The Evolution of the Academic Profession in Research-Centered Universities in Chile

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Abstract: Faculty members are fundamental for the development and success of higher education organizations, and building strong academic cadres is a major challenge, especially for research universities. While there are no fully-fledged research universities in Chile (Bernasconi, 2007), a few strive to get closer to that ideal by way of the professionalization their faculty. This study follows this process guided by the question “How do academic rules and guidelines in six research-oriented universities in Chile reflect the professionalization of the academic profession from 1967 to 2016?” Findings show that universities have converged in the structure they provide for their tenured and tenure-track faculty. The requirements to enter the “tenure track” career have become stricter over time, while adjunct faculty experience little regulation of their duties, governance rights, and benefits, even though they still constitute the highest proportion of faculty
members overall. Lastly, it seems that these universities have changed their academic regulations over time as a response to internal processes rather than external pressures.

**Keywords**: Faculty; Professionalization; Research University; Chile

La evolución de la carrera académica en universidades con foco en investigación en Chile

**Resumen**: El cuerpo académico es fundamental para el desarrollo y el éxito de las instituciones de educación superior, y la conformación de equipos académicos sólidos es un desafío importante, especialmente para las universidades de investigación. Si bien no hay universidades de investigación en Chile (Bernasconi, 2007), algunas se esfuerzan por acercarse a ese ideal, a través de la profesionalización de su cuerpo académico. Este estudio fue guiado por la siguiente pregunta ¿Cuál es la evolución de los reglamentos académicos y planes de desarrollo institucional en universidades con orientación de investigación en Chile desde 1967 a la fecha? Los hallazgos preliminares señalan que las universidades estudiadas coinciden actualmente en tener una jerarquía académica similar al menos en cuanto a sus responsabilidades y se han vuelto más estrictos con el tiempo. Sin embargo, los académicos adjuntos experimentan poca regulación de sus deberes, derechos de gobernabilidad y beneficios, aunque todavía constituyen la proporción más alta de los académicos en dichas instituciones. Por último, parece que estas universidades han cambiado sus regulaciones académicas a lo largo del tiempo como respuesta a procesos internos en lugar de presiones externas.

**Palabras-clave**: Académicos; Profesionalización; Universidades de Investigación; Chile

A evolução da carreira acadêmica nas universidades com foco na pesquisa no Chile

**Resumo**: O corpo acadêmico é fundamental para o desenvolvimento e o sucesso das instituições de ensino superior, e a formação de sólidas equipes acadêmicas é um desafio importante, especialmente para universidades de pesquisa. Embora não existam universidades de pesquisa no Chile (Bernasconi, 2007), alguns se esforçam para abordar esse ideal, através da profissionalização de seu corpo acadêmico. Este estudo foi orientado pela seguinte questão: Qual é a evolução dos regulamentos acadêmicos e planos de desenvolvimento institucional em universidades com orientação de pesquisa no Chile desde 1967 até o momento? Os resultados preliminares indicam que as universidades estudadas atualmente coincidem em ter uma hierarquia acadêmica similar pelo menos em termos de suas responsabilidades e se tornaram mais rigorosas ao longo do tempo. No entanto, acadêmicos adjuntos experimentam pouca regulação de seus deveres, direitos de governança e benefícios, embora ainda constituam a maior proporção de acadêmicos nessas instituições. Finalmente, parece que essas universidades mudaram seus regulamentos acadêmicos ao longo do tempo em resposta a processos internos e não a pressões externas.

**Palavras-chave**: Acadêmicos; Profissionalização; Universidades de pesquisa; Chile
The Evolution of the Academic Profession in Research-Centered Universities in Chile

Faculty members are a fundamental element contributing to the development and success of higher education institutions (Altbach, Reisberg, & Rumbley, 2009). This is especially the case at institutions classified as research universities as they “employ the most talented professors-scientists” (Albach, 2009, p. 19; see also Altbach, 2003). In Chile, the professionalization of academic work has been slow but noteworthy, at least when the following indicators are accounted for: the number of full-time faculty members, the number of publications, and the number of faculty members holding a doctoral degree (Berrios, 2015), which is less than 12% of faculty in higher education institutions in the country (SIES, 2017). Even though the academic productivity of most faculty members in Chile is below the standards of other emerging economies (according to OECD criteria), its progress in the last decade has been notable (Bernasconi, 2008; Berrios, 2015), due in part to the support given by the government to increase the number of scholarships offered at the masters- and doctoral-levels as well as research funds.

Internationally, the academic profession has largely been influenced by the U.S. research university model (Bernasconi, 2008), where universities are committed to the creation and dissemination of knowledge with a specific focus on faculty research activity (Albach, 2007). This model also requires that institutions have resources to support research and students, such as appropriate laboratories, libraries, and other facilities that allow teaching and research to flourish. The union of research and teaching is a hallmark of these universities, which employ mainly full-time academics who hold doctoral degrees and have been trained to conduct research, on which they devote a substantial portion of their time. In particular, these institutions produce a great number of doctorates, mostly demanded by international students, which are crucial for the transfer of technology that influence the local economy. These institutions are organized in departments, and have a system of faculty ranking and promotion, a group of professional and highly specialized administrators, curriculum flexibility, academic governance by faculty, rewards for research and publication, and an elastic balance between autonomy and accountability (Bernasconi, 2008).

The research university model may be attractive for universities around the world since its structure could bring diverse benefits, such as introducing research and teaching procedures proven successful elsewhere or facilitating an institution’s progression within international rankings or other measures of prestige. In emerging economies such as Chile, this model is difficult to implement as it requires varied resources and conditions, such as high-quality infrastructure to support research, high salaries to support full-time faculty, and advanced human capital, among others. That is, countries with emerging economies are usually characterized by lower wages and less access to

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2 Although the majority of faculty at U.S. higher education institutions are employed full-time, their number and share have decreased overtime as institutions have turned to hiring non-tenure-track and adjunct faculty (National Center for Education Statistics, 2015, Table 315.10), which often are cheaper to employ and not afforded the same benefits as full-time faculty.

3 An emerging economy can be defined as a country that satisfies two criteria’s: a rapid pace of economic development, and government policies favoring economic liberalization and the adoption of a free-market system (Arnold & Quelch, 1998).
research funding, highly sophisticated laboratories and libraries, and the often relied on basic research already produced in other countries (Marquina & Ferreiro, 2015). For these reasons, only a small percentage of universities in these emerging economies attempt to follow the U.S. research university model, usually to gain market advantages (Bess & Dee, 2008), such as the attraction of more doctoral students (e.g., international students). But, in achieving this model, institutions may drift their original mission. For example, in Chile the original mission of universities was the development of undergraduate students (Bernasconi, 2011). Therefore, Chilean universities formerly characterized by their emphasis on teaching and professional training changed their focus to research in order to increase their prestige and status to become elite institutions. This form of “institutional isomorphism” (DiMaggio & Powell, 1983)\(^4\), defined as the process by which one organization adopts the structures of another, typically more “prestigious” organization and thereby obtains external legitimacy regardless of the new structure’s contribution to coordination and efficiency to could explain the similarities between institutions, not just in organizational terms but also in administrative and academic practices.

Among the emerging economies, Chile is an interesting case because its university system is remarkably privatized compared to the global context (Bernasconi, 2005, 2009, 2010; OECD, 2016; Zapata & Tejeda, 2016). Chile also has the highest number of peer-reviewed publications per researcher in Latin America (Berrios, 2015; Santelices, 2015). Lastly, Chile’s university professorate has only recently professionalized\(^5\) (see Jencks & Riesman, 1968), but only in a minority of the institutions of the system – precisely those with a stronger research mission (Bernasconi, 2009, 2010; Berrios, 2015; González, Brunner, & Salmi, 2013). While academic work has been studied from an institutional perspective (Bernasconi, 2005), no known literature has addressed the evolution of the academic profession within research-intensive universities in Chile.

To better understand the academic work in research-centered universities in Chile, this study aims to expand the available knowledge about the evolution of the academic profession in the country. One way to study the professionalization of academic work is to examine what institutions expect of their faculty members in regards to their roles, teaching and research requirements, hours of work, career advancement, etc. These expectations are articulated in the institutional rules and the academic guidelines that define the standards governing academic life. In this way, it is possible to see how the academic profession has evolved over time and in the three areas that normally are considered the bulk of academic labor: teaching, research, and service (Clark, 1987). Identifying these expectations provides insight into how institutions conceptualize academic work and to what extent institutions support the professionalization of their faculty members. For these reasons, this study attempts to describe and analyze the evolution of the academic profession across six research-centered universities in Chile (Rosso & Reyes, 2012) between 1967 and 2015 through an evaluation of their promotion and tenure guidelines, and their strategic plans. Using institutional isomorphism as our theoretical framework, the present article seeks to understand: “How do the academic requirements of Chilean research-centered universities published between 1967 and 2015 articulate the professionalization of faculty?”

\(^4\) Institutional isomorphism is also referred to as “academic drift” or “reputation race” (Brewer et al., 2002).

\(^5\) Jencks and Riesman (1968) understand the professionalization of academia as the transformation of a professor to an independent expert, trained in research (usually through a doctorate), with full-time dedication to the academic life and that generates knowledge through academic standard pre-established and control by their peers.
In the following paragraphs, we briefly provide a context of the academic profession in emerging countries, Latin America, and Chile. We then present our conceptual framework and research approach, followed by our findings and concluding remarks.

**The Academic Profession within the International Context**

Globally, two major trends have affected the academic profession in the past few decades. First, the widespread growth and social diversification of undergraduate enrollment due to the expansion of the service sector of the economy (Altbach, Reisberg, & Pacheco, 2012; Altbach, Reisberg, & Rumbley, 2010; Clark, 1997; OECD, 2013; van Vught, 2008). Second, there have been increasing expectations for and pressures on institutions and faculty alike from governments and the public to conduct advanced research in the context of the knowledge society in attempt to achieve or maintain economic development (Altbach et al., 2010; Brennan, 2006; Codling & Meek, 2006; Leisyte, Enders, & De Boer, 2009). Consequently, the academic profession has undergone substantial changes due to its diversification, specialization, and the increasing control exerted over it (Musselin, 2007).

These substantial changes came after a process of professionalization of the faculty in developed economies, a process that made them independent experts qualified to produce research (normally after earning a doctoral degree); fully devoted to the academic activity, but predominantly focused to research duties (Berríos, 2008; Bernasconi, 2008; Berrios, 2008a, 2008b; Diamond, 1993; Enders, 2006; Fairweather, 2005; Finkelstein, 2012; Link, Swann, & Bozeman, 2008; Serow, 2000). In the current era of reduced financing, increased enrollments, and more extensive accountability, the figure of the adjunct professor has proliferated in the U.S. and elsewhere because of its lesser cost and expendability (Berríos, 2015; Finkelstein, 2012; Kuzminov, 2012; Schuster & Finkelstein, 2006), thus dismembering the traditional academic community (Altbach et al., 2012).

Conversely, as it will be addressed later, broadly speaking Latin American universities had progress somewhat lagged due in part through their reliance on part time professionals. In fact, the development of an academic career for tenure-track faculty in Chile is a recent phenomenon that has complemented the historical support of the adjunct professor.

**The Chilean Context and Its Higher Education Features**

In the 1960s, Latin America developed a university model in which a predominant portion of its faculty members were hired as teaching professors who worked mostly on a part-time basis. A doctoral degree was not required for an academic appointment and research output was not expected (Bernasconi, 2008). Chile, at the beginning of the 20th century, followed these same trends; the main focus of Chilean universities was to educate and train professionals. This was reflected in their distribution of expenditures, where around half of each university’s budget was spent on teaching and only a one-third was spent on research (Brunner, 1986). The University Reform of 1967 (Shared Governance and Research), however, ushered in a new era for universities in Chile that emphasized social equity, democracy, and modernization. This change in the structure and purpose of Chilean universities produced a rapid expansion in enrollment due to a commitment to free higher education, and a ratification of institutional autonomy from the State (Bernasconi, 2010;
Brunner, 1986, 2015). Additionally, the University Reform encouraged the development of academic research: institutions increased the number of academics dedicated exclusively to research, created competitive mechanisms for funding research projects, encouraged training abroad, and expanded investment in scientific professions (Berner, 2010; Brunner, 1986, 2015).

However, these developments came to a halt with the military coup in 1973 (Bernasconi, 2010; Brunner, 1986, 2015). In 1981, the military dictatorship (1973-1990) implemented its own reforms to the higher education system to make it competitive, differentiated, mass-oriented, and commercialized (Bernasconi, 2005, 2010; Bernasconi & Rojas, 2004; Brunner, 1986, 2015). It forced institutions to charge tuition and to vie for resources due to new forms of funding that were (and still are) mainly based on competition for students, funds, and grants (Bernasconi, 2005; Brunner, 1986, 2015). In other words, these reforms introduced neoliberal principles into the Chilean higher education system. Since then, public resources are distributed by two criteria: 1) a direct public subsidy (Aporte Fiscal Directo [AFD]), which allocates funds through historic and current patterns of performance indicators based strongly on past and present research achievements, and 2) an indirect public subsidy (Aporte Fiscal Indirecto [AFI]), which assigns resources to universities that recruit freshmen with the highest scores on the national admission test (Prueba de Selección Universitaria or PSU) (Bernasconi, 2005, Bernasconi & Rojas, 2004). Moreover, in 1982 the National Fund for Scientific and Technological Development (FONDECYT) – the main public fund in the country – was created to encourage the development of basic and technological research by allotting research funds within institutions according to the peer-review of proposals in different areas (Bernasconi, 2005; Brunner, 1986, 2015). FONDECYT funds also contribute to the AFD institutional performance indicators.

With Chile’s return to democracy in 1990, universities recovered their autonomy and started an accelerated process of massification. The most relevant change made during this period was investment in quality assurance introduced in 1999 (Brunner, 2015), which was properly formalized in 2006 with the creation of the National Agency for Accreditation (CNA). Another policy worth mentioning is the expansion of a series of post-graduate scholarship programs, which date back to 1981 with the President’s Scholarship programs for studies abroad (Budget Office, 2007). The creation of the “Becas Chile” program in 2008 boosted the number of doctoral scholarships recipients, with 10,598 scholarships awarded in 2014 (Chiappa & Muñoz, 2015). This policy in particular has clearly contributed to the availability of a critical mass of research-oriented academics. Doctoral fellowships like this are one of the most common tools to increase the scientific capacities of the countries (Nerad, 2011).

Given the stability of the system, there are currently three types of higher education institutions in Chile today: (1) universities that existed before 1980 or were a result of a regional division of some of the pre-1980 institutions (members of the Council of Presidents of Chilean Universities); (2) new universities, created after 1980; and, (3) non-university institutions of tertiary education (Technical Education Centers [CFTs] and Professional Institutes [IPs]) (Bernasconi, 2005; OECD, 2013). In this paper, we focus on six universities of the first group: institutions that existed before 1981 that are considered to be research-centered universities (Rosso & Reyes, 2012).

As a result of some of the changes described above, Chile is a relatively exceptional case of extreme privatization (Bernasconi, 2005, 2009). Chile’s higher education tuition fees are among the most expensive in the world (Bernasconi, 2009; OECD, 2016) and comprise a large portion of universities’ financial resources (Bernasconi, 2010; Paredes, 2015). For instance, state institutions received, on average, 47% of their funding from student payments (Zapata & Tejeda, 2016).

Chile has also been depicted as highly productive within Latin America in terms of peer-reviewed research publications. Indeed, the government’s support of research and development has
continuously increased, from $400 million USD in 2005 to $1.4 million USD in 2013 with approximately 60% of this money distributed as competitive funds (Santelices, 2015). Of special significance are the AFD and FONDECYT allocations, both of which promote the production of Web of Science (WOS/ISI) publications, which may in turn possibly account for the increases in faculty output and institutional productivity (Berrios, 2008a). However, most of this research productivity is achieved by a few universities created well before the 1981 reforms (Berrios, 2015; Santelices, 2015).

Faculty working in social sciences and the humanities are likely to value different research requirements, and therefore could be limited by these types of obligations (Colbeck, 1998; Griffiths, 2004; Healey, 2005; Horta, Dautel, & Veloso, 2012; Leisyte et al., 2009). Nevertheless, publication in peer-reviewed journals is the type of productivity that has been endorsed in Chile, as we have pointed out above. Additionally, this research output has been normally used to define prestige globally (as it supports the positioning of international rankings, for example).

Lastly, in contrast with the classic definition of the academic profession (Jenks & Riesman, 1968), academics in Latin America have predominantly been professionals with highly successful professional careers. They teach part-time in universities to contribute to the public good, to gain social prestige, because they like teaching, or as a way to give back to their alma mater (Bernasconi, 2009, 2010; Berrios, 2015) – as reflected in the honorary character of their salaries and contracts (Bernasconi, 2008). Together with modern adjunct professors, who emerged specifically to address the widespread growth in higher education enrollment, these types of faculty members constitute the bulk of faculty in Latin America, with Chile being no exception (Bernasconi, 2009, 2010; Berrios, 2015; González, Brunner, & Salmi, 2013; Levy, 1986, 2005). Worldwide, between 70% and 90% of postsecondary faculty work full-time (Teichler, Arimoto, & Cummings, 2013) compared with approximately 20% to 25% of faculty in Chile (Berrios, 2015; González et al., 2013).

**Conceptual Framework**

Portraying Chile’s higher education system, given its profound commercialization and competitive structure, requires a conceptual framework that is highly sensitive to the interaction of organizations within their environment. DiMaggio and Powell’s (1983) concept of institutional isomorphism allows us to focus on the homogeneity between institutions while taking into account that organizations compete not just for resources and costumers, but also for political power and institutional legitimacy.

Institutional isomorphism is the process by which one organization adopts the structures of another, typically more “prestigious” organization and thereby obtains external legitimacy regardless of the new structure’s contribution to coordination and efficiency (DiMaggio & Powell, 1983). This theory argues that institutionalized myths, enforced as norms by public or expert opinion, shape institutions in some fields giving them public legitimation (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). Specifically, organizations within fields where the evaluation of outputs is unclear, the environment is uncertain, or goals are ambiguous are more prone to generate institutionalized myths (DiMaggio & Powell, 1983; March & Olsen, 1976; Meyer & Rowan, 1977; van Vught, 2008).

Through this lens, institutions could attempt to avoid thorough inspection of their technical performance, working with a decoupled structure for the operation of their subunits and assuming that people are acting according to their functions (Meyer & Rowan, 1977). This loosely coupled institutional structure allows some organizational levels to meet the criterion of efficiency at least partially, while others can carry on perpetuating the institutionalized myth (Fernández & Bernasconi, 2012; Meyer & Rowan, 1977).
There are several different theories that present an opposite perspective. Rational action theory argues that, in contexts where a scarcity of resources exists, only the fittest institutions survive and the increasing efficiency should, in turn, cause them to become more structurally similar over time (Fernández & Bernasconi, 2012; Meyer & Rowan, 1977; Scott, 1998). However, nowadays rational action theory has opened to explanations that consider diversity as a result, as there would be a number of suitable ways to attain the same organizational goals (Donaldson, 2001; Fernández & Bernasconi, 2012; van Vught, 2008). In addition, some scholars have argued that institutional isomorphism falls short of explaining evolution or change because it excludes significant internal factors that explain homogenization or heterogenization (Beckert 2010; Levy 2006; Vaira 2004), such as cultural and historical influences, as well as cognitive conflicts among individual actors and groups (Meyer & Rowan, 2006; Scott, 1995).

However, Bieber and Martens (2011) have argued that beyond the sovereignty of each state, there are cultural, economic, and social globalization factors that are responsible for the acquisition of global “standards,” such as global rankings by international organizations. The authors also suggest that even though the convergence of domestic education policies derives from nation-state spontaneity, this policy convergence reflects the domestic actors’ beliefs, norms, legitimacies, and myths regarding international standards and policy recommendation.

Following this, Joo and Halx (2012) suggest that the trend towards policy convergence and its path dependency shows how neoliberalism has gained legitimacy through its diffusion across public and private areas alike (Ross & Gibson, 2007; Vaira, 2004). This would imply that the neoliberal values or market policy dependencies in domestic policy areas function as coercive, normative, and mimetic pressures to every aspect of society emerging economies (Joo & Halx, 2011).

These three types of pressure are variations of institutional isomorphism and are not necessarily empirically distinct: 1) coercive isomorphism, related to governmental policy or laws uniformly applied to an institutional field; 2) mimetic isomorphism, associated with uncertainty in goals and technologies within a field and leading to the imitation of (perceived) successful organizations; and 3) normative isomorphism, linked with professionalization, which produces homogeneity both through formal training and professional association (DiMaggio & Powell, 1983; van Vught, 2008).

One of the main behaviors of higher education institutions that could produce a decrease in diversity, besides mere efficiency, is the “Reputation Race.” That is, because mechanisms for undergraduate instruction or knowledge expansion are imprecise, institutional worth is evaluated according to prestige (Brewer et al., 2002). In today’s knowledge society, higher education institutions could be particularly driven by the wish to maximize their academic and research prestige to uphold their reputations, constantly trying to create the best possible images of themselves rather than achieving efficiency. This could hinder effectiveness through the costs of excessive marketing (Fernández & Bernasconi, 2012, 2014; Meyer & Rowan, 1977; van Vught, 2008).

Methods

Population

In this study, we focused on a selection of six research-centered universities. We selected the institutions based on two criteria. First, these universities existed before the 1980's reform, which allows us to analyze their evolution throughout all the historical changes in the country. Second, a national group of scholars (Rosso & Reyes, 2012) classified these six institutions as the “research-
centered universities” existing in Chile. While it is true that these universities cannot be categorized as research universities according to the Carnegie Foundation classification or under the world-class universities rankings (such as Academic Ranking of World Universities [ARWU] or Times Higher Education [THE] rankings), and even some national scholars have stated that there are no research universities in Chile (Bernasconi, 2007), we decided to use this classification because it aligns with the reality of the Latin American and Chilean higher education system: institutions that had at least seven doctoral programs in a minimum of three disciplines, the production of peer-reviewed research, and if the institution is accredited by the national commission (CNA) (Rosso & Reyes, 2012).

The nature of the analysis was qualitative, since our aim was to deeply understand the context where this development occurred (Maxwell, 1996). Of the institutions, three are located in Chile’s capital, Santiago, and the rest are located in different regions of the country. They all grant credentials ranging from bachelor’s degrees to doctorates, offering seven or more doctoral programs in at least three disciplinary areas. Due to one university’s anonymity requirement, we have assigned each institution a pseudonym.

**Table 1. General Description of Research-Centered Universities in Chile**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Total Enrollment 2014¹</th>
<th>Total Faculty¹</th>
<th>% Full-time Faculty¹,²</th>
<th>% Faculty holding a doctoral degree³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private University 1 (PU1)</td>
<td>30,271</td>
<td>3,209</td>
<td>53.4%</td>
<td>35.4%</td>
</tr>
<tr>
<td>State University 1 (SU1)</td>
<td>38,417</td>
<td>3,455</td>
<td>48.3%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Private University 2 (PU2)</td>
<td>13,907</td>
<td>1,401</td>
<td>57.3%</td>
<td>27.0%</td>
</tr>
<tr>
<td>State University 2 (SU2)</td>
<td>24,118</td>
<td>2,388</td>
<td>26.9%</td>
<td>22.6%</td>
</tr>
<tr>
<td>Private University 3 (PU3)</td>
<td>15,202</td>
<td>1,415</td>
<td>36.4%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Private University 4 (PU4)</td>
<td>26,796</td>
<td>1,739</td>
<td>72.7%</td>
<td>42.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>148,711</strong></td>
<td><strong>13,607</strong></td>
<td><strong>48.6%</strong></td>
<td><strong>32.9%</strong></td>
</tr>
</tbody>
</table>

¹ Compiled by author based on Overview of Higher Education in Chile 2014 (SIES, 2015)
² Part-time Faculty is equivalent to a 22-hour or shorter contract, per week. Full-time Faculty is defined as working more than 22 hours.
³ Universities in Chile grant general “doctoral” degrees, and do not distinguish between Ph.D. and Ed.D.

Total university enrollment during 2014-2015 varied from a low of 13,907 at Private University 2 (PU2) to a high of 38,417 at State University 1 (SU1) (Table 1). SU1 and Private University 1 (PU1) together enrolled 46% of all students at research-centered universities in Chile. These two universities also employ the greatest number of faculty members, each with over 3,000 faculty members (representing 49% of all faculty at these six universities). In terms of faculty characteristics, faculty at Private University 4 (PU4) has the highest percentage of full-time faculty (73%). As explored above, this feature is actually atypical within Latin America. In comparison, only 27% of faculty members at State University 2 (SU2) are employed full-time. Perhaps as expected, these two universities also have the highest and lowest proportion of faculty members who hold a doctoral degree; 42% of faculty at PU4 had a doctoral degree compared with 23% of faculty at SU2.

**Data Source**

The data for this study consisted of the academic guidelines available in these six research-centered universities dating from 1967, when the major educational reforms took place, to 2015. To find these documents at each institution, we first contacted via email their academic affairs officers and they put us in contact with the specific representatives who could help us with our request.
Interestingly, none of the universities had these documents readily compiled, nor did they have digital versions, especially of the older texts. We tracked down the documents by contacting several people and offices at these institutions. The documents were easier to collect at some institutions, while at others the data was not available for all the years we requested. Hoping to increase the quantity of information gathered, we visited each institution and obtained additional documents.

During this 49-year span (1967-2015), the academic guidelines collected from our six research-centered universities went through several iterations, ranging from two to 17 revisions per university. They also varied in length, from nine to 135 pages. All six universities had a similar formatting for these documents, which included the following criteria: general guidelines, academic ranks, rights and duties for faculty members, promotion guidelines, penalties, and contract termination, among others.

Since 1967, we were able to distinguish patterns in the changes made to the academic guidelines (Figure 1). The earliest guidelines were first published in 1971 (PU3), 1974 (PU2), and 1977 (PU1), but to the year 1986 that all universities (with the exception of one) made some changes in their guidelines. The next period of changes was between 1993 and 1995 and then again between 1998 and 2001. All of the universities changed something, except for two (PU3, SU2). The final period of changes occurred between 2008 and 2013.

Figure 1. Changes in academic regulation at research-centered universities in Chile

Figure 1 shows the number of changes made to the academic guidelines of each of the research-centered universities in the boxes above the timeline. We consider a change to be any modification made to an academic guideline, independent of the magnitude of the change. Under the timeline, the figure shows the main historical events affecting the Chilean higher education system, including national events that could have potentially influenced the behavior of these universities in terms of their expectations and requirements for their faculty members.

We examined the documents using content analysis techniques (Merriam, 1998), particularly those involving ethnographic content analysis. Our objective was to systematically identify thematic elements at these institutions through a constant reflective and comparative analysis (Altheide,
1987). Specifically, this methodology works with a purposive and theoretical sample, in this case academic guidelines of the Chilean research-centered universities. Our analysis considered the existence of some pre-structured categories, but sought to discover emergent patterns, areas of emphasis, and themes (Altheide, 1987). For this, we used an inductive technique that guided the categories of examination, in this case those related to the academic activities that faculty members at research-centered universities were expected to fulfill, such as research, teaching, and service. The methodology process used in ethnographic content analysis also generates good descriptive information (Altheide, 1987).

All of the academic guidelines were organized by individual sections describing the expectations for faculty members in terms of teaching and research and other duties such as service. This organization was aligned with the trio of teaching, research, and service that guides faculty work and the reward’s system (Clark, 1987). Our initial coding of the documents looked at the different types of academic positions and their internal ranks, requirements, expectations for promotion in each rank (e.g., assistant, associate, and full), exceptions to the requirements, types of contracts, benefits, internationalization, and how these aspects have changed over time. Three researchers were simultaneously involved in the coding process of the documents; however, they worked independently to chart the evolution of the academic profession over time. Reliability was achieved through triangulation: each researcher coded the documents independently and then compared and contrasted his/her analysis with that of his/her peers.

To complement the data analysis, we also examined strategic plans for each of the institutions, from 1998 to 2015, for a better understanding of the evolution of the academic profession at these six research-centered universities. This period corresponds with the date universities started to publish these documents. We requested prior versions of these documents from the officers in charge at each university, and collected current strategic plans from the universities’ websites. Lastly, in order to look for further information on the evolution of the academic profession in Chile, we also identified the most important events in the history of higher education in Chile during the specified time span (1967-2017) and compared them to the changes in the universities’ academic guidelines.

**Findings**

Our analysis of the 1967-2015 academic guidelines revealed interesting patterns in and across the academic profession at the six Chilean research-centered universities included in this study. Described below, the themes identified are (a) academic hierarchy, (b) academic expectations, and (c) duties of faculty.

**Academic Hierarchy**

An interesting finding is that all of the most recent university documents we examined currently have a similar, ordinary academic (tenure-track) hierarchy, which was not the case in the historical materials. Since 1967, academic categories have begun to resemble each other in these six universities in terms of faculty labels, because their content was always rather similar. Nowadays, a “tenure-track Chilean model” exists in all six institutions, which includes full professor, associate professor, and assistant professor ranks. It is important to stress that, in all of the universities studied, these categories are not associated with contract hours, at least in their academic guidelines, which constitutes an anomalous case according to the international literature (Teichler et al., 2013). For example, from 1977 onwards, the PU1 has specified that existing academic categories are “independent from the academic’s mode of dedication to university activity.” This may be due to the way in which the academic career was originally organized in Chile - primarily supported by part-
time professionals committed to the university for the status it conferred, to be of service to their alma mater, or for other reasons (Bernasconi, 2009; Berrios, 2015).

Half of the institutions require professors to complete a probation period, as in the U.S. tenure-track system, but it can only be terminated for cause or under extraordinary circumstances, such as financial exigency or program discontinuation like in the US. In these universities, faculty have to move to the next academic stage (e.g., from assistant to associate), and if the promotion conditions are not met the professors must leave the university, or at least their current academic appointment. By way of illustration, SU1’s 2001 the academic guideline stated that “the maximum time of permanence in the assistant professor category will be 12 years.” Interestingly, two of the three universities with an explicit probation period in their regulations are those with a higher level of international recognition according to international rankings. On the contrary, in the other universities studied no probationary period is mentioned in the academic guidelines.

Our document review also revealed that universities have an adjunct category that includes various types of professors. Adjunct professors, which are typically part-time faculty with teaching responsibilities, form the backbone of these institutions’ regular functioning. Nevertheless, two ways of regulating the work of such adjunct faculty can be identified in the universities sampled. We have termed the first one as a “Hierarchical Adjunct Track,” and it is observed in four of the universities studied – a group that includes Chile’s most prestigious institutions (PU1, SU1). This track is a part-time or full-time academic track that grants hierarchical status and promotion opportunities to professors, where faculty are mainly dedicated to teaching or research, and is generally sanctioned in the most recent institutional documentation.

The second regulation type, the “Non-Hierarchical Adjunct Track,” is present in the two remaining universities, where adjunct professors have no hierarchical status and therefore cannot be promoted. However, it should be noted that such appointments also exist in the universities included in the first group and therefore coexist with those of hierarchical adjunct professors. Usually, these professors have shorter fixed-term appointments (e.g., 22 contract hours) that entail specific tasks. In all the reviewed universities, only generic norms regulate the status of non-hierarchical adjunct professors, at least in the general guidelines studied. It is also important to note that part-time professors continue to represent the majority of faculty in the Chilean higher education system (Berrios, 2015).

In the strategic plans, only PU1 addresses adjunct faculty; specifically, in its current version (2015), it highlights the importance of this group, stating that it is in these professors “where rests an important part of our student’s formation.” Because of this, “a consolidation plan and greater recognition of its teaching work, similar to that undertaken for the ordinary plan, will be a part of the efforts of the next year.” According to their numbers at PU1, adjunct faculty have constantly increased in number over time, whereas the number of tenure-track faculty have remained stable. Interestingly, all other institutions studied do not mention adjunct faculty as part of their strategic plans even though they still constitute a bulk of the academic body.

Regarding this disparity between hierarchical (tenure-track or adjunct) and non-hierarchical professors, the documents examined show that the former enjoy benefits that the latter do not receive. For example, in the PU3, the professors who lack hierarchical status are not able to participate in Academic Performance Assignments (which are only for faculty members), which effects their potential for salary increases. In addition, these faculty members have no right to receive benefits, such as professional development courses, university scholarships, and year-end bonuses, and are unable to apply for internal grants – all of which reduces their academic development opportunities. While the academic guidelines describe this group as homogeneous, if
we follow the literature (e.g., Kezar & Sam, 2010), there should be great variability among them in terms of workload, responsibilities, and benefits.

**Academic Expectations**

According to the university strategic plans, most of them state the importance of faculty excellence, but do not specify the requirements for their incorporation and permanency in the institutions. As an example, PU3 presents the strategic objective of strengthening the development of the academic body, under the premise that it “Is necessary for the university to count with faculty members with high levels of expertise in their different disciplines and with a commitment to the institutional mission, in order that their work align with the objectives of the institution?”.

The data revealed some patterns in the area of requirements that are worth mentioning. In particular, it seems that private Chilean research-centered universities have recently converged on a more or less shared qualification minimum for their upper echelons of academic hierarchy, namely a doctoral degree (or an equivalent for more professional or artistic disciplines, such as a medical specialization or a Master’s Degree in Art). The data aligns with public policies that the government has pushed in the last 10 years in order to increase the availability of advanced human capital (e.g., development of the “Becas Chile” program). It is worth mentioning that only 10% of all professors in the country have a doctorate degree, and they are mainly employed by universities, and another 23% of all professors have a master’s degree; in total, 34% of the academics have a postgraduate degree, a figure that has been increasing over the years (SIES, 2014).

However, these universities do not evenly apply this requirement at the entry level of the academic career path. Indeed, some institutions are more flexible than others when specifying the expected qualifications for instructors and associate professors. In spite of this, the convergence is quite clear. The documents collected at the beginning of our review period (50 years ago) had one vague requirement for all ranks: a graduate degree. The most recent documents, however, show that the faculty requirements at private research-centered universities is more objective, standardized, and strict, and in this way echoes the requirements for faculty at research universities worldwide. Reinforcing the world-class universities trend observed in recent years, certain academic guidelines after the 1990s have introduced explicit policies for promoting international academic searches, for example, through global calls for applicants. These requirements line up with the public policies that the government has implemented in the past 10 years, as well as the increasing investment in research and development from $400 million USD in 2005 to $1.4 million USD in 2013 (Santelices, 2015).

In contrast, the current regulations of the state research-centered universities do not specify clear entry-level requirements. They do not establish major differences in terms of the academic level needed to progress though the academic hierarchy; in general, they merely point out that it is necessary to hold a professional degree or a bachelor’s degree, a master’s degree, or a doctoral degree. For example, one of the current requisites to become a Full Professor at the SU2 is “holding an academic or professional degree.” At any rate, the strategic plans of these universities all recognize the importance of the excellence of the faculty. One of the objectives stated in the SU1 strategic plan of 2006 is “being known as the university who has the academic body that, with vocation and commitment, has the best level of the country, in conformity with requirements in quality in the international context.”

In general, the research-centered universities studied allow for some exceptions to the regular entry procedures (i.e., a public call for applications). Two of the institutions whose documentation allows these exceptions maintain the minimum requisites for each rank. In the
remaining universities it is possible to waive said requirements for experienced and prestigious candidates; for example, the 2011 regulations of the PU4 state:

In the case of hirings that do not meet the academic degree requirements established in the Personnel Regulations for hierarchy, the Personnel Office will submit a report to the Vice-President, who will request the University’s Hiring and Promotion Commission (CCPU) to issue a ruling.

In any case, a trend towards reduced exceptions can be observed when comparing current regulations with older ones. For example, the SU2 most recent documentation states that entering the institution without fully meeting the requirements in place is an option for exceptional academics, while its 1983 Regulations had defined that this alternative was available to professors with sufficient qualifications.

On the other hand, requirements for moving up the tenure-track pipeline, like hiring criteria, have become stricter over the years; however, they have never been fully measurable. Normally it is pointed out that academics must: (1) gain national or international reputation (with no clear specification of a criterion for this) in the fields of teaching, research, and/or service, while also being excellent at those activities (as determined by internal committees only); (2) be awarded with external grants and projects (governmental or industrial, usually with no indication of how many or of which nature); (3) maintain a steady publication rate (without specifying time frames or indexing quality); and, (4) stay a minimum of years in each rank, among other requirements. For instance, the PU2, regarding the requirements to become Full Professor in 1995, notes that an individual must have:

…reached the summit of his/her academic career, displaying permanent productivity, creativity and, in general, academic excellence. Academic excellence will be defined as the merit, distinction, and prestige earned by an academic due to his/her remarkable scientific publications, noteworthy technological activities, or relevant artistic creations or performances.

The PU4 is an exception to these guidelines, providing specific requirements explicitly demanding that their academics reach a certain number of external research projects and indexed publications, along with other elements. Thus, there has been an evolution in the criteria for advancing along the tenure track, but from the documents analyzed it is unclear how the requirements are or were measured, with the exception of PU4.

**Faculty Duties**

In general terms, the academic duties described in the regulations tend to refer to teaching, research, outreach, and management activities, both for tenure-track and adjunct faculty. However, some disparity is observed in the level of compulsoriness of such functions. Four of the six research-centered universities do not establish the obligatory nature of certain functions for tenure-track faculty, let alone for adjunct faculty. Likewise, the 1986 regulations of the SU2 state that “All academics must be available to fulfill most of the functions that their position entails, and may compensate for any deficits in some through excellence in others.” The PU1 and the PU3 are exceptions, as they both define obligatory areas of responsibility for their academics depending on their hierarchical level. For example, the 1971 regulations of the PU3 state that “…a Full Professor must inspire and coordinate the work of the teaching, research, and communication teams of the Academic Unit to which he/she belongs.”

Over the years, the two universities that already displayed some degree of compulsoriness in their academic functions (PU1, SU2), particularly in the teaching and research spheres, were joined by the SU1, whose 2001 regulations note:
Tenure-track academics will be required to perform higher teaching and research duties or engage in artistic creation. In addition, they may conduct any other of the activities listed or perform exceptional professional work within the context of their academic life.

The situation described above is in line with the institutional development plans of the research-centered universities studied, where research-related tasks have gained increasing relevance within faculty duties. For instance, the current strategic plan defined by the PU1 (2015) states, with respect to research, that it is necessary to “engage more tenure-track professors in these tasks,” establishing also the obligatory nature of research duties in the institutional academic regulations. In any case, even the universities that do not specify this demand in their regulations do acknowledge its major importance in their development plans. One such institution is the PU2, which in 2011 established within its principles the fundamental role of research: “Not privileging the generation of knowledge as a way to give meaning to all teaching processes is foreign to our view of academia, its aims, and its essence.”

Additionally, in order to contextualize our findings, we also examined the most important events effecting higher education in Chile during the span of time analyzed (1967-2017), and compared these events to the changes in the university academic guidelines. From this analysis, we observed that the changes made to the academic guidelines were independent from the changes happening at the national level; in other words, it seems that the research-centered universities we examined in this study revised their academic regulations in response to internal processes and to align with global research university expectations rather than external national pressure. While Chile's policies and the research-centered universities are influenced by global research universities, our study indicates that the academic guidelines in the research-centered universities are primarily revised in response to internal pressures.

**Discussion and Conclusions**

Our analysis found that research-centered universities in Chile now define tenure-track faculty categories more similarly than in earlier documentation, both nominally and in terms of content. The historical academic guideline documents were more diverse, with many of the research-universities having their own definitions and requirements for hiring, tenure, and promotion. This suggests that some kind of convergence has taken place among the Chilean research-centered universities – a convergence that emulates the academic ranking categories in existence at international elite universities, such as U.S. research universities.

It is worth mentioning that the academic regulations of Chilean research-centered universities allow their tenure-track professors to be less than full-time academics, which is a rarity in the international context (Teichler et al., 2013). However, in reality, it may apply to a small fraction of their staff, or it could be a recognition of the insufficiency of the contract conditions that faculty have in some organizations. The latter possibility could reflect the original arrangement of the academic career in Chile, which has not historically offered the conditions for full-time teaching and research (Bernasconi, 2008). Whatever the case, the situation could be explained by mimetic isomorphism (DiMaggio & Powell, 1983), as these academic guidelines and requirements are being used as a symbol of organizational prestige, conferring neither the status nor the privileges that these positions traditionally entail. Conversely, the need for increased efficiency may also explain the changes we observed, as the reduction of funds following the 1981 reform effort resulted in a decrease in contract benefits. However, the research-centered universities we studied still use a nomenclature that it is associated with full-time academic, tenure-track employment worldwide.
Strongly linked to the previous finding, there are two contractual possibilities for the employment of adjunct faculty in the universities studied. The first one, the Hierarchical Adjunct Track, is defined by mid- to full-time dedication to teaching and/or research, some degree of employment stability, promotion options, and benefits. This type of employment occurs in four of the six universities studied, including the two most research-centered, and we argue that such an approach is consistent with the Latin-American tradition of hiring professionals with exceptional non-academic careers (Bernasconi, 2009, 2010; Berríos, 2015; González et al., 2013; Levy, 1986, 2005). The second contractual possibility, the Non-Hierarchical Adjunct Track, involves an hourly to part-time employment commitment, job stagnation, nonexistent benefits, and general uncertainty. All the research-centered universities studied display this second possibility, including those identified as the most research-centered, and it reflects the current global plight of the adjunct professor (Berrios, 2015; Finkelstein, 2012; Kuzminov, 2012; Schuster & Finkelstein, 2006). Bearing this in mind, the first hiring approach could be highly inefficient, as it perpetuates a local and historical “myth” that has a much higher cost than the second approach (Meyer & Rowan, 1977).

However, it could be argued that employing a large number of non-hierarchical adjunct professors could have unintended effects on organizational performance as, for example, faculty detachment may largely weaken students’ learning (Austin & Trice, 2016).

A general lack of specificity was observed regarding what is expected from academics in the Hierarchical and Non-Hierarchical Adjunct Track. This is remarkable, as it has been pointed out that these professors constitute the largest segment of the academic personnel in Latin American universities (Bernasconi, 2009, 2010; Berríos, 2015; Levy, 1986, 2005). There are at least two possible reasons for the lack of specificity of this category: (1) the detailed conditions may be set out in other institutional documents than the general guidelines studied here; or, (2) the general rules examined may be influenced by a traditional (Humboldtian) conception of the university that denies, in its discourse, the existence of academics who do not fit that ideal. Considering that a significant portion of faculty may be on a career track with unspecified requirements, this situation could be interpreted as evidence of a decoupled organizational structure (Meyer & Rowan, 2006), as this group of undefined faculty supports the operation of universities while tenure-track academics serve as a status symbol required to convey the image of a global research institution in line with societal expectations.

Another situation identified concerns the existence of an explicit probation period for hiring tenure-track faculty in the two most renowned research-centered universities examined (PU1, SU1), which could be a sign of mimetic isomorphism (DiMaggio & Powell, 1983; Meyer & Rowan, 1977) given that such practices, common in the leading institutions of the U.S. and Europe, are viewed as successful by Chilean universities. However, this probation period could also reflect an efficient way of hiring new faculty, given that it could avoid some of the complexities involved in dismissing tenure-track professors. It is worth mentioning that these two research-centered universities produce half of the research outputs in Chile in terms of publications of indexed articles, and are the only Chilean universities that appear on international rankings, which are usually associated with international prestige.

We also identified a tendency to demand that prospective tenure-track faculty hold a doctoral degree – a decision that reflects the great amount of control that faculty have within the universities over governance and hiring, and also may reflect the requirements of U.S. and European research universities. This could be a further example of normative isomorphism (DiMaggio &

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6 The Humboldtian model is based on the two basic features of research-like learning and academic freedom of research and teaching (Elton, 2008).
Powell, 1983), as dictated by the professionalization criteria established by Jencks and Riesman (1968), particularly if the mechanisms for achieving the organizational objectives are not clear-cut (DiMaggio & Powell, 1983; March & Olsen, 1976; Meyer & Rowan, 1977; van Vught, 2008).

However, this requirement is not clearly established in the state research-universities examined, probably due to the antiquity of their academic career regulations and the complexity of their modification mechanisms, which are less dynamic.

In addition, it could be stated that the current doctoral-centered recruitment policy could be due to the necessity to incorporate the many Chileans who have completed their postgraduate studies abroad (Bernasconi, 2008, 2010). In fact, the Chilean government has increased the number of scholarships, reaching up to 10,598 doctoral scholarships in 2014 (Chiappa & Muñoz, 2015), with many of these scholarships supporting overseas study. The existence of an increasing share of doctoral holders within the universities has resulted in more globalized higher education organization given that the socialized actors introduce new requirements that align with their own educational and professional experiences, as suggested by normative isomorphism (DiMaggio & Powell, 1983). As an additional sign of the latter, we observed that the procedure for hiring new faculty, which used to include exceptions to the general norms in the case of individuals with prominent professional careers, has gradually faded over time despite being strongly aligned with the aforementioned Latin American tradition.

Likewise, institutional isomorphism is also connected with the idea that universities compete in a market in which the main good exchanged is prestige, which is boosted by enrolling both exceptional students and “star professors” (Fernández & Bernasconi, 2012; Meyer & Rowan, 1977; van Vught, 2008). However, strictly in terms of financial efficiency, those professors may bring more resources to the university through their acquisition of funds and their publication contribution to the AFD indicators, but at the same time it is likely that they cost more and may spend a great deal of resources on their research activities (Fernández & Bernasconi, 2012; van Vught, 2008).

Regarding the criteria for moving up in the academic hierarchy, we found that the academic guidelines have become increasingly similar and strict over time, which can be due to a number of situations. First, there has been an increase in societal expectations and pressures involving the role of universities as generators of scientific knowledge (Altbach et al., 2010; Brennan, 2006; Leisyte et al., 2009), a situation that is also present in Chile (Bernasconi, 2005; Brunner, 1986) and which may have affected the historical development of the academic regulations of the universities examined, given their research focus. Second, we posit that Chilean research-centered universities have begun imitating the research-centered universities that have performed well in terms of academic production indicators in hopes of attaining the same results. In this respect, it could be argued that this process of imitation involves replicating the most efficient methods for obtaining these positive results. However, since this is an activity in which the procedures leading to success are not clearly defined (DiMaggio & Powell, 1983; March & Olsen, 1976; Meyer & Rowan, 1977; van Vught, 2008), institutional isomorphism could be said to be acting instead. Particularly, this idea is backed by the fact that the requirements for promotion in five of the six research-centered universities studied are goals that cannot be strictly measured. Yet, this may be due to only having reviewed documents overseeing these universities as a while; demands and requirements may be set out in more detail in the documentation of each academic unit.

Lastly, that two-thirds of the universities studied do not specify their academics’ duties could suggest that loose coupling is in operation at these institutions. Thus, individuals work independently, assuming that others are following the institution’s strategic guidelines (Fernández & Bernasconi, 2012; Meyer & Rowan, 1977). On the other hand, universities whose guidelines or institutional development plans specify that academics must conduct research, do so because this
allows them to receive more national funding, as noted in the section on the Chilean context (Bernasconi, 2005; Brunner, 1986, 2015), and therefore reflect the need for institutional efficiency. In any case, it must be highlighted that only three universities have made this obligation explicit, two of them being the most renowned in the country. As previously noted (Bernasconi & Rojas, 2004; Theurillat & Gareca, 2015), this situation could be due to the fact that resource accumulation by the most prestigious or effective institutions makes it impossible for other universities to compete for funding (Codling & Meek, 2006; Marginson, 2006; Marginson & Rhoades, 2002).

In any case, it must be highlighted that only three universities have made this obligation explicit, two of them being the most renowned in the country. As previously noted (Bernasconi & Rojas, 2004; Theurillat & Gareca, 2015), this situation could be due to the fact that resource accumulation by the most prestigious or effective institutions makes it impossible for other universities to compete for funding (Codling & Meek, 2006; Marginson, 2006; Marginson & Rhoades, 2002).

In sum, in a descriptive level, we were able to find some general convergences, namely: the content and designations of the ranks of the tenure-track, the formal possibility to have a tenure-track position but have less than full-time employment, the existence of hierarchical and non-hierarchical contractual possibilities, the non-specificity of adjunct professor duties, and the enhanced strictness of the criteria for moving up, among others. These convergences account for the fact that the research-centered universities we studied share a history and, in particular, a stable, exclusive, and longstanding public policy that generally favors them over Chile’s other postsecondary institutions (Bernasconi, 2005, 2010; Bernasconi & Rojas, 2004; Brunner, 1986, 2015). On the contrary, we saw divergence in the academic guidelines when the most research-centered universities improved their national and international rankings compare to the rest, specifically in the existence of a probation period, the exigency of a doctoral degree, and the compulsory duties of the academics. It goes beyond the aim of this article, but it could be conjectured that these organizations developed advantages because of their additional resources, obtained either by higher student tuitions (Bernasconi, 2010; Paredes, 2015; Zapata & Tejeda, 2016), a greater share of AFD funds obtained (Berrios, 2015; Santelices, 2015), or both.

The findings of this study were limited to one specific higher education context: the Chilean higher education system, and even further, a specific set of highly successful, historic, and research-centered organizations within Chile. Therefore, when Chile’s other postsecondary institutions are considered, they could alter the dynamics presented here and perhaps even forcing the use of a completely different framework to account for the possible interdependencies hidden in our investigation. To address this problem, for instance, future studies could explore how the promotion and tenure guidelines in different types of universities have evolved over time. Future research that examines both the research-centered and non-research-centered institutions may help to generate new and local ways to understand the evolution of the academic profession in Chile and, more broadly, across Latin America.

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The Evolution of the Academic Profession in Research-Centered Universities in Chile

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<td>Dalila Andrade Oliveira</td>
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