

353 Academic inbreeding and faculty research capabilities: exploring tenure track rules and mechanisms in four traditional universities in Peru, Chile and Colombia

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Research Domains

Academic practice, work, careers and cultures (AP)

Abstract

The relationship between academic inbreeding and scientific productivity show that the results may be considered inconclusive, however this is not a minor phenomenon and deserves greater attention from alternative perspectives. This study analyzes how endogamous practices emerge and formalize within tenure track systems, shaping the research capabilities of their academic communities. To do so, a comparative case study of the tenure track systems of four traditional universities in Peru, Chile, and Colombia was conducted. Our analysis reveals that unclear or misaligned signaling to institutional goals, low institutional representativeness in the composition of evaluation committees, the absence of external peers, and weak incentives or control mechanisms throughout the academic career trajectory are conducive conditions for academic inbreeding. In these cases, the formation of academic communities with low research capabilities and the development of elites were observed, to the detriment of the development of critical masses of professors with robust research capabilities.

Full paper

In Latin America, academic inbreeding has not yet sparked concern for studying the relationship between endogamous practices in universities and the research capabilities of their professors, and very few studies have been conducted in the region focused on the relationship between academic inbreeding and scientific productivity (Horta et al. 2010; Rabossi, 2015; Grochocki and Cabello, 2022; Borenstein et al., 2022). The present study has identified a gap in the literature concerning academic inbreeding and its relation to endogamous practices within tenure-track systems. This study explores how these practices, with a particular emphasis on examining the design of hiring processes of the tenure track systems of four traditional universities in Peru, Chile, and Colombia.

We pose the question on what are those specific rules and mechanisms that foster academic inbreeding and examine whether they are associated with diminished research capabilities among faculty members in tenured and tenure-track positions. We propose an analytical framework supported by the concept of academic inbreeding as a phenomenon that emerges from hiring processes characterized by internal connections and relationships within an institution, resulting in limited mobility within the academic community (Gorelova & Yudkevich, 2015), and the concept of academic tenure as the appointment institution for faculty, based on the collegial governance of the tenure track system within the university (Brown, 1997, 2001; McPherson & Shapiro, 1999).

The study adopted a mixed-methods approach, employing the comparative case study (Levy, 2008). Findings from qualitative analysis have been triangulated with findings from descriptive quantitative analysis. In this regard, four cases have been selected: a Chilean and a Colombian university and two Peruvian universities. The four cases meet the following criteria: they are traditional universities, privately owned and non-profit, and were founded before the liberalization reforms in their respective countries. Additionally, all four universities have academic career statutes based on the tenure track system and have a collegial governance model, which implies that members of the academic community participate in the hiring processes.

The qualitative analysis was based on the comprehensive analysis of the statutes and regulations that govern the tenure track in the four selected universities. To carry out this analysis, the thematic text analysis technique has been employed (Kukartz 2014). And for the descriptive analysis a database was constructed with information from 1551 professors, their profile data and their production registered in Scopus between 1998 – 2017; all professors belonging to the four selected universities were active in the academic career until June 2019. To ensure the validity of the

sample and minimize the impact of factors such as size and particularities of each discipline, information was collected only from professors in the specialties of Biology, Physics, Chemistry, Engineering, Medicine, and Psychology.

In order to evaluate whether the four universities succeeded in cultivating communities of professors capable of generating knowledge and driving research during the analysis period, a logarithmic (\ln^{10}) distribution analysis was conducted on the sample of professors who had one or more publications within that period. The choice of a lognormal distribution allowed for examining the probability distribution of variables that can attain considerably high values, such as the total number of publications per professor. This approach enabled the observation of the formation of academic communities with research capabilities and the median number of publications among the sampled professors.

The results of the analysis qualitative analysis showed that in both Peruvian cases requirements were low, and processes and incentives allowed the emergence of endogenous. While in the Chilean and Colombian cases higher requirements and incentives to stay in the tenure track were observed. In the same way, the logarithmic distribution (\ln^{10}) of publications recorded in Scopus from the sample of professors ($n=1551$) during the study period (1998-2017) show that Colombian and Chilean cases have managed to form critical masses of professors with research capabilities (medians of 17 and 24 respectively), while research development in the two Peruvian cases relies heavily on the existence of elites capable of producing a significant portion of knowledge generation in their universities (medians of 6 and 7). (Bonifaz, 2021)

The findings demonstrate that setting high requirements for entry and progression in academic careers, forming different committees for each evaluation stage in the tenure track, involving external peers (beyond the department and the university), and establishing incentives and control mechanisms contribute to reducing the discretion of evaluators and, consequently, the endogenous practices that prioritize affinity, social or power relationships (Horta, 2022). In this way, an academic community is formed with the credentials and capabilities to carry out research functions in alignment with institutional objectives.

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