to format themselves so that when a company of this size came, he could sell his institution or become a partner. With this, several models of mergers and acquisitions have been and continue.” (I5)

Regarding (Q3), How do these companies currently position themselves in the market? Evidence also suggests that the stock exchange companies preferred virtual learning instead of classroom learning, as illustrated by I7:

“These companies are giving a preference for distance education because at first, it is expensive, but then it cheaply snares because the teaching material reproduces by the teacher and the number of students in the virtual classroom is infinitely higher than in the face-to-face.” (I7) Evidence also points out,

“The stock exchange groups today gather in their flags many acquisitions of brands that have kept their names but were acquired by the commanding groups and with this, brings a teaching modeling implemented everywhere in which they operate and imposing these models in all institutions that are incorporated into the large group.” (I3)

Finally, to answer (Q4), What is the impact of these changes on the quality of higher education? Interviewees converged on a critical opinion, pointing to a severe loss in the quality of instruction after the entry of the stock exchange companies into Brazilian higher education, stressed by the following quotations:

“No education data quality increased after these publicly traded companies entered Brazilian education. That’s a fact; prove it with the data provided by the Ministry of Education.” (I1)

“The quality of Brazilian higher education has not advanced with the entry of publicly traded companies because these companies are much more concerned with the salary of their directors, their bonuses, and the return of shareholders than with research, workload, and wages of teachers.” (I5)

“The indicators reflect a total unconcern about the quality of Brazilian higher education. Therefore, to summarize, I would say that the entry of publicly traded companies in Brazil to the quality of education contributed little or nothing, except for the massification of teaching.” (I4)

“INEP also takes care of the evaluation of Brazilian education, but in my opinion, the data it has are still few and incomplete, so it reflects little on the actual panorama of this segment. Only those who live from education in teaching and students know how the quality of education requires improvement.” (I2)

“After the opening of the capital, we realized that the most significant demand was concerning the teacher. So we start earning less, working harder, and making the student’s life more accessible and manageable. The low quality of education greatly impacted the change in higher education with these S.A...” (I6)

“The low quality of teaching is today a reality of these large groups, in which they do not strive to achieve the best, and this I see as the evaluator for these institutions.” (I8)

“For quality, I see a loss. A loss because sometimes the model offered puts 200, 300 people in the classroom. I’m in favor of there being more oversight. Can you learn in a room with 300 people? So we could have a supervisory body with ANATEL to oversee education institutions. It had to have a regulatory body to supervise better because the MEC cannot accumulate so many tasks and quality, fell into the mass model.” (I9)

In sum, the analysis revealed that the experts in Brazilian higher education pointed out a consistent loss in quality of instruction after the entry of the stock exchange companies, revealing their interest focused primarily on investment return and profit rather than the quality of education, as mentioned by I5:

“The market wants fast results and when you work with the market increases the collection for results. Therefore, you must hit goals, achieve EBITDA, make a profit, and demonstrate to investors.” (I5)

Similar opinion presented I7:

“There are quantitative goals that are most of interest to the investor as the number of students. The number of students will generate cash flow, but you also have problems with qualitative goals when you start to enter many students with low quality.” (I7)

Finally, solutions to overcome the loss of quality in education were pointed out by the experts interviewed, such as the creation of new regulatory instruments and face-to-face versus virtual teaching, as follows:

“We need a more evolved regulatory process because no significant changes have occurred. The market has expanded and grown, and the evaluation processes’ regulatory bodies do not seem adequate for the new market model. And the other flaw I see is the modalities. They are mixing much face-to-face with distance without sufficient and quality pedagogical material so this student can learn better.” (I2)

Evidence suggests the necessity for improving the standards of the education evaluation system; “Nobody, neither the market nor the regulatory agency, evaluates the education qualitatively. Currently, the evaluation system is only quantitative.” (I1)

In sum, low professor wages, an increasing number of students per professor, lower education level of professors, less professor autonomy in the classroom, poor internet connection, local diversities in a vast country, mass production of teachings, shareholders’ interests before the quality of education interests were pointed as main influences of the stock exchange companies’ entrance in Brazilian higher education over the past decades.

DISCUSSION: BENEFITS AND RISKS OF QUALITY INDICATORS

Considering the relationship between education policies and the modern theory of economic growth, Aghion and Cohen (2004 apud Mazzarotto, 2007) identified four objectives that a higher education system should aspire to lead the country to significant economic growth: (a) generation of high-quality research, (b) generation of applied research and integration with other researchers and users of applied research, (c) production of high-quality education at both middle and higher levels and (d) select the best students and researchers to perpetuate the system. Based on these four objectives and considering the national evaluation system, we consider the quality of an HEI dependent on the five factors aforementioned.

The quality of human resources refers to the employees of the HEI both at the administrative level and in teaching and research. The institutional development plan relates to the objectives, goals, and actions of the HEI, research policies, education, and extension, professional management, academic organization, and financial aspects, among others related to the planning of the HEI. The research refers to the productivity of the HEI and its ability to raise funds for research funding. The infrastructure refers to the adequacy of administrative offices, teaching rooms, and classrooms. Bibliotecas, laboratories, and materials refer to the physical facilities of the HEI according to the number of students enrolled and courses offered. For example, an HEI that has high investments in infrastructure, but does not invest in the professional qualification of its teachers, certainly has high risks of reducing its quality through low productivity in teaching and research. Below we will show the five indicators that can benefit the five quality factors for an open HEI, that is, that points out to an HEI that invests in quality factors, as shown in Figure 8, as follows:

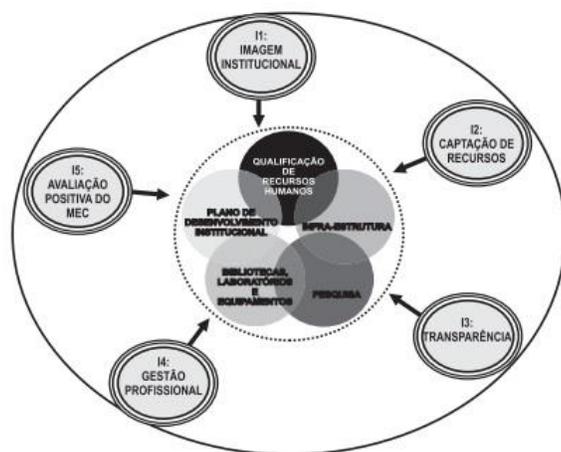


Figure 8 Quality indicators for a HEI. Source: Aghion and Cohen (2004 apud Mazzarotto, 2007)

I1: Institutional image An open HEI that privileges quality strengthens its image and processes with the market, besides providing more excellent reputation and loyalty of the faculty and student; I2: The opening of capital makes it easier to obtain resources. Part of the fundraising can be invested in

the quality of the HEI through maintenance and improvement in infrastructure, updating of equipment and software in laboratories, constant updating and increase of the collection in libraries, training of employees, the incentive to research, encouragement to the qualification of teachers and other employees, among other improvements; I3: The opening of capital requires transparency in the information. For an HEI to open part of its capital in the financial market, it must be appropriately organized and make its data publicly available, thus providing more transparency to the company. I4: For professionalized management is essential for opening capital. Professional management aims at efficiency in process planning, resource optimization, and feasibility analyses of new conjunctures. I5: Positive Evaluation of the MEC, but it is worth mentioning that, since these evaluations began, these institutions have sought to adapt to better results. With these five indicators, we can verify that a publicly traded HEI can have high profitability with quality. That is, the opening of the capital of an HEI can bring advantages to the education sector, but for this to occur, it is necessary that with the acquired resources, several issues that affect quality can be benefited in the short term, generating a better image of the HEI, thus retaining students and staff, minimizing the dropout and increasing the number of students of the HEI. On the other hand, we mention seven indicators that deserve the attention of investors, as they can cause risks related to the decrease in quality, as shown in Figure 9:

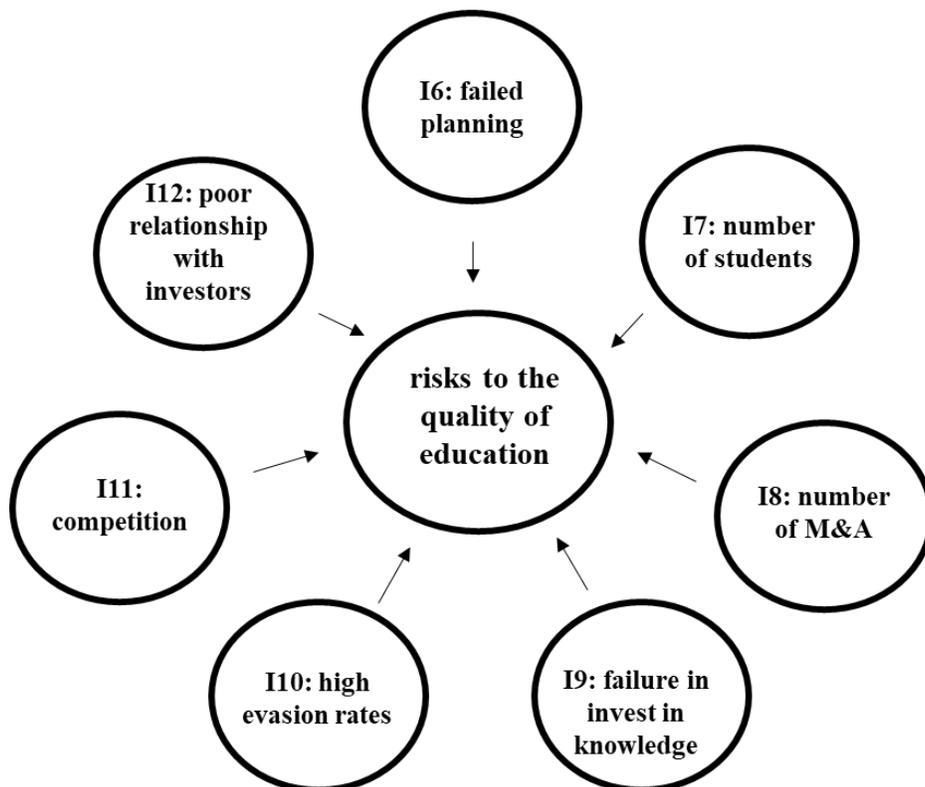


Figure 9 quality of education risks. Source: Aghion and Cohen (2004 apud Mazzarotto, 2007)

I6: Strategic and operational planning disaggregated In any organization, the strategic goals must be in line with the tactical and operational actions, which are, in this case, strictly related to academic

activities. For example, optimizing costs is always necessary at any level of any organization, but cutting essential spending on education in an HEI does not move in the same direction as improving quality in higher education.

I7: A large number of teachers in private HEIs, the number of teachers hired is excessively higher than that of public HEIs. A question related to this fact and quite worrying is that the teacher is in several HEIs simultaneously because it is hourly or part-time, generating a high turnover of teachers, which causes a discontinuity of teaching. This fact goes against the student's fidelity and is directly related to the high dropout rates.

I8: Many Acquisitions - Fundraising in the opening of capital should increase existing equity, but it should be noted, however, if the acquisitions are not being made just because the smaller HEIs already have courses authorized or recognized by mec. Thus, large HEIs can quickly increase the number of students without allowing the operation of systems through the government's assessment but may run the risk of having an upcoming evaluation with low results.

I9: Lack of investment in knowledge. Knowledge in an HEI is transmitted through teachers. These, especially in professionalizing disciplines, can receive knowledge through research (theoretical knowledge) or business work (practical wisdom). Both have extreme relevance in teaching but have two significant differences in managing the HEI. The former must be hired by HEI as a full-time teacher and must teach a few hours in the classroom, leaving much of his time for research and other academic demands of the institution. The second, in turn, can be hired part-time with all workload in the classroom. The rest of the working hours are spent on your other occupation. In this way, it seems that the full-time professional costs are expensive. However, investment in research does not provide a short-term return but is fundamental for higher education quality. In the study, the teacher updates himself about the contents taught, increasing the conceptual level of the classes and generating greater participation and loyalty on the part of the students. Although the number of full-time teachers (IT) with an incentive to research is increasing in private HEIs, this increase does not come close to the existing number of I.T. teachers in public HEIs.

I10: High evasion. The number of students entering is always higher than the number of students graduating, especially in times of economic and social crisis; that is, evasion should be a critical factor for investors.

I11: The opening of capital encourages competition between HEIs. Dietschi and Nascimento (2008) show that publicly held companies primarily focus on short-term financial results to meet shareholder expectations. On the other hand, closed companies are not pressured by these shareholders to present quarterly financial statements, aiming for long-term growth. In this way, intense competition can lead open institutions to leave quality in the background.

I12: Precarious relationship with investors On the websites of higher education institutions that have opened their capital are links to "investor relations" with data related to the growth of the number of students, revenue from tuition, evasion, taxes, for instance. However, when it comes to deductions,

that is, incentive to research and productivity, null and void are the information. Even more difficult is to find information about the goals of improving the quality of higher education, describing schedules for updating or improving infrastructure, laboratories, study rooms, classrooms, teacher rooms, equipment, hardware, and software, among others.

WHAT IS THE OECD EVALUATION OF THE QUALITY OF BRAZILIAN HIGHER EDUCATION?

In Brazil, aiming to improve the system and resolve criticism from experts about the higher education evaluation model, the Ministry of Education hired 2017 the OECD (Organization for Economic Cooperation and Development) to evaluate this system externally. In March 2018, the OECD sent a mission to Brazil that interviewed government representatives and different sectors of public and private universities (OECD, 2018).

In December 2018, the conclusions on ENADE and the quality indicators used by INEP (2015) were critical, i.e.: (i) ENADE tests are not standardized. Therefore, they do not allow comparing the results from one year to another and do not allow comparing the quality of different careers. (ii) The comparison is only between bachelor's, bachelor's, and technologists' courses in about 80 different areas, without having criteria to say what is good, bad, or excellent. (iii) As the test results do not affect students directly, many are not interested in responding, even if they are required to participate when it is their sit. (iv) The indexes combining ENADE data with other data on teacher degrees, infrastructure, ENEM grades, and evaluation of courses by students have no apparent justification, mix different things, and tend to disadvantage professional training courses, generally private, which have fewer full-time Ph.D. teachers. Furthermore, (v) there are no dropout rate indicators or labor market indicators (OECD, 2018).

The OECD recommends: (vi) that an assessment of the costs and benefits of this system be made, and even that it is worth considering whether it is worth continuing with ENADE, as it was conceived, precisely because of the difficulties that the Brazilian experience shows. She also recommends that (vii), instead of synthetic indicators, give information about the different aspects of each course and institution in a simple and accessible way to the general public. Another critical point of the OECD conclusions is (viii) that the Brazilian system emphasizes the evaluation of courses and less on the assessment of institutions (OECD, 2018).

The OECD recommendations are to focus more on (ix) qualitative evaluation of institutions, which, once well evaluated, would have more freedom and autonomy to administer their courses. This complicated system of accreditation, reaccreditation, authorization, and recognition of practices would only be right in the private sector because public institutions do not need accreditation to function and almost always do well in evaluations because they have more full-time Ph.D. teachers and reasonably good facilities.

Finally, we follow OECD recommendation and point to the creation of the National Agency of Higher Education (NAHE) as the primary initiative to improve the quality of higher education in

Brazil, helpful not only for the stock exchange companies but essentially for all Higher Education Institutions, private or public ones, because it suits best with the research goals described early. Therefore, the National Agency of Higher Education (NAHE) is outlined in the following section as the main contribution of this study.

MANAGERIAL CONTRIBUTION: THE CREATION OF THE NATIONAL AGENCY OF HIGHER EDUCATION (NAHE)

In this section, we present the recommendations for improving the Brazilian higher education system: (i) an effectively autonomous regulatory body that transforms the current evaluation system into a less bureaucratic process that gives more autonomy to well-evaluated institutions, which better informs students and society about what is happening with Brazilian higher education in its various sectors, and indicate the best paths.

Therefore, with the proper proportions, the present study concludes and recommends, based on the analysis of the evidence studied here, the creation of the unprecedented National Agency for Higher Education (NAHE), an authority linked to the Ministry of Education. We consider, after analyzing the results, that the creation of the Regulatory Agency is a crucial step for the improvement of the evaluation system of higher education in Brazil, for various reasons, namely: (i) decentralization of the accreditation process of the courses, in different regulatory activities, see Table 1, now mixed and centralized in a very complex way by the MEC; (ii) increased transparency of the relationship with educational institutions and society; (iii) change in the paradigm of evaluation of courses, (iv) inclusion, in an unprecedented way, of good practices of institutional governance and qualitative evaluation of institutions, in a less complex, decentralized and transparent way for society.

The National Agency for Higher Education (NAHE) would then be created with the (i) mission of ensuring excellence in Higher Education in Brazil; (ii) the vision of being the reference in the promotion of best practices for the development of this education niche. Attributions: (iii) regulation of higher education activities in Brazil, subject to current legislation and the general guidelines of the MEC.

NAHE would be responsible (iv) for the quantitative and (v) qualitative evaluation of higher education institutions in the country, incorporating (vi) the best corporate and institutional governance practices from publicly traded companies and others that work in this field of education and that can contribute to the success of this management model encompassing all higher education institutions operating in the country, public or private, to ensure better performance and excellence in higher education in Brazilian education.

Finally, the last activities of NAHE would be divided into two major groups: (viii) the Technical Regulation and (ix) Academic Regulation, as illustrated in Table 3, as follows:

Table 3

Activities of the National Agency for Higher Education (NAHE)

Technical Regulation	Academic Regulation
Institutional Social Responsibility	Policies for teaching, research and extension
Organization and management of the institution	Transparency and communication with society
Physical infrastructure	Personnel policies
Planning and evaluation	Student service policies
Institutional Governance	Qualitative evaluation of the Institution

Table 3 shows that the tasks previously centralized in processes controlled by the MEC would be decentralized and subdivided into two regulatory activities mentioned above. The analysis of the results indicates the need for reordering and redistributing the dimensions observed by SINAES in different regulatory activities to give more transparency and objectivity to the accreditation and control of higher education courses in Brazil. Also, note in Table 3 that the Technical Regulation includes: (a) Social responsibility of the institution; (b) organization and management of the institution; (c) physical infrastructure; (d) Planning and Evaluation, and (e) institutional governance. Table 3 shows that academic regulation includes: (f) the policy dimensions for teaching, research, and extension; (g) transparency and communication with society; (h) personnel policies in charge of training, improvement, and training programs for teaching and technical-administrative staff, associating them with career plans consistent with the magnitude of the tasks to be developed and the objective working conditions. Finally, the (i) policies of care for students and (j) qualitative evaluation of the institution. There are ten functions redistributed in two different and complementary regulatory activities.

Finally, note that there are two contributions to the current management model practiced by the Ministry of Education (MEC), in addition to the creation of NAHE: (i) the insertion of Institutional Governance, aimed at condensing and incorporating the best corporate governance practices from publicly traded companies, to the management models of higher education in the country. Note that the second contribution concerns (ii) the institution's qualitative assessment, not only of performance but also of risk management and student well-being, in a more transparent channel and close to society. Therefore, we consider the creation of the agency a fundamental step toward improving the management system of Brazilian higher education.

IMPLICATIONS AND CONCLUSION

The present study has merit in presenting a broad discussion about the evaluation system of Brazilian higher education, addressing the influence of the stock exchange companies in education. This article consolidates extensive archival research on the subject, with direct implications in the decentralization of the decision-making process of higher education in Brazil, today the exclusive responsibility of the Ministry of Education, directly impacting the quality assessment systems of Brazilian higher education, by proposing the inclusion of criteria innovatively hitherto not observed by the current management system, as widely described in the previous sections of the present work. The study also disclosed the opinion of nine sector experts through qualitative interviews.

This work has implications in many fields of the study: (i) virtual classes (Dias, 2020; Dias and Lopes, 2020, Dias, 2019c, 2019b; 2019d); (ii) extension courses (Dias, M., 2012); (iii) for-profit organizations (Dias, M.; 2018; Dias, M., 2018b; Dias, M., 2018c; Dias, M., 2019; Dias, 2020; Dias, 2020b; Dias, 2020c); (iv) Family business (Dias, M. et al., 2014; Dias, M. et al., 2015); (v) business negotiations in higher education (Dias, M., 2016; Dias, M., and Aylmer, R., 2018; Dias, M., Duzert, Y., 2016; Dias, M.; Teles, A., 2019; Dias, M., Falconi, D., 2018; Dias, M., Lopes, R., 2019; Dias, M., Lopes, R., Teles, A., 2020; Dias, M., Navarro, R., 2018; Dias, M., Navarro, R.; Valle, A., 2013; Dias, M., Teles, A. Duzert, Y., 2018; Dias, M., Teles, A., Duzert, Y., 2018; Dias, M.; Alves, H.; Pezzella, M., 2016; Dias, M.; Davila Jr., E., 2018; Dias, M.; Duzert, Y., 2017; Dias, M.; Duzert, Y., Teles, A., 2018b; Dias, M.; Krein, J.; Streh, E.; Vilhena, J. B., 2018; Dias, M.; Mori, V., 2018; Dias, M.; Ramos, M. 2018; Dias, M.; Ribeiro, Ana Paula; Lopes, R., 2019; (vi) privatization (Dias, M.; Teles, A.; Pilatti, K., 2018;

Evidence pointed out a significant loss of quality in education standards and performance throughout the past two decades, influenced by the entrance of the stock exchange companies into Brazilian higher education. This study is helpful for academics, decision-makers, policymakers, and managers. However, it also implies the practical contribution of including different regulatory activities complementary to the process of operation of the regulatory agency presented here and widely debated. Therefore, it was not only enough for us to suggest creating a regulatory agency for higher education in the country but also to offer all the structural parameters for creating it in its primary and in-depth details. In this sense, we have expanded the debate about creating a regulatory agency, presenting a solution deeply adapted to the Brazilian reality regarding higher education in the country, highlighting the entry of the stock exchange companies into the proposed regulatory model.

We conclude that the Brazilian higher education evaluation system needs to be improved so that it can be able to inform students and their families about the quality of the courses in which they are entering; notify employers about the quality of professionals leaving the systems; educate governments about the return on their investments in higher education, and should also provide elements so that the institutions themselves are stimulated and can improve their performance. We conclude that the creation of the National Agency for Higher Education (NAHE) would represent a fundamental step to improving the entire evaluation process of Brazilian higher education, with

emphasis on the entry of publicly traded companies due to the importance of their participation in the system.

It should be noted that the creation of an autarchic regulatory agency linked to the MEC does not represent the solution to all the problems of Brazilian higher education but is an innovative step towards the achievement of excellence, transparency, promotion of best practices, improvement of current systems and decentralization of the decision-making process, thus ensuring excellence in higher education in Brazil.

Finally, we concluded that the entry of stock exchange companies into Brazilian higher education had its ups and downs. On the one hand, the number of courses offered and the number of enrollments increased drastically. However, on the other hand, the quality of higher education did not perform equivalently. Therefore, evidence suggests the creation of new regulatory instruments, supporting the decentralization of the Ministry of Education activities by creating a new regulatory agency in the sector, able to cope with the demands of the ever-increasing private higher education market for the decades to come.

FUTURE RESEARCH

We encourage future research in the educational system and evaluation of higher education in other countries and their associated public policies, as they may present different results than Brazilians. Furthermore, we recommend future studies on the impact of the creation of the National Agency for Higher Education (NAHE) on performance indicators in education in the country.

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