



## The quality of economics education in Portuguese universities: how academics' characteristics fit with teaching accreditation standards

### A qualidade da educação em economia nas universidades portuguesas: como o perfil dos académicos se ajusta aos critérios previstos na acreditação

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#### **Abstract:**

The purpose of this paper is to examine how the characteristics of academics in Portugal (regarding sex, professional category, contract type and tenure, degrees awarded and institutions that awarded each of them, age, research and professional experience) fit with the new teaching accreditation standards currently in use. An empirical quantitative study supported by data collected from the first and only national census of Portuguese course accreditation, comprising 972 academics in 14 institutions, was conducted. The profile that emerges of academic staff shows that there are significant areas for improvement to meet the quality of the accreditation standards. Also, our work has the advantage to be part of a scholarly reference that can be used (in a comparative perspective) for upcoming studies.

**Keywords:** Economics; academics; higher education; quality assurance; research; Portugal.

#### **Resumo:**

O objetivo do presente artigo é o de examinar como as características dos académicos portugueses (relativamente ao género, à categoria profissional, ao tipo de contrato e vínculo contratual, aos graus académicos e às instituições que os concederam, à idade, à investigação científica produzida e à experiência profissional) se ajustam aos novos critérios de acreditação em vigor. Um estudo quantitativo sobre os dados obtidos no primeiro e, à data, único, censo nacional de acreditação de cursos, envolvendo 972 académicos em 14 instituições diferentes, foi realizado. O perfil que emerge dos académicos mostra que há áreas significativas a melhorar para se dar cumprimento aos critérios de acreditação da qualidade em curso. Este estudo apresenta também a vantagem de se poder constituir como referência capaz de ser utilizada (em termos comparativos) em estudos futuros.

**Palavras-chave:** Economia; docentes; ensino superior; garantia da qualidade; investigação; Portugal.



## Resumen:

El objetivo deste trabalho es lo de examinar como las características de los docentes portugueses (en relación con el género, la categoría profesional, el tipo de contrato e de vínculo contractual, los grados académicos e las instituciones que os concederán, la edad, la investigación científica producida e la experiencia profesional) se ajustan a los nuevos criterios de acreditación en vigor. Un estudio cuantitativo sobre os dados encontrados en lo primero e, à la data, único, censo nacional de acreditación de cursos, envolviendo 972 académicos en 14 instituciones diferentes, ha sido realizado. El perfil que emerge de los académicos muestra que ha áreas significativas a mejorar para se dar cumplimiento a los criterios actuales de acreditación de la cualidad. Este trabajo, pretende también constituir-se como referencia que pueda ser utilizada (en termos comparativos) en estudios futuros.

**Palabras clave:** Economía; docentes; enseñanza superior; garantía de calidad; investigación; Portugal.

## Introduction

The drive for continuous improvement in the quality of higher education is being fueled by widely held concerns about the efficacy and efficiency of the education sector, with education policy in Portugal no exception (Rosa & Sarrico, 2012). This is particularly true of the approach to quality assessment and the accreditation of institutions and their different education cycles, with Portugal implementing the European system which guarantees quality in higher education across the member states (A3ES, 2015). The models used to comply with the legal requirements of these objectives are developed using a series of indicators which seek to reflect the different roles of academic staff.

The review of the literature on quality, accreditation and university career statutes (in Portugal) in the next sections shows the importance of examining the characteristics of the academic staff involved in lecturing. From the first and, to date, the only national round of course accreditation, a big amount of comprehensive information regarding every single academic in public universities. The study also includes the Catholic University (a private university established under the Concordat between the Portuguese Government and the Vatican) as the only concordatory one).

As data was accessible for all scientific domains (e.g. Sarrico & Pinheiro, 2015) and as it would not be worth considering all of them on a scientific paper, the option to choose the particular domain of Economics came both from our personal disquiets and interests. This paper analyzes the body of academics lecturing economic courses and how their characteristics fit with teaching accreditation standards (regarding sex, professional category, contract type and tenure, degrees awarded and institutions that awarded each of them, age, research and professional experience). As so, this backdrop seeks to provide a motivation to enlarge and inform on the debate on the quality and accreditation of economics education, with a focus on Portuguese universities. To do so, we examine how the characteristics of economics academics agree with the national and international accreditation standards currently in place. Starting with the census data, we built a database consisting of the characteristics of the academic staff that teaches in 1st, 2nd and 3rd



cycle-level degrees with the word "Economics" in their designation. The underlying data of the study covers 972 academics in 14 institutions. This study is organized into five main sections. After the introduction, this paper first presents the conceptual framework on the concepts of quality and accreditation in higher education, with reference to the universities career statutes. In the next section the research questions, data and method are introduced. This is followed by a series of findings and the empirical contribution is then analyzed and discussed by the light of the literature review. At the end of the paper, conclusions, limitations and future outlines of research are presented.

## Quality and accreditation in higher education

Quality assurance (QA) systems have been evolving across Europe for more than twenty years (Westerheijden, Stensaker, Rosa, & Corbett, 2014). Today, formal systems exist which have grown out of extensive debate about quality in higher education and how to manage it. However, despite this long period of evolution, there is still a feeling that "something very important is still largely missing: that is methodologically more comprehensive and empirically more reliable knowledge about the effects and mechanisms of action of QA measures in higher education" (Leiber, Stensaker, & Harvey, 2015, p.288).

In the current state of things, there is widespread use of external quality reviews, but there is no clear connection showing that QA systems help improve teaching quality (Rosa & Amaral, 2012). The drive for QA in higher education is often seen as a method of providing reassurance in a system experiencing significant growth. In many cases, higher education systems were conditioned by dual drivers of expansion and improved efficiency, while at the same time controlling for standards (Cave, 1997). External accreditation agencies developed accreditation regimes, taking over from the teaching quality audits run by individual institutions that had traditionally driven quality in higher education (Rosa & Sarrico, 2012). The arrival of these accreditation regimes affected academic work and identities, with an audit culture developing around higher education (Strathern, 2000). As a result, the perception of academic work changed: whereas previously it was seen as professional work characterized by trust and autonomy, it is now more controlled and structured, with rigid management work procedures (Hayes, 2003; Parker & Jary, 1995; Willmott, 1995; Wilson, 1991). As competition has increased in higher education alongside the growing number of rankings being performed, academics have become unsettled with their change in status and how the profession has become stratified, with those at the top of the rankings being classed as the elite (Sarrico & Melo, 2012; Sarrico & Pinheiro, 2015). These factors create an extra source of concern for academics and give a particular perspective to the idea of qualified faculties. The Standards and Guidelines for QA in the European Higher Education Area - ESG (ENQA, 2009) provide the basis for the idea of qualified faculty, making it a common criterion across accreditation standards in Europe, including Portugal (A3ES, 2015).

Quality assessment in Portuguese higher education can be traced back to 1994, when the first law ushered in two cycles of assessment. This proved relatively ineffectual, as no degree courses were closed as a result of the process. The Organization for Economic Co-operation and Development (OECD) review of higher education in Portugal in 2007 (OECD, 2007) and the European Network for QA in Higher Education (ENQA) review of QA (ENQA, 2006) provided the catalyst for new legislation.



In 2007, an Agency for Assessment and Evaluation of Higher Education (A3ES) was formed, basing itself on the Standards and Guidelines for QA in the European Higher Education Area (ENQA, 2005). The new agency assessed all degrees and accreditation awarded only to those complying with the standards laid down in law. In 2010 and 2011 the agency undertook several activities. A preliminary accreditation of all study cycles was carried out, using the minimum legal requirements, with a particular focus on the qualification of academic staff and the quality of research for postgraduate studies. New study programs required approval before opening and the foundations were laid for internal systems of quality control to be audited. Regular accreditation for all study programs started in 2012, introducing with it the first small scale auditing of internal QA systems. The emphasis on proper functioning internal QA systems represented a move to place the main responsibility for the quality of education with the institution itself. The next phase of accreditation, focusing on the institutional level, is taking place in 2017, following the accreditation cycle covering programs of study.

## The post-1974 growth of higher education in Portugal

### From 1974 to the university career statutes in 1979

In Portugal, the totalitarian ideology of the New State and the theories of the Salazarism “sought to preserve the idea of the university as a ‘corporation of masters and students (...) which were upheld so long as both groups did not question the fundamental ideas of ‘national unity’” endured until 1974 (Torgal, 2012, p.68). Following the post-revolution of 1974 against the New State, and after the political effervescence “to set up a State of socialist Marxist” and a Political University (conceived within the restrictions defined by a sole methodology), a period of greater consistence in education policies arose (Arroteia, 2002). It was then that the Portuguese Republic Constitution of 1976 “opened the way for creating private schools” (Torgal, 2012, p.69) and “embarked on a numerus clausus logic” (Torgal, 2012, p.70). It was also by that time that the Decree-Law 781-A/76 of October, 28<sup>th</sup> “gave formal institutional shape to the bodies of faculty administration” (Torgal, 2012, p.69) where “the freedom to learn and to teach is guaranteed” (Torgal, 2012, p.69). Three years later, the Decree-Law 107/79 of May, 2<sup>nd</sup>, created the Council of Rectors of the Portuguese Universities (CRUP), which sought to decentralize the competencies of the Ministry of Education in what regarded universities. This organization, CRUP, assumed itself not as a mere consultant body, but rather as an active part in the coordination functions of universities (Arroteia, 2002). In addition, the Rector of the Catholic University (that gained official recognition in 1971) was also accepted to be part of the CRUP, in dissimilarity to other private universities (Rosa & Sarrico, 2012; rosa, 2012). Later on, with the Decree-Law 448/79 of November, 13<sup>th</sup>, the universities career statutes were published. A few months later, the Decree-Law 513-T/79 of December, 26<sup>th</sup> definitely institutionalized the binary nature of Portuguese higher education that combines universities and polytechnics, emphasizing the sharply vocational training of the latter and the conceptual and theoretical nature of the former.

Since the preamble of the Decree-Law 448/79 of November, 13<sup>th</sup>, it was mentioned the will of qualifying the university academic career as a “true professional career” supported both by a solid academic base, a strong research and social concern. Particularly, it appealed to the creation



of specific conditions in order to make it possible for academics to receive a doctoral degree (Ministério da Educação, 1979).

The Decree-Law 448/79 of November, 13<sup>th</sup> defined five professional categories: assistant trainee (assistente estagiário), assistant (assistente), assistant professor (professor auxiliar), associate professor (professor associado) and full professor (professor catedrático). Professors were the only ones that could obtain tenure. To access the category of assistant trainee an undergraduate degree sufficed. After two years, during which a masters degree had to be achieved, the academic was promoted to the assistant position. During the next six years, the academic should receive a doctoral degree in order to be promoted to the next echelon. Still, as this did not guarantee a permanent contract (after being five years as an assistant professor), the academic had to apply to the University's Scientific Council, which, upon a curriculum in-depth evaluation, could decide to change the temporary contract to a permanent one. To access the position of associate professor, it was necessary not only a minimum period as assistant professor, but also a submission to a public competition. Finally, to access the higher position, the one of full professor, the academic had to accomplish three pre-requisites: to be an associate professor, to have the title of Agregado (similar to the German notion of Habilitation) and to apply to yet another public competition (Machado-Taylor et al., 2017; Ministério da Educação, 1979). Ergo, "positions for associate and full professor were awarded only as a result of a nation-wide competition as and when a vacancy for a particular post became available" (Sarrico & Pinheiro, 2015, p. 542).

## The new university career statutes in 2009 and what has changed

The first university career statutes of 1979 ruled for more than thirty years. Naturally, the need for a change arrived with new challenges and with the new reality that higher education in Portugal, as in other countries, faced in the XXI century. As a consequence, changes arrived with the Decree-Law 205/2009 of August, 31<sup>st</sup> through a set of amendments to the Decree-Law 448/79 of November, 13<sup>th</sup>. With this new decree (Ministério da Educação, 2009) and posteriori revisions a "new legal framework changed the academics careers regulations" (...) *although the main structures remain very similar*" (Machado-Taylor et al., 2017, p. 79). Under a philosophy of modernization, higher education was assumed as an essential part of Portugal's development and the university career was anticipated as a very attractive and dignified one. In fact, the very first preamble of the document covers a diverse set of issues from "changes in the legal framework of employment of academics; changes (...) in the rules of the access to the academic career and of the public competitions to fill vacant positions" (Machado-Taylor et al., 2017, p. 79) to "improving the quality of universities for international competition" (Machado-Taylor et al., 2017, p. 77).

Particularly, it emphasizes the will to keep narrow relations between academic career and research. More, and from the very first draft of the document, some issues are mentioned as important topics. Among those, we highlight: the abolition of the assistant trainee and the assistant echelons, the doctorate as the access degree in the career at the level of assistant professor, and the enlargement of top places inside the academic career (in total, associate and full professors must comprise between 50 and 70 per cent of the entire number of academics). Also in the spotlight is the introduction of tenure for some echelons, the valorization of all academic's functions in academic contests or the



mandatory procedure of a public competition (at all times international) for the filling of university positions. Here, the fact that the new Decree-Law 205/2009 of August, 31<sup>st</sup> enforces a majority of external and international members within the juries of all public competitions, causes inbreeding a difficult issue, while internationalization and mobility are stimulated (Machado-Taylor et al., 2017).

University academics are either career academics or 'invited' academics with the former having permanent contracts or tenure, and the later having a fixed-term contract (and so not being in the career). Furthermore, academic contracts may be with or without exclusivity and the decision of non-exclusivity contracts may occur just because being in exclusivity means a compensation of 30% extra on the base salary of the academics. The new Decree-Law 205/2009 of August, 31<sup>st</sup> limits the proportion of non-tenure academics, stating that these shall be, at the most, one third of the academic body. The underlying rationale is that those same academics are thought to carry external professional experience and, so, to be on part-time contracts.

## Research questions, data and methods

A3Es took the first (and, to date, the only national round of course accreditation) census for course accreditation in 2009/2010 and Portuguese public universities (including the Catholic University) were required to submit information concerning their teaching staff. From all the comprehensive information, we selected all the courses with "economics" in the title at both the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> cycle of studies. The sample is composed of 14 institutions and 972 academics (see Table 1).

Table 1: The sample distribution of academics by institution

Universities	Frequency	%
Instituto Universitário de Lisboa	67	6.9
Universidade Católica	121	12.4
Universidade da Beira Interior	37	3.8
Universidade da Madeira	35	3.6
Universidade de Aveiro	60	6.2
Universidade de Coimbra	100	10.3
Universidade de Évora	53	5.5
Universidade de Trás-os-Montes e Alto Douro	30	3.1
Universidade do Algarve	38	3.9
Universidade do Minho	48	4.9
Universidade do Porto	108	11.1
Universidade dos Açores	28	2.9
Universidade Nova de Lisboa	154	15.8
Universidade Técnica de Lisboa	93	9.6
Total	972	100.0



From the form that each academic had to submit to A3ES, we collected data regarding the following information: name, institution, academic department, category, contract, degrees awarded and institutions that awarded each of them, year in which first degree was awarded, research (up to five references) and professional experience (A3ES, 2014). As data was built from the information submitted on each academic by the universities (to A3ES), we had no control over the correspondent form or how it was applied. Within the previous context, the following question served as a guideline for the empirical research: how the characteristics of academics lecturing economics in Portugal (regarding sex, professional category, contract type and tenure, degrees awarded and institutions that awarded each of them, age, research and professional experience) fit with the new teaching accreditation standards established by the new university career statutes of 2009?

The information derived from the staff forms is the information that is used by the assessors to pass judgements on whether as a whole each institution has the necessary staff, with the necessary "quality", to teach at bachelor, master's and doctorate levels. From the records of the A3ES form filed by the academics, we created a set of indicators that were then turned into variables (see Appendix 1). Even if the majority of the existing information was coded without trouble, the variables "Endogamy", "Internationalization" and "Research" were not so easily constructed. In fact, we used the name to code the sex and the graduation year to code the age (the graduation year was assumed to be a proxy for age, as it is in the early 20s that graduation usually occurs).

To construct the variables "Endogamy" and "Internationalization" we used the information regarding the institutions where academics attained their academic degrees, available from the indicator "Awarding institution". For the variable "Endogamy" we used three categories: "No endogamy", "Weak endogamy" and "Strong endogamy". Like this, the first category was itemized when the academic was awarded no degree from his current employing institution; the second when the academic was awarded a degree (other than the most recent one) from his current employing institution and the third when the academic was awarded his most recent degree from that same institution. Also, for the variable "Internationalization" we used two categories: "In Portugal" and "Outside Portugal". Like this, the first category was itemized if the academic was awarded the last degree in Portugal and the second one if not. As a generic rule, habilitation was always excluded from the classifications as this is usually awarded by the employing institution.

The construction of the variables "Research" was a little bit more challenging. To do that we used the information available from "Research intensity" that A3ES uses for the accreditation process of postgraduate degrees. The issue is that there is no definition of criteria in respect to the judgement on research relevance. Being so, the authors decided to consider the recommendations for the position of associate professor by using three categories: "No research output", "Some research output" and "Relevant research output". Like this, the first category was itemized when the academic mentioned no research at all; the last category was itemized when (conferring to the Journal Citation Reports (JSR) evaluation) 4 or more published A or B articles were mentioned and the second category was itemized when not any of the aforementioned categories was a choice (see Appendix 2).

Descriptive statistical procedures, suitable to categorical data, were used. To do so, and after an overview of data to have a wide-ranging idea about it, we used contingency tables and



chi-squared tests to analyze the level of dependence of the variables involved and Cramér's correlation coefficients when dependency was found. Regarding the power of the test, all residual categories were disregarded in order to ensure that expected frequencies were over five in each category.

## **Findings and discussion: describing the academic staff's teaching in economics degrees in Portugal**

Using the categories for the variables defined above (see Appendix 2), we now look at whether these variables are independent of each other.

### **Academics and gender**

In the actual Decree-Law 205/2009 of August, 31<sup>st</sup> of the university career, (Ministério da Educação, 2009), that is drew on Humboldtian values, the holistic concept of academic education empowers academics to assume positions of teaching, research and services to society (Carvalho, Özkanlı, & Machado-Taylor, 2012). The specific position of Portugal as an European OECD member, the dominant perception of its gender-neutral nature, together with the European directives relating to the parity of women, may lead to gender equality, which it doesn't seem to be the case. As a matter of fact, the "dominance of assumptions of gender-neutral ideals along with the presence of a meritocratic ideology makes the 'veiled' forms of discrimination even more invisible" (Carvalho et al., 2012, p. 61). Also, even if women are gradually more present in undergraduate courses, their involvement in academia has not been amplified by the same proportion (Machado-Taylor & Özkanlı, 2013). Indeed, the figures for 2008 showed in the work of Machado-Taylor and Özkanlı (2013), confirm a male domination with a proportion of 43.4% women academics.

Among a myriad set of factors that may explain the significant under-representation of women, the work of Machado-Taylor and Özkanlı (2013, p. 348) regarding the gender effects on academic careers, stresses the presence of horizontal (e.g. by scientific area) and vertical segregation (e.g. the number of women decreases as one goes up in the hierarchy)(Machado-Taylor & Özkanlı, 2013). And this, even if a national paid maternity scheme is implemented and academics seem to believe that there are no barriers to the promotion for women in Higher Education Institutions (HEI)

Although we do not pretend to dwell upon this subject, the simple idea that, as Machado-Taylor and Özkanlı (2013, p. 353) discusses, "women may create their own barriers (e.g., by prioritization of housewife and mother roles) seems to be important enough to think about the need of action policies to improve the conditions of family-work conciliation". So, being observant about feminist scholarship must be an unending mission on the production of academic knowledge (Pereira, 2012). And that, as Pereira (2017) claims, hopefully can bring attention to critically engage in informed political and academic changes in order to fend off the negative effects of discrimination on women's statuses.



In this study, men represent the majority of academics in the survey (62.0%). They are significantly over represented in all categories, while the gender difference for assistants and assistant professors is much less pronounced than in the senior categories of associate and full professors. This is reflected in the weak association between sex and professional category ( $\chi^2(3)=28.532$ ,  $p=0.000$ , Cramér's  $V=0.191$ ). However, and even if women used to be the minority during several decades, in the younger generation women are becoming more represented. Once again, this seems to be justified by the weak correlation between sex and the year of the undergraduate degree, as a proxy of age ( $\chi^2(5)=24.606$ ,  $p=0.000$ , Cramér's  $V=0.174$ ).

Taking a different perspective, while men represent a bigger percentage of those gaining degrees, the difference is reducing, particularly in master's degrees. Again, this seems to be reflected in the weak association between sex and degree ( $\chi^2(3)=11.820$ ,  $p=0.008$ , Cramér's  $V=0.147$ ).

Men are found to have more professional experience outside academia but the association between sex and professional experience is weak ( $\chi^2(1)=23.677$ ,  $p=0.000$ , Cramér's  $V=0.164$ ). This seems to be aligned with the findings of Carvalho et al. (2012), Machado-Taylor & Özkanli (2013) and Pereira (2012, 2017) the three of them about male dominance (essentially within a vertical segregation – the number of women drops when one ascends to higher categories) and the relatively high representation of women in younger generations. Therefore, it may be possible that all the questioning of those same authors about the urgency to improve the conditions of family-work balance for women, in general, and the urgency to improve childcare facilities at the workplace or the improvement of maternity and paternity arrangements for academics, in particular, may be suggested as social and political top priority actions.

## Academics and professional category

As said, the Decree-Law 448/79 of November, 13<sup>th</sup> (Ministério da Educação, 1979) imposed a national competition for the position for associate and the same plus the habilitation for the position for full professor. With the new career statues (Ministério da Educação, 2009), the joined number of associate and full professors shall be not less than 50% and not more than 70% of the total academic staff. However, at present, they only represent 17.1%. Though, we believe that change will be slow, given the financial constraints that Portugal is facing.

Another interesting point is that, despite the Decree-Law 448/79 of November, 13<sup>th</sup> (Ministério da Educação, 1979) institutes the doctorate as the access degree in the career at the level of assistant professor, Portuguese universities seem far away from that. In fact, at present, a little less than one-third of academic staff is not categorized as professors. And it can become even worse as most of them are assistants or not even that (so, without a doctorate degree).

Nonetheless, it is interesting to note that the results found indicate a dependency between the professional category and other variables studied.

Academics are either career academics (with permanent contracts, on tenure-track, or already tenured), or 'invited' academics (who are not career academics and are on fixed-term contracts).



The relationship between Category and Tenure ( $\chi^2(3)=138.375$ ,  $p=0.000$ , Cramér's  $V=0.421$ ) shows that professors are more likely to be tenure-track or tenured staff (i.e. on permanent contracts).

The dependency between Category and Internationalization ( $\chi^2(3)=105.211$ ,  $p=0.000$ , Cramér's  $V=0.367$ ) indicates that associate and full professors are more likely to have obtained their last degree abroad.

Age seems to be linked to the category: looking at the year of the undergraduate degree ( $\chi^2(12)=314.087$ ,  $p=0.000$ , Cramér's  $V=0.381$ ) indicates that the higher categories are associated with older academics, reflecting the idea that seniority is very important in progressing up the ranks. The results also show a strong relationship between the Professional Category and the Degree ( $\chi^2(9)=731.916$ ,  $p=0.000$ , Cramér's  $V=0.559$ ), with those academics who have a doctorate reaching the higher categories. At the same time, while academics are mostly split between strong endogamy and no endogamy, there is only a weak association between an academic's Category and their level of Endogamy ( $\chi^2(2)=37.943$ ,  $p=0.000$ , Cramér's  $V=0.158$ ).

## Academics and contract

The major group of academics (47.2%) is employed full time with exclusivity while an additional 32.5% are employed full time but without exclusivity (meaning that they are permitted to work outside of academia). At this point it is important remembering that the fact that some of those academics who are on non-exclusivity contracts, may occur purely because exclusivity means an extra 30% of the salary. This is even truer for academics without tenure but who may have preferred to be in the tenure track. The remaining academics are represented either by the 17.5% who work part-time or by the 2.7% who, typically, are being paid by the hour.

The results show a notable dependency between the Contract and Tenure ( $\chi^2(2)=264.452$ ,  $p=0.000$ , Cramér's  $V=0.558$ ). Those working part-time are less likely to be in tenure track positions, which is to be expected. Most of the academics across the different contract types have experience outside of academia although the association between these variables is weak ( $\chi^2(2)=29.992$ ,  $p=0.000$ , Cramér's  $V=0.188$ ). While it has been traditional for older academics to have exclusive contracts with their institution, in the last decade that has changed, with younger staff members working either part-time or without exclusivity. However, there is a weak association between the contract type and the year the first degree was awarded ( $\chi^2(10)=72.874$ ,  $p=0.000$ , Cramér's  $V=0.215$ ).

The academics which work part time are mostly those who completed their highest degree in Portugal, while academics with exclusivity contracts are the group which exhibit most internationalization. However, the association between the Contract and Internationalization is weak ( $\chi^2(2)=25.007$ ,  $p=0.000$ , Cramér's  $V=0.172$ ). Finally, the results also show a weak correlation between the Contract and Endogamy ( $\chi^2(4)=27.834$ ,  $p=0.000$ , Cramér's  $V=0.129$ ).



## Academics and tenure

The new statutes enforce a limit on non-tenure-track academics, stating that they should not exceed one third of the academic body. They are supposed to bring professional experience from outside academia and consequently should be on part-time contracts. The issue is that, often, these conditions are not met. In fact, and as it offers more flexibility, a common practice among many universities is to have staff on some kind of non-permanent contracts. Currently 34.5% of academic staff is not tenure-track, which only slightly exceeds the legally stipulated limit.

As there is a weak association between the tenure status and professional experience ( $\chi^2(1)=18.871$ ,  $p=0.000$ , Cramér's  $V=0.147$ ), non-tenure-track academics are more likely to have professional experience outside academic, as should be expected. Although it was traditional that older academics would be contractually linked to their institution, the tendency has been changing in the last decade, with younger academics being fairly equally split between invited and career contracts.

The link between Tenure and the Graduation Year is weak ( $\chi^2(5)=42.972$ ,  $p=0.000$ , Cramér's  $V=0.230$ ). There is a similarly weak connection found between the variables of Tenure and Endogamy ( $\chi^2(2)=27.380$ ,  $p=0.000$ , Cramér's  $V=0.179$ ) and between the variables of Tenure and Internationalization ( $\chi^2(1)=14.600$ ,  $p=0.000$ , Cramér's  $V=0.129$ ).

## Academics and degree

As mentioned, the Decree-Law 448/79 of November, 13<sup>th</sup> (Ministério da Educação, 1979) institutes the doctorate as the access degree in the university career. Nevertheless, data shows that merely 57.8% of academics possess a doctorate, and 12.5% do not even possess a master's degree. Thus, as 68.5% of academics are professors, this means that a substantial fraction of academics do not possess a doctorate, even those who are professors. On the other hand, as for tenure-track positions a doctorate is a requirement, those professors that do not hold a doctorate can only be 'invited' professors. So, once again, Portuguese universities seem far away from the new quality standards.

The results show that there is some dependence to be found between the Degree and the type of Contract ( $\chi^2(6)=223.237$ ,  $p=0.000$ , Cramér's  $V=0.363$ ). Those academics that have a doctorate are mostly employed with exclusivity or full-time.

The results also indicate dependency between the Degree and the level of Internationalization ( $\chi^2(3)=119.953$ ,  $p=0.000$ , Cramér's  $V=0.370$ ) meaning that those academics with higher degrees are more likely to have been awarded their last degree by a foreign institution.

On the other hand, the results indicate a sizable dependence between the academic Degree and Tenure ( $\chi^2(3)=226.411$ ,  $p=0.000$ , Cramér's  $V=0.509$ ) with those that have higher degrees more likely to have tenure.

The data also reveals a weak parallel between the Degree variable and the Graduation Year ( $\chi^2(15)=180.208$ ,  $p=0.000$ , Cramér's  $V=0.272$ ) and between the Degree variable and the level of Endogamy ( $\chi^2(6)=32.445$ ,  $p=0.000$ , Cramér's  $V=0.138$ ).



## Academics and graduation year

We do not have a variable for the age of academics, but we can consider the year of graduation (first degree) as a proxy for age, as most staff is expected to have graduated in their early 20s.

The distribution of the decade of graduation is negatively skewed, which indicates that more people have graduated relatively recently and, consequently, a relatively young body of academics (skewness=-0.457). This fact is evidence of the increased level of massification in Portuguese higher education from the 1990s onwards.

The Graduation Year is only weakly associated with Endogamy ( $\chi^2(10)=30.684$ ,  $p=0.000$ , Cramér's  $V=0.138$ ), with older academics showing lower levels of endogamy. Similarly, there is a weak association between the Graduation Year and the level of Internationalization ( $\chi^2(5)=23.901$ ,  $p=0.000$ , Cramér's  $V=0.172$ ), with the large majority of younger academics receiving their last degree from a foreign institution.

There is also a weak link between the Graduation Year and Professional Experience ( $\chi^2(5)=30.829$ ,  $p=0.000$ , Cramér's  $V=0.195$ ), with younger academics recording less professional experience, as expected.

## Academics and endogamy

Alumni are a very important part of academic institutions. When we looked to the number of academics that work in a university of which they were or they still are alumni, we see that merely 32.6% have not some kind of inbreeding. In fact, 71.5% of academics were awarded their last degree (excluding habilitation) in the same institution where they work, which seems to signify an astounding level of inbreeding. If, on the one hand, the Decree-Law 205/2009 of August, 31<sup>st</sup> (Ministério da Educação, 2009) imposes international procedures on public competitions that make inbreeding a more difficult issue, on the other hand, the difficulties regarding either the very recent academic funding conditions or the job places in Portuguese universities (due to the Eurozone economic crisis), do not allow to bring in highly qualified international staff. Another interesting point is that the almost exclusively Portuguese undergraduate teaching has been attracting mainly those from other Portuguese-speaking countries, such as Brazil, Mozambique, East Timor or Macau.

The results found show a well-developed dependence between endogamy and internationalization ( $\chi^2(2)=369.618$ ,  $p=0.000$ , Cramér's  $V=0.657$ ). In fact, 69.7% of those who studied for their last degree in Portugal work for the very same university. However, a significant 44.6% of those who studied for their last degree abroad returned to a university where they had studied previously. It seems that inbreeding is thus still quite strong, despite the effect of internationalization.

## Academics and internationalization

Within the policy of the national funding agency that supports science, research, technology and innovation (FCT) (under responsibility of the Ministry for Science, Technology and Higher Education),



several doctoral studies outside Portugal, were funded. Nevertheless, data shows that only 32.5% of academics awarded their last degree (excluding habilitation) from an institution outside Portugal.

## Academics and research

The last years have seen increasing pressures for constant enhancement in what concerns the quality-research nexus, with Portugal being no exception. Regarding research, data shows that 'relevant research' was mentioned only by 23.1% of academics and 22.1% declared 'no research output'. So, the issue is the capacity for doctoral degrees in economics in Portugal. As a matter of fact, the 32.0% of economics academics still to obtain a doctorate, and the pressure to obtain qualifications to access the professoriate, makes us wonder about the quality of doctoral education that can be realistically provided.

Having professional experience outside academia is expected to make it difficult for academics to do research. However, we found no evidence that is so. Actually, our data shows that the two variables 'research' and 'professional experience' are independent.

However, there is a weak association between Research and Internationalization ( $\chi^2(2)=72.255$ ,  $p=0.000$ , Cramér's  $V=0.289$ ) with those academics who were awarded their most recent degree outside of Portugal producing more research output.

In the same way, the data collected show a limited association between Research and Endogamy ( $\chi^2(4)=20.767$ ,  $p=0.000$ , Cramér's  $V=0.110$ ); those who produce more research output tend to exhibit less endogamy.

In addition, the data indicates that there is a weak association between Research output and the Graduation Year ( $\chi^2(10)=91.381$ ,  $p=0.000$ , Cramér's  $V=0.237$ ) as well as for Research output and Sex ( $\chi^2(2)=8.439$ ,  $p=0.015$ , Cramér's  $V=0.098$ ).

A stronger degree of association is visible between Research output and the Professional Category ( $\chi^2(6)=248.054$ ,  $p=0.000$ , Cramér's  $V=0.399$ ), the last Degree awarded ( $\chi^2(6)=330.066$ ,  $p=0.000$ , Cramér's  $V=0.434$ ), Tenure ( $\chi^2(2)=98.107$ ,  $p=0.000$ , Cramér's  $V=0.335$ ) and the type of Contract ( $\chi^2(4)=177.276$ ,  $p=0.000$ , Cramér's  $V=0.457$ ). The interpretation of these results is that the most productive academics are those who are in the higher categories, with tenure and who work full-time.

## Academics and professional experience

Being economics especially concerned with a professional arena, it is not surprising that 59.0% of academics have experience outside academia. So, if 34.5% are non-tenure academics (and therefore supposed to have professional activity external to academia), it means that, somewhere in their path, 32.5% of those that do have tenure, or are tenure-track academics, must also have professional experience.



## Conclusions and future research

Our work sheds light upon the following question: how do the characteristics of academics lecturing economics in Portugal (regarding sex, professional category, contract type and tenure, degrees awarded and institutions that awarded each of them, age, research and professional experience) fit with the new teaching accreditation standards established by the new university career statutes of 2009?

Most academics teaching economics courses in Portugal are men. This is changing as new members enter the profession. This also reflects the changes noticeable in the student population. Furthermore, economics educators in Portugal are quite young with the main part being in their 40s, or younger. While more men than women are finishing academic degree programs, the gap is narrowing, particularly for masters' degrees. There are still not enough associate and full professors, and progress in this area will be difficult due to the financial constraints that will likely accompany Portugal in coming years. Another factor relates to the number of academics who have yet to complete a doctorate, including those in the professoriate. Younger academics are better qualified, reflecting changes to the career statutes. Given the size of Portugal, it is important that its academics become increasingly internationalized. However, in-house academic staff development is noticeable and a continuing trend. This warrants the question whether selection processes are being conducted properly or whether continuity in an institution is given precedence. Overall, research output needs to improve, with less than one quarter of academics teaching in economics courses citing five or more relevant pieces of research in the survey. This seems to be at conflict with the growth in the number of doctoral programs in recent years and the fall in doctoral students studying abroad.

The profile that emerges of academic staff from the indicators studied shows that there are significant areas of improvement needed to meet quality thresholds set out in the accreditation standards. This is not an insignificant task, with an integrated approach needed for the different dimensions of human resources policy and career management (Adcroft & Taylor, 2013).

External QA is recognized as being beneficial, but its application locally within the institution is often a more contested and fraught process (Sarrico, Veiga, & Amaral, 2013). These difficulties reflect the fact that academics are facing mounting responsibilities for management decisions and divergent loyalties (Melo, Sarrico, & Radnor, 2010). Finding an equilibrium is not impossible; properly designed governance mechanisms have the ability to bring stakeholders together to resolve conflicts (Sarrico, 2010). And academics have learnt to successfully adapt to dealing with more managerial involvement in their work (Sousa, Nijs, & Hendriks, 2010). To be able to meet the standards required, much can be learned by looking at the practice and experience of other institutions and regulatory agencies. Performance measurement processes introduced in other public sector organizations have often suffered from a difficult period of adaptation and there are lessons that can be learnt to expedite the process (Adcroft & Willis, 2005).

As it might be expected, our results have shown that it is the professors that have tenure and exclusivity that received their last degree from an institution outside Portugal. And it is the older academics that are more likely to have risen to the higher professional categories. It is also understandable that



the results show that those in part-time employment are not in tenure-track positions. The number of academics without tenure associated with economics degrees is only slightly above the one-third limit, and not considered problematic. Research output is positively associated with the professional category, tenure and working full-time. Most academics have experience outside of academia, even those with tenure. Professional experience is not found to negatively impact research output.

Several practical implications for universities can be found. From a system perspective, this allows universities to understand how they relate to the national context, and how trends are changing and quality improving in HEI. From the initial accreditation (2010) up until now (2017), HEI have been subject to significant changes as a result of their alignment with external quality requirements, in general and with academics' qualifications, in particular. So, and despite the fact that our results have to be put under perspective, the analyses of such an important amount of data on issues of quality and accreditation has, as we see it, not less than two main gains. Firstly, the benefit of describing the economics academics body in Portuguese universities by the time the new career statutes, Decree-Law 205/2009 of August, 31<sup>st</sup> replaced the previous ones. Secondly, the advantage of being part of a scholarly reference to be used in future studies.

This work also provides useful insights for policy making in the area of degree accreditation and quality management in institutions teaching economics. The accreditation procedures introduced were designed to address concerns relating to the quality of education and implement common standards and oversight for the system. Notwithstanding this goal, recognition is needed of the effects of introducing such a system, in an attempt to minimize the unwanted negative effects on the work and career path of academics.

As for future research, similar information (namely with comparable data to be achieved with the forthcoming national census) could be explored. Also, it would be interesting to do the same analyzes with the upcoming national census within every area, to make a picture of how the national higher education system has evolved from the previous career statutes until the present ones and how it is related with quality and accreditation concerns.

Moreover, and because there has been an extensive discussion on the importance of research in higher education, it would be also interesting to consider some extra information to be attained from teaching curricular files to staff. For example, the regular teaching burden of each academic and to what extent the teaching burden may or may not be associated to differences on academic profiles. Finally, to spread all of these suggestions to other scientific domains (e.g. Sarrico & Pinheiro, 2015) is another important recommendation for additional research. This will hopefully open the door to a more informed discussion of quality and accreditation policies which we look forward to being part of.

To finish, and as fostering quality teaching in higher education is a multi-level aim, academics' pedagogical competences cannot be forgotten.



## References

- Afonso, C. (2008). Será a actual formação inicial de professores em Portugal compatível com a docência de AILC (AILC – Aprendizagem Integrada de Línguas e Conteúdos)? *Curriculum Linguae 2007 – Linguistic Diversity through Integration, Innovation and Exchange* (pp. 257-264), Painopaikka: Tampereen Yliopistopaino Oy – Juvenes Print, Tampere.
- A3ES. (2014). Guião para a autoavaliação. Retrieved from [http://www.a3es.pt/sites/default/files/Guião\\_ACEF\\_2014\\_2015\\_Univ\\_Polit\\_PT.pdf](http://www.a3es.pt/sites/default/files/Guião_ACEF_2014_2015_Univ_Polit_PT.pdf)
- A3ES. (2015). Agência de Avaliação e Acreditação do Ensino Superior. Retrieved July 12, 2015, from <http://a3es.pt/>
- Adcroft, A., & Taylor, D. (2013). Support for new career academics: an integrated model for research intensive university business and management schools. *Studies in Higher Education*, 38(6), 827–840.
- Adcroft, A., & Willis, R. (2005). The (un)intended outcome of public sector performance measurement. *International Journal of Public Sector Management*, 18(5), 386–400.
- Machado-Taylor, M. de L., Soares, V. M., Brites, R., Ferreira, J. B., Fahrangmehr, M., Gouveia, O., & Peterson, M. (2017). Academic job satisfaction and motivation: perspectives from a nation-wide study in public higher education institutions in Portugal. In M. de L. Machado-Taylor, V. M. Soares, & U. Teichler (Eds.), *The changing academy - the changing academic profession in international comparative perspective* (pp. 69–142). Cham: Springer. <https://doi.org/10.1007/978-3-319-45844-1>
- Melo, A., Sarrico, C. S., & Radnor, Z. (2010). The influence of performance management systems on key actors in universities: the case of an English university. *Public Management Review*, 12(2), 233–254.
- Ministério da Educação. (1979). Approval of the university career statutes. *Decree-Law 448/79, Serie I(262)*, 2899–2917. Retrieved from <https://dre.pt/application/file/a/367742>
- Ministério da Educação. (2009). Approval of the university career statutes. *Decree-Law 205/2009, Serie I(168)*, 5729–5757. Retrieved from <https://dre.pt/application/file/a/488423>
- Rosa, M. J., & Sarrico, C. S. (2012). Quality, evaluation and accreditation: from steering, through compliance, on to enhancement and innovation? In A. Amaral & G. Neave (Eds.), *Higher Education in Portugal 1974-2009. A Nation, a Generation* (pp. 249–264). Dordrecht: Springer. <https://doi.org/10.1007/978-94-007-2135-7>
- Sarrico, C. S. (2010). On performance in higher education: towards performance governance? *Tertiary Education and Management*, 16(2), 145–158.
- Sarrico, C. S., & Pinheiro, M. M. (2015). The characteristics of Portuguese management academics and their fit with teaching accreditation standards. *Management Decision*, 53(3), 533–552.
- Sarrico, C. S., Veiga, A., & Amaral, A. (2013). The long road - how evolving institutional governance mechanisms are changing the face of quality in Portuguese higher education. *Educational Assessment, Evaluation and Accountability*, 25(4), 375–391.
- Sousa, C. A., Nijs, W. F. de, & Hendriks, P. H. (2010). Secrets of the beehive: performance management in university research organizations. *Human Relations*, 63(9), 1439–1460.



## Appendix 1: Description of the variables

Dimensions	Indicator	Variable	Classifications	Observations
Personal details	Institution	Institution		Coded using the institutions in Table1
	Name	Sex	Female	Coded from the name
			Male	
	Academic department	Academic Department		
	Professional Category	Professional Category	Assistant	
			Assistant professor	
			Associate professor	
			Full professor	
	Type of contract	Contract	Part time	
			Full time	
Exclusive contract				
Tenure		Non-tenure-track		
		Tenure or tenure-track		



Academic training	Degrees awarded	Degree	Undergraduate degree	
			Master's	
			Doctorate	
			Habilitation	
	Year in which first degree was awarded	Graduation Year	1960—1969	Using the year when the degree was awarded acts as a proxy for age
			1970—1979	
			1980—1989	
			1990—1999	
	Awarding institution	Endogamy	No endogamy (no degree awarded by the employing institution)	Excluding habilitation as this is normally awarded by the employing institution
			Weak endogamy (a degree other than the most recent awarded by employing institution)	
			Strong endogamy (last degree awarded by the employing institution)	
		Internationalization	In Portugal (last degree awarded)	
Outside Portugal (last degree awarded)				
Research intensity	Relevant research	Research	No research output	
			Some research output	
			Relevant research output	
Professional experience	Professional experience	Professional Experience	No experience outside academia	
			With experience outside academia	



## Appendix 2: Breakdown by class for each of the variables

Variables	Classes	Frequency	%
Sex	Female	333	38.0
	Male	543	62.0
Professional Category	Assistant	229	28.4
	Assistant Professor	406	50.4
	Associate Professor	89	11.0
	Full Professor	57	7.1
	Other	25	3.1
Contract	Part time	153	17.5
	Full time	284	32.5
	Exclusivity	412	47.2
	Other	24	2.7
Tenure	Tenure or tenure-track	215	34.5
	Non-tenure-track	661	75.5
Degree	Undergraduate degree	109	12.5
	Master's degree	171	19.5
	Doctorate	506	57.8
	Habilitation	89	10.2
Graduation Year	1950—1959	1	0.1
	1960—1969	11	1.4
	1970—1979	133	14.8
	1980—1989	254	24.9
	1990—1999	425	44.8
	2000—2009	124	14.1
Endogamy	No endogamy	279	32.6
	Weak endogamy	164	19.2
	Strong endogamy	412	48.2
Internationalization	In Portugal	591	67.5
	Outside of Portugal	284	32.5
Research	No research output	194	22.1
	Some research output	480	54.8
	Five or more relevant pieces of research	202	23.1
Professional Experience	No experience outside academia	359	41.0
	With experience outside academia	516	59.0