The Interaction between Higher Education Institutions and Professional Bodies in the Context of Digital Transformation: The Case of Brazilian Accountants

Osmar António Bonzanini [1], Amélia Silva [2,*], Gary Cokins [3] and Maria José Gonçalves [2]

1   ACCRGS, RS, Porto Alegre 96203-040, Brazil; bonzanini.prof@gmail.com
2   CEOS.PP, Polytechnic of Porto, 4200-465 Porto, Portugal; mjose@iscap.ipp.pt
3   Kellogg School of Management, Northwestern University, Evanston, IL 60208, USA; gcokins@garycokins.com
*   Correspondence: acfs@iscap.ipp.pt

Abstract: The business economy experienced major changes during the last three decades. The social and economic globalization associated with the fourth revolution put the accounting profession under great pressure toward harmonization and convergence. Still, the route to become a qualified professional accountant varies from country to country all over the world. This paper seeks to understand the evolution of the accounting profession in Brazil and focus on the interaction between higher education institutions (HEIs) and professional bodies, in the context of digital transformation. It is an exploratory study. A survey questionnaire was used to collect data about the perception of the directors of first-degree programs regarding the autonomy of HEIs in defining the curricular contents intended to qualify accounting professionals. The findings show that HEIs are highly influenced by the professional order and Ministry of Education. The limitation associated with this research is that it focusses on one particular professional group in one country.

Keywords: accountant; professions; digital; professional bodies; higher education institutions

1. Introduction

Globalization has effects on the environment, culture, political systems, development and economic prosperity, as well as on the welfare of human beings that make up societies around the world. Technology has been the catalyst that has propelled another globalization process. The progress made, especially in the field of information technology, has dramatically transformed economic activity.

The fourth industrial revolution has changed the landscape of education and innovation. Higher education institutions (HEIs), businesses, professional associations and public authorities will have to cooperate in the next framework of Industry 4.0. This term was introduced by Kagermann et al. at the Hannover Fair in Germany in 2011. The emergence of Industry 4.0 is driven, not only by the rapid development of technology, but also by social and economic factors. Key technologies driving Industry 4.0 are wearables, augmented reality, simulation, autonomous vehicles and robots, additive manufacturing, distributed ledger systems (such as blockchain), big data analytics, mobile computing and cloud computing. These technologies affect and enable the creation of different novel business models [1–4].

In addition, there are also social and economic factors driving the fourth industrial revolution, such as emerging platform economies and more freelancing and consultant-style services, which are enabled by technology. While, at the same time, more and more people are getting accustomed to a new flexible kind

of work, it also means that work relationships are becoming more interdependent [5]. The development of up-to-date curricula compatible with current market requirements, namely those required by Industry 4.0, requires collaborative networking, where the various actors, namely universities, companies, professional associations and the state, are represented. The digital transformation of society pressures professions to adapt to the traditional framework of professionalism by including attitudes and behaviors expressed in the digital world.

The professions have evolved from a "golden age" of professionalism to a loss of professional dominance and influence, partially caused by managerialism [6–8]). Over the past four decades, the increase in higher education courses, replacing the old professional training programs, has been growing, due to the knowledge and skills that involve the qualification of future professionals. In this scenario, HEIs (universities, colleges, polytechnics) provide knowledge and certify the technical skills of professionals, sustaining their ability to solve problems and guide their clients [9]. University autonomy and academic freedom are closely related; however, they form different concepts. According to [10], the first is an institutional authority; the latter is a personal privilege granted to academics to safeguard the unrestricted pursuit, transmission and dissemination of truth and knowledge. Still, according to the same author, the following concept is an interpretation of the historical roots of these concepts and, in particular, how the determinant concepts of university autonomy have evolved in response to changes in opinion about education. The author of [11] starts from the claim that the result of higher education, in the first place, is the credentials in which knowledge is obtained, mainly, in professional life.

Although such perspectives have significant consequences for the understanding of the characteristics of professionalism, it is not yet clear how professional competence is acquired. In the social and human sciences, professions are presented as a phenomenon of the organization of the labor market, given the ability to create exclusive shelters for performance, through the monopoly of advanced knowledge and other credentials, which are necessary to achieve social and economic opportunities of authorized practices [12–14]. In addition to this concept, [13] observes that the control of exercise and professional power is guaranteed by universities, the state and professional bodies, which support professional power from three pillars: autonomy, monopoly over knowledge and credentialism. Still, according to [15], the result of the professionalization process is seen as the achievement of "professional autonomy".

In this context, the problematization of this study is formulated in the following terms: which are the main influences that Brazilian HEIs suffer regarding the definition of the curricula of higher education courses in accounting? Similar to [16], this paper seeks to understand how various human actors including the accounting profession, the state, universities and accounting academics, along with non-human actors such as accreditation, regulation and transformation, interact for the setting of syllabi or course content to prepare future accounting professionals.

In the following sections, we look for a deeper understanding of how professional bodies interact with universities. The next section introduces the theoretical framework adopted in this paper. In Section 3, we describe the methodology and premises of the study, followed by Section 4 with the presentation and discussion of the results. Finally, the conclusions and perspectives for the deepening of the theme with a proposal for further studies are presented.

2. Theoretical Approach

The term professionalism is applied in many different circumstances. To understand the vagueness of the concept, we must go back to [17], who identified a professional as a person whose time is mostly dedicated to an activity, unlike that individual whose involvement in a particular occupation is transient or provisional. The authors of [18] emphasize that a profession emerges when a defined number of people begin to practice a defined technique, based on specialized training. Thus, categories of daily life are confused with the ways in which they exist in social life, in the context of real groups and the aspect of formalization, starting from the state, granting professional status.

According to [19], the initial development of the fundamentals of the study of professions, in large part, arose in North America, with a focus on the United States. The traditional method of self-regulation, which characterized major professions like medicine, was based on legal devices of exclusive licensing and certification and involved protection from naked economic and political pressures and from competition with other occupations [20,21]. The assumption was that with such protection, the professions would be both willing and able to regulate the performance of their members themselves, by placing the public interest over collective and personal advantage. It was presumed that under these circumstances, professionals would work ethically and competently.

Professions are presented, according to [20], as a phenomenon of market organization, in specific areas of work, due to higher education knowledge and the monopoly of knowledge and credentials, delimiting the performance of individuals who do not have the requirements required, and who are not allowed to present themselves as professionals. In the contemporary literature, the term profession is approached in line with certain legal categories, such as lawyers, doctors and engineers, in the form of specialized activities, which gives them a high status, power and prestige [13,20]. Occupations, on the other hand, are transient or provisional activities, without specific knowledge, which do not require training and are carried out autonomously, even in the face of remuneration [18,22]. Still, as mentioned by [20], the formal education required is the milestone that distinguishes occupations from professions. That is, something like a form of accreditation, which acts as a market reserve mechanism. According to [13] and [14], aiming to achieve status as a professional, in addition to the inherent knowledge, the graduate must comply with other requirements, among which are the credentials in the form of a degree and, in particular, approval through a knowledge test applied by the respective order or professional council. Thus, in both cases, the "power" of a profession to identify and safeguard the content and practices of its work influences its evolution and status in the system of interdependent professional relationships [23].

The assumption was that with such protection, the professions would be both willing and able to regulate the performance of their members, by placing the public interest over collective and personal advantage. It was presumed that under these circumstances, professionals would work ethically and competently. However, this traditional method of self-regulation is changing. It is being replaced by methods intended to impose stronger, external controls which [21] are classified into three forms, as follows:

- The first one is *market* regulation, which is usually labeled as "deregulation". Professionals are exposed to the market. This can be done by promoting interprofessional or intraprofessional competition.
- The second form of regulation pointed out by Freidson is *bureaucratic regulation.* Such regulation is characterized by a proliferation of record-keeping requirements and the development of systematic methods to review those records. Embedded in that system of records, facilitated and accelerated by the computer, is a rationalized system of categories by which professional work becomes measured and assessed.
- *Collegial regulation*, the third method of regulation identified by Freidson, becomes more clear, active and formal. In the case of accounting, accountants were required, first, to review their colleagues' working processes and decisions. For the author, collegial regulation rather than external bureaucratic regulation remains predominant.

In charge of legitimizing the professionalization process, the formal structures are represented by universities, professional bodies and the state. The organization of professionals around associations and orders originates from what [13] lists as the first function of professionalism: the protection of standards of excellence in the face of pressures of speed or ease, in which such a function is performed in the development of expertise, with autonomy, which results in the belief that qualified professionals are qualified in determining the functions to be performed, in dedication, based on the concept that through the development and exercise of expertise, they are worthy of devotion to a career. In this context, professional associations and orders operate between the state and professionals and between

them and their clients, who participate in the construction of rhetoric and discourse, aiming at public recognition and legal protection. The debate in relation to the performance and prerogatives in favor of professional orders also involves questioning the legitimacy delegated by the state, in its own powers, based on the argument that in some countries, there is no mandatory registration of professionals, in the respective orders [24,25]. On the other hand, in countries like Spain, England and Brazil, the legislation has greater requirements, since certain orders, such as accountants, doctors, engineers and architects, fulfill a supervisory role.

In the context of sociological theories, studies on professions, within a critical perspective, do not recognize professionals as neutral altruistic groups, but in the form of aggregates with identical interests and who seek market control, in addition to their central role in capitalist mediation and the means of production [26]. Indeed, functionalist theorists of professions were heavily criticized. Their scientific support, mainly their ideological neutrality, was questioned. Professions underwent "crises of confidence and accountability" [27] which created the basis for new approaches. The paradigm of power (Freidson, Johnson, Larson) opens up a debate between the theses of *professional power dominance* and *professional power decline*. The ideal type of [28], i.e., professionalism in its pure sense, no longer exists, or rarely exists. It is now organizationally defined and includes the logics of the organization and the market, managerialism and commercialism. The authors of [29] argue that the discussion about professionals and scientists working in formal organization revolves around the issue of control, namely, whether or not conventional bureaucratic methods are appropriate or practical for controlling the work of scientists and professionals. Indeed, as stated by [30], "professional work is increasingly mediated by organizations; many professionals now work in corporations or government offices; most professional services are delivered to organizations rather than individuals; and professional service firms have become complex, diversified organizations that are often larger than their Fortune 500 corporate clients".

According to the set of publications present in the contemporary literature aimed at professions, its field of study remains attractive for research, related to the theme, notably as regards educational and training aspects, the specific knowledge required, state interference and the actions of associations and professional orders [31,32]. Indeed, as stated by [33], "there exists a large and well-established body of research which has shown that the process of becoming a professional involves much more than simply passing examinations and being registered to practice".

The accounting profession, whose prerogatives involve acting in relation to the accounting of organizations with economic activity, in the context of liberal professions, does not belong to the group of so-called "imperial professions" whose identification is attributed to law, medicine and engineering [34]. Although, in recent times, some of them have had to adopt more flexible ways of acting, instead of legally supported and socially legitimized claims [35]. Additionally, the same author already identifies accounting as a liberal or collegial profession.

Historically, the recognition of accounting, as a profession, initially occurred on the European continent, when the first accountants obtained their status legitimately, based on the significant role played by the state in aiming its development as a profession [27,36–38]. In addition to the powers and prerogatives delegated by the state, professional accounting associations and orders, in many countries, including Brazil, the United States, Japan and Portugal, for example, take care of the preparation and application of the evidence required for access to the professional category and the performance of its affiliates, namely [36,39,40], regarding the code of ethics and ontology.

In Brazil, the 1988 Federal Constitution expressly enshrined the principle of university autonomy. Autonomy is generally understood as the capacity to be governed by specific laws [9]. In practical terms, society entrusts HEIs with the task of building and disseminating scientific knowledge so that, through the state's delegation, it can decide on the appropriate technical–scientific training, which allows future professionals to be prepared for their performance in the market [41]. Additionally, within the scope of Brazilian legislation, comprising the Law of Directives and Bases of Education (LDB), concomitant with Article 207 of the country's Federal Constitution and with the text of Resolution 10/2004 of the

National Education Council (CNE), it is expressed that HEI directors, operating in the country, have didactic–scientific autonomy to structure the curricular content of higher education courses, including undergraduate courses in accounting sciences [42]. Regarding the management of these higher education courses, this is the responsibility of a teacher, called the director, with a master or doctor title, elected or appointed to the position according to the current guidelines, issued by the Ministry of Education and Culture [43,44]. Regarding accounting teaching in higher school, this autonomy is hard to manage, since the performance of accounting science students is periodically evaluated in the tests of the National Student Performance Exam (NSPE) and at the time of the professional access tests, applied by the Federal Accounting Council (FAC) and called the Sufficiency Exam. Based on the above, it is observed that the Brazilian HEIs, which have the privilege of autonomy in the elaboration of their curricula, face two different situations: the first, in relation to the autonomy itself, which allows them to define their own educational and the second, in view of the consequences that this autonomy can bring, since when shaping their curricula, they need to act to guarantee the success of their graduates [45]. Therefore, curricular components and didactic–pedagogical issues are subordinated to two external evaluation parameters: NSPE, from the National Higher Education Assessment System (SINAES) and the Professional Order Examination, called the "Sufficiency Examination".

3. Materials and Methods

In this context, the problematization of this study is formulated in the following terms: which are the main influences that Brazilian HEIs suffer regarding the definition of the curricula of higher education courses in accounting?

In Figure 1, we represent the framework followed in this research. In the context of open economies and digital transformation, the rise of the market introduced important changes in the way universities interact with professional bodies. In particular, professional organizations and their increasing power are connected to processes of professionalization dictated by the market and highly influenced by the digital transformation of society, based on the assumption that professional behaviors are defined by society, culture and generations [46].
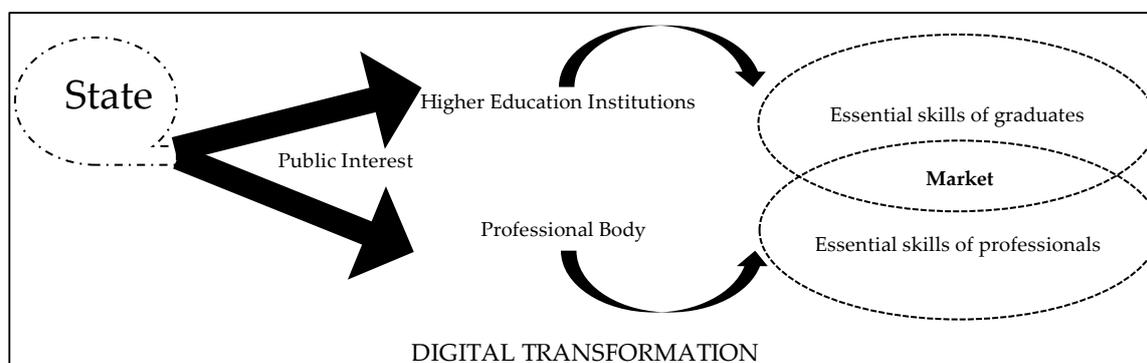
Figure 1. Research framework.

Our framework recognizes changes and continuities within the increasingly competitive context in which professionals operate. So, in order to know the perception of the directors of the higher courses in accounting sciences in relation to the way HEIs and professional orders interact, they were asked about three premises, in which they expressed their opinion from five options: (1) strongly disagree, (2) partially disagree, (3) indifferent, (4) partially agree and (5) totally agree.

- P1. The knowledge provided by the university is the main pillar of the training of future accountants, as it allows it to build the profile of the ideal professional type and to develop the essential skills for the exercise of the profession.

- P2. Universities, as accredited to qualify future accountants, are instrumentalized by professional orders, aiming to legitimize their own existence.
- P3. The curricular matrix adopted at the HEI in which I work; in view of the implementation of the Sufficiency Exam in 2010; needed significant adjustments in the subjects covered in the exam.

Aiming to confirm the perception of the directors in relation to the starting point, they were motivated to point out the degree of influence in relation to participation in the definition of the study plan (contents/pedagogical methods/curriculum), of the following drivers, already identified in the theoretical framework of this article: (a) defined by the HEI itself; (b) national curriculum guidelines; (c) Federal Accounting Council; (d) content present in the FAC Sufficiency Exam; (e) suggestions from the course faculty; (f) UN/UNCTAD/ISAR guidelines and; (g) regional features.

For data collection, a questionnaire was used. The population of this study comprised all 980 directors of accounting sciences in Brazil, identified from a report provided by the FAC, in January 2014. The sample is represented by 436 responses obtained from questionnaires sent electronically, through the tool ''Google Docs'' and to confirm its validity, the formula proposed by [47] was used to calculate the error of proportions in finite populations. Data collection was completed in December 2014, and the systematization of data began.

4. Presentation and Discussion of the Results

4.1. Brazilian Settings

In order to understand the interaction between higher education institutions and professional bodies regarding the construction of curricula of the course for future accounting professionals, one should first know the political and institutional settings of the Brazilian accounting profession.

Higher education institutions operating in Brazil and offering higher education in accounting sciences must follow the legislation of the Ministry of Education (MEC), in the form of Resolution no. 10/2004 of the CNE. In this rule, the body of knowledge that makes up the formation of the future accountant is based on this resolution [42]. However, it is necessary to note, at the outset, that in Article 1. of this legal document, there is reference to the National Curriculum Guidelines, to "[...] be observed by Higher Education Institutions", that is, there is not an imposing term in that article, but in the sense of observing the precepts listed there. According to [48], these bases do not define, in general, the mandatory subjects common to all courses. According to the same authors, there are guiding principles—or something like axes, of teaching areas—from which each HEI has autonomy to develop its curriculum. As for the guiding principles provided for in Resolution no. 10/2004 of MEC, these deal with the formation of the desired professional profile, in the context of skills and competences; the curricular components of the courses; the student assessment system and the course, in addition to the topics linked, for example, to the supervised internship, complementary projects and activities [48,49] that bring the activities of international organizations to the agenda, for which the training of competent professionals is one of the objectives of accounting education, in the context of professional organizations. Among these, the International Federation of Accountants (IFAC) through the International Accounting Education Standards Board, has acted with emphasis, aiming to create a standard reference in accounting education, with the new attributes that future accounting professionals need to develop, starting from the proposition of the American Institute of Certified Public Accountants [50], which are related to strategic and critical thinking, which propose the adoption of a perspective of global understanding, in view of the legal and tax implications in business, with a focus on clients and in marketing, with the ability to make use of technologies.

From the conceptual review carried out in this article, it appears that the curriculum content proposals for the training of accountants, from those presented by Association of International Certified— Professional Accountants—AICPA and International Federation of Accountants—IFAC and United Nations/United Nations Conference on Trade and Development/International Standards of Accounting and Reporting—UN/UNCTAD/ISAR form a set of curricular guidelines. In addition to these, the proposal

of the Brazilian Accounting Foundation and the Federal Council of Accounting, to the legal text of Resolution CNE nº. 10/2004 of the MEC, constitute the so-called "drivers", i.e., influencers, of the accountant's training.

Society, likewise, with its particularities, together with the clients of accounting services, present themselves as drivers. The existing influences are part of the composition of the curriculum aimed at training the professional, along with others, that may occur. As a result of the conceptual and theoretical development, it is inferred that there is a set of organizations, which can interfere in the composition of the curricular contents intended to train accountants in Brazil, namely:

(i)   the Higher Education Institution itself;
(ii)   national curriculum guidelines;
(iii)   contents present in the Sufficiency Exam of Federal Accounting Council;
(iv)   regional specificities;
(v)   suggestions from the faculty;
(vi)   guidelines of United Nations/United Nations Conference on Trade and Development/International Standards of Accounting and Reporting;
(vii) proposal for a new curricular matrix, based on the Federal Accounting Council/Brazilian Foundation of Accounting.

As already mentioned, HEIs have the freedom to structure the curriculum content for accountant training. However, such freedom, from now on, is limited to the contents that make up the NSPE and the Sufficiency Exam itself, which is why both are placed as limitations and restrictions. A concern with these limitations involves the imbalance between external financial reporting, for the purpose of statutory and regulatory compliance with government agencies, and internal management accounting, for the purpose of providing managers and executives of a company with insights to make decisions. Today there is greater emphasis on external financial reporting relative to internal management accounting. This imbalance adversely affects organizations in terms of improving their performance to benefit their stakeholders.

This set of curricular guidelines, designed to support the training of future professionals in Brazil, including aspects related to ethics, management controls and citizenship orientation, is largely related to that contained in the International Education Standard 2 and issued by the IFAC [49]. In this way, students acquire knowledge, skills, values, ethics and professional attitude, with the ability to integrate such elements, using the professional accounting education program to develop their professional skills.

It is also necessary to note that the demands of the labor market in the accounting area, in the Brazilian scenario, have converged to a deeper look at the teaching of accounting [49] and this concern is justified by the nuances of the business field, considering the current economic situation in the world context. Among these changes, in the academic and corporate environment, the process of convergence to international accounting standards stands out, with the signing of Law no. 11,638/07—Brazilian Corporate Law and Law no. 11,941/09, concomitant with the technical pronouncements, issued by the Accounting Pronouncements Committee (CPC) as of 2008 [51].

It should also be noted that organizations, companies and users of accounting services are customers of accounting education, seeking to meet their needs based on the skills, abilities and attitudes of students trained by HEIs. Such action requires interaction between the education offered and the demands of the world of work, in order to minimize the problems of accounting education [52,53], in addition to considering that the work environment in which the professional is inserted, with its regional particularities, becomes a competitive differential for users of accounting information, for professionals and HEIs themselves. Taking into account the legal aspects that need to be met in the training of accountants and concomitant with the contributions already listed in this article, it is possible to identify a set of drivers that tend to influence the curricular structure of accounting courses in Brazil, in line with the objective proposed.

Based on the current curricular guidelines and other items of the MEC legislation, the HEIs have autonomy in the construction of the curricula of higher education courses [47,48]. In the same legal context, concomitant with the studies that highlight the main duties of the course coordinators, their performance, together with the collegiate of the course, includes the task of organizing the full curriculum of the course, after hearing the faculty [43]. Thus, they become the first curricular drivers of accounting science courses: the HEIs that offer the course, its coordinators and the respective collegiate of the course.

Instituted by Law no. 10,861/2004, the NSPE is a mandatory curricular component, whose test is applied to graduating students every three years. The sample is made up of academics who, by the month of July, have completed more than 80% of the minimum workload of their curriculum, or will stick to a degree by the end of July of the following year. The tests are applied by the National Institute of Educational Studies and Research Anísio Teixeira—INEP [54,55].

According to Ordinance no. 202/2012, the NSPE's general objective is to evaluate the performance of students in relation to the syllabus provided for in the curricular guidelines, the skills and competences for permanent updating, of knowledge about the Brazilian and global reality and about other areas of knowledge [56]. Even if it is a mandatory curricular component, the individual result obtained by the student does not have the possibility of failing, but it contributes to the evaluation of the HEI and the respective course, without being linked to the Sufficiency Exam, applied by the Federal Council of Accounting [55].

The NSPE test takes as a reference a professional profile that includes scientific, technical, social, economic and financial issues; that has logical reasoning in the face of different scenarios; that manifests critical–analytical capacity and quantitative reasoning and has a systemic and holistic view. It must also be able to demonstrate critical–analytical capacity in relation to the activities of investigations, audits, expertise and financial, patrimonial and governmental quantifications [31].

In addition to these qualities, the future professional will be assessed on their ability to generate information for management processes for performance improvement, on the development of information systems, and on the understanding and ethical conduct in the professional practice, and even if they are not selected for the NSPE tests, they must perform the Sufficiency Exam, if they want to obtain the professional registration.

Under current Brazilian law, graduates who wish to access the category of accountant must provide, from the 8th semester of the course or after graduation, the tests that make up the Sufficiency Exam. Having completed his graduation and obtaining approval in the exam, he/she will be able to submit the professional registration with the respective Regional Accounting Council [57]. The Sufficiency Exam aims to ensure that the professional has minimum knowledge for entering the profession and, according to [56], the registration itself is not just an endorsement for the professional to perform his duties, but represents, above all, the protection of society from bad professionals, from people without training exercising their profession, from the risks that are involved in a lack of inspection and from many other factors that compromise the quality and trust of the services provided. The application of the Sufficiency Exam results from Law no. 12,249 [57], and the exam has become mandatory, and accountants could have professional registration only if they pass the exam, without exception. the Sufficiency Exam is of four hours' duration and is composed of fifteen multiple-choice questions. The Federal Council of Accounting (FCA) is in charge of its preparation and it counts on the collaboration of academics, nominated by the FCA. The first test, in 2011, brought to the agenda the study and adaptation of the disciplines and content that make up the curricula, then offered, in light of the new requirements of the exam [51]. There was also a need to include the contents resulting from the changes that occurred in the harmonization of international accounting standards, the new Brazilian Corporate Law and the creation of the Accounting Pronouncements Committee.

The institution of the Sufficiency Exam, as a requirement for the registration of professionals, is configured as another way of safeguarding the market against the untrained, protecting society and customers who use accounting services, verifying if students, even those away from the labor market,

hold the average knowledge necessary to exercise the profession, in line with the syllabus, made available during the accounting sciences course [37,58]. Therefore, it does not constitute proof of training, but aims to prove whether the training obtained by the future professional was sufficient to enter the profession. However, given the nature of the course and its guidelines, aspects questioned by [59], for whom the contents are present in the Sufficiency Exam, as well as the level of approvals, given the requirement of 50% of correct answers, do not allow for acting as accountant or financial advisor.

In addition to the NSPE and Sufficiency Exam tests, the contemporary literature allows us to identify other possible drivers. One of these comes from the Brazilian Accounting Foundation [60] in the form of a national content proposal for undergraduate courses in accounting sciences, together with the Federal Accounting Council (FAC). The objective of this joint proposal from the FBC and the CFC is to create a new curricular matrix, with the contribution of professors and directors of accounting courses, from HEIs all over Brazil, aimed at HEIs that offer the accounting sciences course [60]. In addition to the FAC/BAC proposal, others are identified, including those from international organizations.

Other international organizations, such as IASB and IFAC, have presented suggestions for the regulation and harmonization of higher education in accounting, through a joint proposal for a global curriculum model, suggested as a benchmark for accounting professionals [61], aiming to standardize the qualification of accountants in all countries.

In order to reduce the disparity in accounting education in the world, the UN/UNCTAD/ISAR presented a curriculum suggestion so that the higher courses in accounting sciences can support their curriculum, so that the graduates in accounting sciences receive training in that the knowledge necessary for the profession be similar, regardless of country [61,62]. In the text, UN/UNCTAD/ISAR presented a study plan model, published by TD/B/COM.2/ISAR/6 in 1999 and revised in 2003 [63] through the document Revised Model Accounting Curriculum, by means of a detailed description of the contents of each of the knowledge blocks.

Even though the processes of globalization are challenged cultural identity and expression in a number of ways, national accounting systems are strongly influenced by local culture. Actually, as recognized by [64], "different values of cultures preventing unified accounting practices globally are perceived to have influenced accounting values nationally and internationally". In this context, a unified exam appears as a utopic idea. Nevertheless, those who are able to take an active part in global cultural exchange often experience culture as a process rather than as a product and, in that sense, maybe we can talk about a tendency for unification regarding "accounting professionalism" [64].

4.2. Coordinators' Perceptions

Supported by three premises and one more question directly linked to the starting question, the systematization of the answers obtained allowed for visualizing the perceptions of the coordinators of the higher courses in accounting sciences in Brazil, in relation to the objective of the study, which aims to identify which organisms, and respective participation, influence the construction of curricular content designed to train accountants in the country.

As for the first premise (P1), the coordinators agree that the knowledge provided by the university is, at the moment, the main pillar of the training of future accountants, since it allows them to build the profile of the ideal professional type, in addition to developing the skills necessary for the exercise of the profession. In this regard, the level of agreement, between partially and totally, is over 90%.

Regarding the second premise (P2), most coordinators agree that HEIs, when graduating students with scientific knowledge at a higher level, are often instrumentalized by professional orders, which use them to legitimize their own existence, to the detriment of preparation of future professionals.

With regard to what is contained in the third premise (P3), there was also agreement on the part of the coordinators, in the majority, that the curriculum adopted in the HEI of performance, from the implementation of the Sufficiency Examination, in 2010, required adjustments and significant adaptations in the subjects whose contents are contemplated in that exam. Although the item of total agreement is not the predominant one in the set of responses obtained, the partial agreement confirmed

that even if not so significant, changes have occurred, to a lesser or greater extent, in a good part of the accounting sciences courses in operation in the country. This aspect allows us to infer, from now on, the importance of one of the influencing factors in the construction of curricula.

In the last question presented to the coordinators and which is directly linked to the starting question, they were motivated to inform about the influence exerted by seven different organizations, in relation to the structuring of the current curriculum of the course. In the table below, the responses of the coordinators indicate the preponderance, individually, of the indicators and their participation in the composition of the curriculum content intended to train accountants in Brazil.

Table 1, below, shows the indicators of influence and respective percentages of participation in the construction of the content intended to train accountants in Brazil.

Table 1. Indicators of influence on the construction of curricula.

Indicators	(%)
Included by Higher Education Institutions	14.70
National curriculum guidelines	17.50
Federal Accounting Council	12.80
Contents of Sufficiency Exam	14.80
Suggested by teachers	17.80
United Nations/United Nations Conference on Trade and Development/International Standards of Accounting and Reporting	9.00
Regional features	13.40
Total	100.00

Regarding participation in the composition of curricular content, in order of importance, it is observed, according to Table 1, that the content included by the HEI itself has a percentage of 14.70%. However, when adding the suggestions of the faculty, it results in 32.5%, that is, the internal influences have considerable importance in relation to the whole.

On the other hand, a percentage of 14.8% coming from the contents present in the Sufficiency Examination brings indications that external aspects promote adjustments in the contents present in the curricula, in line with the answers obtained in the third premise (P3).

Another important piece of information that can be identified in Table 1 is the sum of the percentages corresponding to the indicators that reflect the influence of associations, professional councils and orders, in their various forms (Federal Accounting Council, United Nations/United Nations Conference on Trade and Development/International Standards of Accounting and Reporting and contents of the Sufficiency Exam), which corresponds to 36.6% of the total. Thus, the three pillars of professional training already mentioned in the study: (i) Higher Education Institutions, (ii) State and (iii) Professional orders, have, through their representative bodies, effective influences in the process that leads an academic to the title of professional.

It is worth mentioning that although there is no legal aspect that can guarantee the influence of regional particularities, this indicator has been proved to be relevant, given the differences existing in the various macro-regions of the country, the dimensions of which have already been mentioned in this article. Since the study data were treated statistically and are within the margin of error as mentioned by [48], this allows for drawing conclusions about the information obtained, in addition to responding to the main premise of the study.

5. Conclusions

The accounting labour market in Brazil has been undergoing several structural changes, being influenced by factors such as advances and changes in information technology, regulatory bodies, organizations and globalization [65]. In such a context, accounting is required to go more and more

international harmonization. According to [66], international organizations of accounting, such as the IFAC, the ISAR and the IASB, are pressuring accounting professionals of different countries to develop similar competencies. Indeed, as the authors stated, "it is understandable that the how strong the similarity between the global international curriculum and the local individual curriculum more strong will be the evidence of the harmonization of the accounting education of this country" [66].

This paper investigates factors affecting the HEI's autonomy regarding the curricula of accounting graduation courses. Although there have been many similar investigations in other countries, to the best of our knowledge, we are the first to explore the perception of the coordinators of accounting graduation courses related to this issue in Brazil.

This study demonstrates that the university is perceived as the main pillar of the training of future accountants, since it develops the necessary skills for professional practice, an aspect that is related to what was proposed by [13,20]. However, coordinators of accounting graduation courses find that Brazilian HEIs are instrumentalized by professional orders, aiming to legitimize their own existence, in line with the propositions of [14,32]. Moreover, our respondents recognized that the curricula of the courses they coordinate underwent significant adjustments due to the subjects covered in the Sufficiency Exam in 2010. Therefore, Brazilian HEIs lost autonomy in defining the curricula of higher accounting courses. In line with [16], we conclude that HEIs should take care not to abdicate their responsibilities for the setting of syllabi or course content to professional bodies.

This paper contributes to the literature because it brings knowledge of accounting education in Brazil to non-Brazilian readers, and provides findings that will help HEIs rethink the way they manage their autonomy concerning the curricula's definition. Moreover, as stated by [67], the Brazilian experience is important to a broader international audience because "despite the growing economic and political prominence, little has been published in English language scholarly journals about the accounting profession in Brazil and its educational requirements". It is worth mentioning that the questionnaire applied to the respondents was built exclusively for this investigation, which is a limitation of the study. Moreover, data were collected six years ago. Even though the phenomenon under study is stable, the outdated data limit the interpretation of the results and their utility for practical purposes. In future, validated scales should be used, so the measure of the constructs is more feasible. Moreover, as the literature describes accounting professionals as negatively stereotyped in relation to creativity, dedication to study, teamwork, communication, leadership, propensity for risk and ethics [68], it would be of great interest to investigate the most recent changes in the curricula of accounting graduation courses that develop new competences in these fields. Simultaneously, considering that the current business environment is characterized by regular and substantial transformation and technological advances are accelerating globalization, it would be interesting to understand how local, national and international cultures influence essential hard and soft professional skills required of accountants in each society.

Author Contributions: O.A.B. have contributed substantially to all parts of the paper. A.S. have contributed substantially to conceptualization and methodology. G.C. have contributed substantially to conceptualization. M.J.G. have contributed substantially to data analysis, writing—review and editing. All authors have read and agreed to the published version of the manuscript.

Funding: This work is financed by portuguese national funds through FCT—Fundação para a Ciência e Tecnologia, under the project UIDB/05422/2020.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. McQuaid, R.W.; Lindsay, C. The concept of employability. *Urban Stud.* **2005**, *42*, 197–219. [CrossRef]
2. Passow, H.J.; Passow, C.H. What competencies should undergraduate engineering programs emphasize? A systematic review. *J. Eng. Educ.* **2017**, *106*, 475–526. [CrossRef]
3. Rautavaara, E. Educating the Future Product Designers—Exploring the Anatomy of a Project-based Capstone Course. 2015. Available online: http://urn.fi/URN:NBN:fi:aalto-201506303416 (accessed on 14 September 2018).

4.　Adolph, S.; Tisch, M.; Metternich, J. Challenges and approaches to competency development for future production. *J. Int. Sci. Publ. Educ. Altern.* **2014**, *12*, 1001–1010.

5.　Hofmann, E.; Rüsch, M. Industry 4.0 and the current status as well as future prospects on logistics. *Comput. Ind.* **2017**, *89*, 23–34. [CrossRef]

6.　Light, D. Towards a new professionalism in medicine: Quality, value and trust. *Tidsskr. Laegeforen.* **2003**, *123*, 1870–1873.

7.　Evetts, J. The Concept of Professionalism: Professional work, professional practice and learning. In *Springer International Handbooks of Education*; Springer Science and Business Media LLC: Heidelberg, Germany, 2014; pp. 29–56.

8.　Muzio, D.; Kirkpatrick, I.; Kipping, M. Professions, organizations and the state: Applying the sociology of the professions to the case of management consultancy. *Curr. Sociol.* **2011**, *59*, 805–824. [CrossRef]

9.　Maali, B.; Al-Attar, A.M. Accounting curricula in universities and market needs: The jordanian case. *SAGE Open* **2020**, *10*, 1–12. [CrossRef]

10.　Guruz, K. University autonomy and academic freedom: A historical perspective. *Int. High. Educ.* **2015**, *63*, 13–14. [CrossRef]

11.　Armstrong, C.F.; Collins, R. The credential society: An historical sociology of education and stratification. *Soc. Forces* **1981**, *59*, 861. [CrossRef]

12.　Freidson, E. Para uma análise comparada das profissões: A institucionalização do discurso e do conhecimento formais. *Rev. Bras. Ciênc. Sociais* **1996**, *11*, 141–154.

13.　Rodrigues, M. *Sociologia das Profissões*, 2nd ed.; Celta Editora: Oeiras, Portugal, 2002.

14.　Caria, A.A.; Rodrigues, L.L. The evolution of financial accounting in Portugal since the 1960s: A new institutional economics perspective. *Account. Hist.* **2013**, *19*, 227–254. [CrossRef]

15.　Sena, B. Professionalization without autonomy: The Italian case of building the nursing profession. *Prof. Prof.* **2017**, *7*. [CrossRef]

16.　Verhoef, G.; Samkin, G. The accounting profession and education. *Account. Audit. Account. J.* **2017**, *30*, 1370–1398. [CrossRef]

17.　Flexner, A. Is social work a profession? *Res. Soc. Work Pract.* **2001**, *11*, 152–165. [CrossRef]

18.　Rudlin, W.A.; Carr-Saunders, A.M.; Wilson, P.A. The professions. *Econ. J.* **1934**, *44*, 322. [CrossRef]

19.　Pekkola, E.; Carvalho, T.; Siekkinen, T.; Johansson, J. The sociology of professions and the study of the academic profession. In *Theoretical and Methodological Perspectives on Higher Education Management and Transformation: An Advanced Reader for PhD Students*, 1st ed.; Tampere University Press: Tampere, Finland, 2018; pp. 121–150.

20.　Berlant, J.L.; Freidson, E. The professions and their prospects. *Contemp. Sociol. J. Rev.* **1975**, *4*, 261. [CrossRef]

21.　Fitzgerald, L.; Dufour, Y. Clinical management as boundary management: A comparative analysis of Canadian and UK health-care institutions. *J. Manag. Med.* **1998**, *12*, 199–214. [CrossRef]

22.　Anteby, M.; Chan, C.K.; DiBenigno, J. Three lenses on occupations and professions in organizations: Becoming, doing, and relating. *Acad. Manag. Ann.* **2016**, *10*, 183–244. [CrossRef]

23.　Abbott, A. *The System of Professions: An Essay on the Division of Expert Labour*; The University of Chicago Press: Chicago, IL, USA, 1988.

24.　Lester, S. The development of self-regulation in four UK professional communities. *Prof. Prof.* **2016**, *6*, 1–14. [CrossRef]

25.　Willmott, H. Organising the profession: A theoretical and historical examination of the development of the major accountancy bodies in the U.K. *Account. Organ. Soc.* **1986**, *11*, 555–580. [CrossRef]

26.　Leicht, K.T.; Walter, T.; Sainsaulieu, I.; Davies, S. New public management and new professionalism across nations and contexts. *Curr. Sociol.* **2009**, *57*, 581–605. [CrossRef]

27.　Parsons, T. The professions and social structure. *Soc. Forces* **1939**, *17*, 457–467. [CrossRef]

28.　Freidson, E.; Rhea, B. Processes of control in a company of equals. *Soc. Probs.* **1963**, *11*, 119. [CrossRef]

29.　Pinheiro de Sá, L.; Neco, L. Um estudo sobre os determinantes de desempenho no Enade de alunos do curso de Ciências Contábeis. *Rev. Bras. Contab.* **2015**, *213*, 28–41.

30.　Suddaby, R.; Gendron, Y.; Lam, H. The organizational context of professionalism in accounting. *Account. Organ. Soc.* **2009**, *34*, 409–427. [CrossRef]

31.　Carter, C.; Spence, C.; Muzio, D. Scoping an agenda for future research into the professions. *Account. Audit. Account. J.* **2015**, *28*, 1198–1216. [CrossRef]

32. Coelho, E. *As Profissões Imperiais: Advocacia, Medicina e Engenharia no Rio de Janeiro, 1822–1930*; Editora Record: Rio de Janeiro, Brazil, 1999.

33. Anderson-Gough, F.; Grey, C.; Robson, K. Accounting professionals and the accounting profession: Linking conduct and context. *Account. Bus. Res.* **2002**, *32*, 41–56. [CrossRef]

34. Reed, C. Professionalizing corporate professions: Professionalization as identity project. *Manag. Learn.* **2018**, *49*, 222–238. [CrossRef]

35. Lee, T.A. Consolidating the public accountancy profession: The case of the proposed institute of chartered accountants of Great Britain, 1988—9. *Account. Hist.* **2010**, *15*, 7–39. [CrossRef]

36. Baker, C. *L'evolution d'une Profession Comptable Globale: Une Etude Comparative Historique en Quelques Pays Europeens. Comptabilités et Innovation*; HAL: Grenoble, France, May 2012; pp. 1–27. Available online: https://hal.archives-ouvertes.fr (accessed on 20 November 2018).

37. Sangster, A. Imagens e Projeções do papel do contador. In *O Profissional da Contabilidade: Desenvolvimento de Carreira, Percepções e seu Papel Social*, 1st ed.; Editora SENAC: São Paulo, Brazil, 2014; pp. 23–32.

38. Altintas, N.; Yilmaz, F. The accounting profession: A descriptive study of the common and code law countries. *J. Mod. Account. Audit.* **2012**, *8*, 932–950.

39. Bugarim, M.C.C.; Rodrigues, L.L.; Pinho, C.; Machado, D.D.Q. O desempenho dos profissionais de contabilidade no exame de suficiência do cfc: Uma análise de conglomerados regionais. *Rev. Contab. Organ.* **2014**, *8*, 60. [CrossRef]

40. Durham, E. *A Autonomia Universitária: O Princípio Constitucional e suas Implicações*; NUPES: São Paulo, Brazil, 1989.

41. Ministério da Educação e Cultura. *Instrumento de Avaliação de Cursos de Graduação (Bacharelado e Licenciatura)*; SINAES: Brasília, Brazil, 2017.

42. Santos, A.; Domingues, M.; Ribeiro, M. Nível de similaridade das matrizes curriculares dos cursos de Ciências Contábeis das instituições paranaenses listadas no MEC, ao currículo mundial. *Regist. Contáb.* **2013**, *4*, 105–127.

43. Associação Brasileira de Mantenedoras do Ensino Superior. *Funções do Coordenador de Curso: Como Construir o Coordenador Ideal*; Associação Brasileira de Mantenedoras de Ensino Superior: Brasília, Brazil, 2011.

44. De Souza, M.A.; Vergilino, C.D.S. Um perfil do profissional contábil na atualidade: Estudo comparativo entre conteúdo de ensino e exigências de mercado. *Adm. Ensino Pesq.* **2012**, *13*, 195–236. [CrossRef]

45. Hammer, D.P. Civility and professionalism. *J. Pharm. Teach.* **2002**, *9*, 71–90. [CrossRef]

46. Triola, M. *Introdução à Estatística: Atualização da Tecnologia*, 14th ed.; LTC: Rio de Janeiro, Brazil, 2017.

47. Institui o Sistema Nacional de Avaliação da Educação Superior–SINAIS e dá outras Providências. Lei n° 10.861, de 14 de abril de 2004. *D. Of. União* **2004**, *72*, 3–4.

48. Pires, C.B.; Ott, E. Estrutura curricular do curso de Ciências Contábeis no Brasil versus Estruturas curriculares propostas por organismos internacionais: Uma análise comparativa. *Rev. Universo Contáb.* **2010**, *6*, 28–45. [CrossRef]

49. American Institute of Certified Public Accountants (AICPA). *The Grants Register 2021*; AICPA, 2020. Available online: https://www.aicpa.org/about/affiliates/aicpafoundation/grantopportunities.html (accessed on 21 August 2020).

50. Ribeiro, O. *Contabilidade Avançada*, 4th ed.; Editora Saraiva: São Paulo, Brazil, 2019.

51. Lemes, D.F.; Miranda, G.J. Habilidades profissionais do contador preconizadas pela IFAC: Um estudo com profissionais da região do Triângulo Mineiro. *Adv. Sci. Appl. Account.* **2014**, *7*, 293–316. [CrossRef]

52. Santos, D.; Araújo, V.; Cavalcante, P.; Barbosa, E. Formação Acadêmica em Ciências Contábeis e sua Relação com o Mercado de Trabalho: A percepção dos alunos de ciências contábeis de uma Instituição Federal de Ensino Superior. In *Novas Perspectivas na Pesquisa Contábil*; Anais do XI Congresso USP de Iniciação Científica em Contabilidade: São Paulo, Brazil, 2014.

53. Conselho Nacional de Educação; Câmara de Educação Superior. *Resolução CNE/CES 10, de 16 de Dezembro de 2004*; Diário Oficial da União: Brasília, Brazil, 2004; p. 15.

54. Gregory, J. Avaliação: Os pecados do MEC. *NetManag. ABRAFI* **2013**, 1–10. Available online: www.abrafi.org.br (accessed on 21 August 2020).

55. Esteves, T.D.J.; Souza, J.D.S. O papel do instituto nacional de estudos e pesquisas educacionais anísio teixeira (inep) na reforma gerencial dos sistemas públicos de ensino no brasil. *Educere Educ.* **2020**, *15*, 10. [CrossRef]

56. *Exame de Suficiência*; Conselho Federal de Contabilidade: Brasília, Brazil, 2020.

57. Breda, Z. *Qual é o papel dos Conselhos Profissionais*; Conselho Federal de Contabilidade, DF: Brasilia, Brazil, 2019.

58. Bugarim, M.; Oliveira, O.A. Evolução da Contabilidade no Brasil: Legislações, órgãos de Fiscalização, Instituições de Ensino e Profissão. *XI Simp. Excel. Gest. Tecnol.–SEGet* **2014**. Available online: https://www.aedb.br/seget/arquivos/artigos14/47120554.pdf (accessed on 21 August 2020).

59. Fundação Brasileira de Contabilidade—FCB. *Matriz Curricular Para Cursos de Ciências Contábeis: Uma Proposta da Fundação Brasileira de Contabilidade*; FCB: Brasília, Brazil, 2017.

60. Wagenhofer, A. Towards a theory of accounting regulation: A discussion of the politics of disclosure regulation along the economic cycle. *J. Account. Econ.* **2011**, *52*, 228–234. [CrossRef]

61. Segantini, G.; Vieira, E.; Melo, C.; Silva, J. Uma análise comparativa entre os currículos dos cursos de ciências contábeis nos países do MERCOSUL com o Currículo Internacional proposto pela ONU/UNCTAD/ISAR. In Proceedings of the Anais do 7º Congresso USP de Iniciação Científica em Contabilidade, São Paulo, Brazil, 28–31 July 2010.

62. Campos, L.C.; Lemes, S. Análise comparativa entre o currículo mundial proposto pela ONU/UNCTAD/ISAR e as Universidades Federais da Região Sudeste. In Proceedings of the Encontro de Ensino e Pesquisa em Administração e Contabilidade E, 3., João Pessoa, Brazil, 20–22 November 2011.

63. Cavalcante, D.; Aquino, L.; De Luca, M.; Ponte, V.; Bugarim, M. Adequação dos currículos dos cursos de Contabilidade das universidades federais brasileiras ao currículo mundial de contabilidade e o desempenho no Enade. *Pensar Contáb.* **2011**, *13*, 42–52.

64. Askary, S. Accounting professionalism—A cultural perspective of developing countries. *Manag. Audit. J.* **2006**, *21*, 102–111. [CrossRef]

65. De Souza, F.A.; Silva, C.A.T.; Da Silva, P.B.; De Souza, P.V.S. Onde estão os profissionais contábeis no Brasil? *Rev. Ambient. Contáb.–Univ. Fed. Rio Gd. Norte* **2018**, *11*, 98–116. [CrossRef]

66. Echternacht, T.H.S.; Niyama, J.K.; Almeida, C. O ensino da contabilidade internacional em cursos de graduação no Brasil: Uma pesquisa empírica sobre o perfil dos docentes e recursos didáticos e metodológicos adotados. *UnB Contáb.* **2007**, *10*, 95–124.

67. Rodrigues, L.L.; Pinho, C.; Bugarim, M.C.; Craig, R.; Machado, D. Factors affecting success in the professional entry exam for accountants in Brazil. *Account. Educ.* **2017**, *27*, 48–71. [CrossRef]

68. Leal, E.A.; Miranda, G.J.; Araújo, T.S.; Fabiana, L.; Borges, M. Estereótipos na Profissão Contábil: A opinião de estudantes e do público externo no Triângulo Mineiro. *Contab. Gest. Governança* **2014**, *17*, 134–153.