

# Chilean Universities in the main international rankings: Critical review of the results

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**Abstract:** Regardless of the multiplicity of criticisms that academic rankings receive, they could position themselves before multiple interest groups as tools that collaborate with the universities' transparency, providing, at the same time, relevant information for the decision-making process. This research analyzes Chilean universities' performance trends in three of the best-known international rankings. An exploratory study is carried out with analytical, descriptive, and comparative perspectives using secondary sources of information. The emergence of three groups of universities can be appreciated: one that is consolidating positively in the international rankings, one of them achieving a place in the world's top 200 in some of the measurements; another that is being forged as entities of excellence at the regional level; and a last one with incipient participation in the lists.

**Keywords:** Higher Education, University Governance, University Rankings, Performance Indicators.

## 1. Introduction

As a fundamental pillar of a society's development, higher education is involved in the creation of knowledge and social value and in the training of highly trained and competent professionals, which is essential for progress and competitiveness in an increasingly globalized and complex world (UNESCO, 1998; The Task Force on Higher Education and Society, 2000; Marginson, 2011; Marginson & Van der Wende, 2017a; Smolentseva, 2023). Therefore, an increasing number of students are looking for educational institutions that offer quality education to develop and apply their skills and competencies in productive activities (Bartual-Figueras & Turmo-Garuz, 2016).

The quality of higher education is a deciding factor in guaranteeing the success of aspirants, and for its achievement, the existence of transparency and evaluation mechanisms that make it possible to know its performance is critical, especially in a context of the performance society where everything is translated into metrics (Wilsdon 2016; Muller 2018; Stark, 2020).

In higher education, transparency plays an important role, as it refers to the availability and accessibility of relevant and timely information about educational institutions, including their quality, outcomes, and processes (Castiglia & Turi, 2011; Hazelkorn, 2012; Mehmet & Arınç, 2021). Having transparency can help foster confidence and participation of students and society at large, making informed decisions on where to study or allocate resources; it also helps promote accountability and continuous improvement in higher education.

Ricci (2013) gathers in three topics the main advantages of transparency in university institutions: (a) it increases their legitimacy as a Professional entity at the service of society, (b) it avoids bad management practices and (c) it facilitates public debate and participation in the university's strategic decisions.

Meanwhile, evaluation mechanisms for quality assurance are also relevant for educational institutions to offer quality education and comply with national and international standards. These may include issues such as the accreditation of programs and educational institutions, periodic evaluation of the quality of teaching, research, and employability of graduates, and other aspects (Mok, 2000). Oversight and transparency mechanisms are the responsibility of the government and regulatory agencies in some countries, while in other countries, they are the responsibility of the educational institutions themselves. Both mechanisms aim to ensure that higher education institutions (HEIs) have the conditions to perform their substantive functions (Balceró-Molina et al., 2022; Matos et al., 2022).

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The university rankings have become popular as a valuable tool for transparency and evaluation (external in most cases) of educational institutions according to their understanding of quality (Van Dyke, 2005; Usher & Savino, 2007). The rankings measure, classify and order the different universities according to different criteria adopted at the methodological level, covering topics such as research, teaching, reputation, and internationalization, among others.

Notwithstanding this, the existence and use of university rankings generate controversy, as some argue that they are not an objective measure of the quality of higher education, given that they are based on subjective criteria and may be biased by external factors (Federkeil et al., 2012). Additionally, the reduction of institutional missions or the work of these in a few indicators, added to the simplicity of the information they provide, does not reflect the complexity of this type of organization (Ganga-Contreras and Rodríguez-Ponce, 2018). This situation is even more complex in Latin America, considering that the universities in this region also devote much of their efforts to the market interrelations or territory, often distancing themselves from the concept of world-class universities promoted by the rankings (Enders, 2015), and considering that not all countries can afford this luxury (Altbach and Balán, 2007).

This study is part of the field of emerging studies in Latin America on university rankings, and its results complement other works carried out in the same line (Ganga-Contreras et al., 2018; Ganga-Contreras, Sáez and Viancos, 2019; Serra-Toledo et al., 2021; Buitrago-Reyes, 2022; Cabrera-Vintimilla, Álvarez-Gavilanes, Jácome-Ortega and Matovelle-Romo, 2022). Thus, the present research aims to analyze the performance trends of Chilean universities in three of the most recognized international rankings: Academic Ranking of World Universities - ARWU (Shanghai Ranking Consultancy), Times Higher Education World University Rankings - THE ranking (Times Higher Education) and QS World University Rankings - QS ranking (Quacquarelli Symonds).

In methodological terms, this is an exploratory study with analytical, descriptive, and comparative perspectives. Secondary sources of information were used for data collection, which also involved documentary research, resulting in the review of scientific articles, databases, and the various websites of the respective rankings' producers.

The analysis of the evidence identifies a group of universities that, in recent years, have been participating assiduously in the three rankings under study, visualizing the dimensions or indicators in which they have the highest scores.

## *1. Theoretical Background*

### *1.1. University Rankings*

A university ranking, by definition, can be considered as a list of groupings of institutions comparatively classified according to a standard set of indicators in descending order and usually presented in tables of positions (Usher and Savino, 2006; Bernasconi, 2006).

Daraio, Bonaccorsi, and Simar (2015), along with Ramírez-Céspedes (2018), understand them as methodological constructions that bring together different criteria with which they seek to make the comparison between higher education institutions homogeneous. This issue is reaffirmed by Montané-López, Beltrán-Llavador, and Teodoro (2017) of Krüger and Molas (2010), where rankings, such as benchmarking, aim to measure the quality of services and institutions by forcing comparison and competition between them.

The earliest references to this practice date back to around 1900, as compiled by Bueno & Barrios (2016) from UNESCO (2013). Around that time, a study was published in England that examined the backgrounds of the country's most prominent and successful men, with particular reference to the institution where each had studied, entitled "Where We Get Our Best Men."

Today's rankings are based on the first edition of the guide "America's Best Colleges," published in 1983 by the U.S. News and World Report magazine. This guide allowed high schools and their parents to obtain information regarding the undergraduate programs of US HEIs. In 1993, a decade later, the "Times Good University Guide" was published for the first time in the United Kingdom. As in the U.S., this publication generated a public debate about which HEIs ranked highest and lowest on the list.

The Observatory on Academic Ranking and Excellence (IREG), an international non-profit association interested in university rankings and academic excellence, currently reports 17 global, 7 regional, and 58 local university rankings in 35 countries worldwide (IREG, 2023).

The expansion of university rankings around the world is not random, as they have become an important tool for students, academics, employers, and sponsors when making decisions in the field (Altbach, 2006; Altbach & Hazelkorn, 2017), having a particularly significant influence on the perception and reputation of universities (Zapata, 2006; Fernandes, Shukla & Fardoun, 2022). Through various indicators, such as research quality, academic reputation, level of internationalization, and employability of graduates, the rankings seek to provide a broad and comparative view of the quality of universities.

Nevertheless, there are also criticisms and concerns regarding the precision and validity of university rankings. For example, it is argued that the rankings tend to favor English-speaking universities and institutions that are more focused on research (Marginson and Van der Wende, 2007b), while other essential areas, such as education and vocational training, may not be adequately represented (Desafios da Educação, 2018), an issue that strengthens the world-class university model (Salmi, 2009), including in countries of so-called peripheral academic capitalism (Brunner, Labraña, Ganga-Contreras and Rodríguez-Ponce, 2019), being that not all countries have this luxury (Altbach and Balán, 2007).

Many rankings have also been criticized for having a questionable methodological construction (Bookstein, Seidler, Fieder and Winckler, 2010; Al-Juboori, Na and Ko, 2012), which can be misleading and lead universities to focus on specific indicators to the detriment of other important aspects of higher education. Nonetheless, following the previously mentioned, some critics point out the importance of knowing the background of these measurements, considering that over time they have become regulatory mechanisms of the education market (Pérez-Esparrells & López, 2009; Ramírez-Gutiérrez et al., 2019).

Despite these concerns, university rankings remain a valued tool for various parties to assess higher education institutions' quality and to inform the decisions of students, academics, and financiers (Reyes, 2016; Thompson-Whitside, 2016). Additionally, rankings can effectively increase transparency and accountability in the higher education system by fostering healthy competition among universities and encouraging institutions to improve their standards (Jongbloed et al., 2018).

The popularity of these instruments has led to various national or local initiatives in different countries worldwide that attempt to explain their reality better and, simultaneously, overcome some of the criticisms or methodological problems of the international rankings. Different from international measurements tend to be based -mainly- on research indicators and opinion surveys, national measurements tend to include a more complex set of indicators that are often excluded by global rankings due to the difficulties in collecting such data on a global scale. There is evidence of this in the work done by Çakır et al. (2015), who also establish through a similarity analysis between global and national rankings that the former do not accurately predict the latter's results, except for a few cases. One of the exceptions is Chile (along with Brazil and Poland), suggesting that there is probably a stronger correlation between research performance indicators and educational/institutional parameters to which global and national rankings tend to give different importance.

Further insight into the methodologies and results of Chilean universities in the national rankings are established in the work of Ganga-Contreras, Calderón, Sáez, and Wendercil (2021), establishing a group of six universities that, regardless of the year or the methodology used consistently ranked among the top 15 in the country (Universidad de Chile, Pontificia Universidad Católica de Chile, Universidad de Concepción, Pontificia Universidad Católica de Valparaíso, Universidad de Santiago de Chile, and Universidad Adolfo Ibáñez).

Therefore, university rankings can be a valuable tool for comparing universities, although it is important to be aware of their limitations and to complement them with other sources of information. Deciding on a college or university is an important and personal decision that should be based on several factors, including the student's academic and career goals and the characteristics and resources of each institution.

## 2. Materials and Methods

As mentioned above, the purpose of this research is to analyze the performance trends of Chilean universities in three of the most influential international rankings. For this purpose, this research has an exploratory nature, undertaking essentially analytical and descriptive dimensions used in the field of comparative education to identify similarities and differences with the subject under investigation. This research also involved documentary research that translates into the review of scientific articles, databases, and web pages of the rankings' producers, which served as a reference.

The three university rankings chosen to develop this research are considered the most influential according to the work of Hazelkorn, Loukkola and Zhang (2014), who through a survey applied to 171 European higher education institutions in the framework of the project "Rankings in Institutional Strategies and Processes", determined that the listings that meet this status are the Academic Ranking of World Universities (ARWU), the Times Higher Education World University (THE) and the QS World University Rankings (QS).

It should be highlighted that the years reviewed for each ranking are: for the ARWU, information was reviewed between 2003 and 2022; while for THE, it was decided to examine its data from its independence from QS, i.e., between 2011 and 2023, finally, for QS the same parameter was used, the years surveyed started from its independence from THE, i.e., from 2010 until its last edition in 2023. There is no 2013 edition for the QS since after that year; they decided to publish it under the name of the following year (2014), a practice that continues to this day.

Information on the methodology and results of each of the rankings under study are in the public domain and can be found on its website.

The analysis is of frequency by ranking, by year, by university and by grouping of universities.

The Chilean universities are grouped into State CRUCH, Non-State CRUCH, Private CRUCH, and Private (see section "Chilean universities background").

### 2.1. Selected Rankings

The following is information on the Academic Ranking of World Universities (ARWU), the Times Higher Education World University (THE), and the QS World University Rankings (QS), with respect to their origin and methodology used.

#### 2.1.1. Academic Ranking of World Universities (ARWU)

The Academic Ranking of World Universities (ARWU) was first published in June 2003 by the Center for World-Class Universities (CWCU) at Shanghai Jiao Tong University, China. The ranking is annually updated to date, pioneering the listing of higher education institutions worldwide in a single measurement (Liu, 2009). The ARWU has been published and disseminated since 2009 by ShanghaiRanking Consultancy; this completely independent organization is not legally subordinated to any university or government agency that dedicates its work to issues related to existing data in higher education (ARWU, 2023).

The ARWU ranked over 2,500 universities worldwide in its 2022 version but only published the first 1,000. Methodologically, the ARWU presents, as shown in Table N°1, six indicators grouped into four dimensions: Quality of teaching, Quality of faculty, Research output, and Performance per capita (ARWU, 2022a). Following the work of Sáez et al. (2023), it is established that the ARWU is identified as a pure ranking, where its indicators focus on objectively measurable products.

**Table 1:** ARWU Methodology 2022.

Criteria	Indicator	Code	Percentage
Quality of Education	Alumni of a Nobel and Fields Medal-winning institution	Alumni	10%
Faculty Quality	Staff of a Nobel and Fields Medal-winning institution	Award	20%
	Highly cited researchers	HiCi	20%
Research performance	Articles published in Nature and Science	N&S	20%
	Articles published in the Science Citation Index-Expanded and Social Science Citation Index	PUB	20%
Per capita performance	Academic performance of an institution per capita	PCP	10%

Source: ARWU (2022a).

#### 2.1.2. Times Higher Education World University (THE)

Times Higher Education is a United Kingdom magazine specializing in higher education issues. Their website states they have 10 million pieces of data from 2,500 institutions in 93 countries, including news, information, and intelligence. They explain that this combination allows them to help institutions, their management teams, and millions of students each year make informed decisions that can define their future (THE, 2023).

The world university ranking carried out by THE was born as a European response to the ARWU. Thus, in conjunction with Quacquarell Symonds (QS) since 2004, assess and list institutions worldwide in a single measurement. This alliance with QS was dissolved in 2009, adopting its particular methodology different from the previous one (Baty, 2010; 2014).

For its 2023 version (published in 2022), 1799 universities from 104 countries worldwide were included, making it the largest and most diverse university ranking to date (THE, 2022a). The rankings of individual universities were determined according to 13 carefully calibrated performance indicators, grouped into five areas as presented in Table N°2: teaching, research, knowledge transfer, international outlook, and industry income (THE, 2022b). Sáez et al. (2023) define THE ranking as a hybrid ranking consisting of indicators with a predominance of products but with a relative balance between objective and subjective indicators, but with a greater prevalence of the objective ones.

**Table 2:** THE 2023, Ranking's Methodology.

Area	Percentage	Indicator	Percentage
Teaching	30%	Reputation survey (academic).	15%
		Student to academic ratio.	4,5%
		Doctorate graduates among bachelor's degree graduates.	2,25%

		Doctorate graduates to the number of academics.	6%
		Institutional income per academic.	2,25%
Research	30%	Reputation survey (research).	18%
		Research income per academic.	6%
		Research productivity (in Scopus) by staff.	6%
Citations	30%	The average number of citations between 2017 and 2022 of Scopus articles.	30%
International Outlook	7,5%	The proportion of international students.	2,5%
		The proportion of international academics.	2,5%
		The proportion of relevant publications with international collaboration.	2,5%
Industry Income	2,5%	Research income obtained from industry among the number of academics.	2,5%

Source: THE (2022b).

### 2.1.3. QS World University Rankings (QS)

Quacquarelli Symonds (QS) is a British company that defines itself as the leading provider of services, analysis, and information for the higher education sector. They state that their primary mission is to enable people worldwide to realize their potential through educational attainment, international mobility, and professional development (QS, 2023). In 2004, in conjunction with Times Higher Education magazine, they published their world university ranking for the first time, an alliance that lasted until 2009. The following publications maintained the characteristics and methodologies of the original list, an issue they maintain to this day.

The 2023 edition (published in 2022) features more than 1,400 universities across the globe, making it QS's most extensive version to date. The institutions undergo an assessment across six categories (or indicators) to effectively capture university performance, including academic and employer reputation, faculty/student ratio, research citations, and the proportion of international students and scholars (QS, 2022a). Table N°3 shows the ranking methodology. According to the work of Sáez et al. (2023), QS presents an essentially hybrid ranking, with a relative balance in indicators focused on inputs and outputs, though with a notable tendency towards the outputs, along with a balance between objective and subjective indicators.

**Table 3:** QS 2023, Ranking Methodology.

Indicator	Percentage	Description
Academic Reputation	40%	Academic Reputation Survey.
Employer reputation	10%	Employer reputation survey.
Academic-to-student ratio	20%	Number of enrolled students of a university among the total number of academics.
Citations by faculty	20%	Number of citations obtained by an institution during the period 2016-2021 from the Scopus database, among the total number of academics.
International student ratio	5%	International students' ratio among the total number of students at the university.
International academics ratio	5%	International academics ratio among the total number of academics at the university.

Source: QS (2022a).

### 2.2. Chilean universities background

Regarding Higher Education in Chile, Law N°21.091 (2018), in Article 4, states that the system is of mixed provision and comprises two subsystems: the technical-professional and the university. The latter subsystem incorporates state universities created by law, non-state universities belonging to the Council of Rectors (CRUCH), and private universities recognized by the State. According to the Higher Education Information Service (SIES), as of March 31, 2023, there are a total of 58 universities in force in the country.

Additionally, state universities, non-state universities, and a group of private institutions with a public vocation make up the Council of Rectors of Chilean Universities (CRUCH), whose members are established by law and who comply with explicit requirements established in Law N°21.091, such as autonomy for a term of more than ten years, having - at least - advanced institutional accreditation with a minimum term of five years, fulfilling the requirements to be eligible for institutional financing for free tuition, being part of the shared access system used by the institutions that are part of the



Council, having required in the last three years a minimum average score for application, offering accredited master's and doctorate programs, among others.

The Council of Rectors is a legal entity under public law compliant with Law N°. 15,561. It is responsible for advising and formulating proposals to the Ministry of Education on public policies on higher education under its organic statute. Likewise, its function is coordinating the institutions that comprise it, promoting collaboration among them (Law N°. 21,091 in Article 5). Until 2018, the CRUCH was composed of only state and non-state universities (also known as "traditional" due to their origin prior to 1981); however, this situation changed after the entry of the Diego Portales, Alberto Hurtado, and Los Andes universities. The CRUCH is currently made up of 30 universities in the country.

Table N°4 lists the 58 universities operating in Chile along with their state, non-state and private status, detailing whether they belong to the Council of Rectors of Chilean Universities. This critical issue will be further discussed in the analysis.

**Table 4: Universities Operating in Chile**

N.º	University	Type	Acronym	N.º	University	Type	Acronym
1	Arturo Prat	State - CRUCH	UNAP	30	Diego Portales	Private CRUCH	UDP
2	de Antofagasta	State - CRUCH	UA	31	Academia de Humanismo Cristiano	Private	UAHC
3	de Atacama	State - CRUCH	UDA	32	Adolfo Ibáñez	Private	UAI
4	de Aysén	State - CRUCH	UAYSEN	33	Adventista de Chile	Private	UNACH
5	de Chile	State - CRUCH	UCH	34	Andrés Bello	Private	UNAB
6	de La Frontera	State - CRUCH	UFRO	35	Autónoma de Chile	Private	UAUTONOMA
7	de La Serena	State - CRUCH	ULS	36	Bernardo O'Higgins	Private	UBO
8	de Los Lagos	State - CRUCH	ULAGOS	37	Bolivariana	Private	UB
9	de Magallanes	State - CRUCH	UMAG	38	Católica Cardenal Raúl Silva Henríquez	Private	UCSH
10	de O'Higgins	State - CRUCH	UOH	39	Central de Chile	Private	UCEN
11	de Playa Ancha de Ciencias de la Educación	State - CRUCH	UPLA	40	de Aconcagua	Private	UAC
12	de Santiago de Chile	State - CRUCH	USACH	41	de Arte y Ciencias Sociales ARCIS	Private	UARCIS
13	de Talca	State - CRUCH	UTAL	42	de Artes, Ciencias y Comunicación UNIACC	Private	UNIACC
14	de Tarapacá	State - CRUCH	UTA	43	de Las Américas	Private	UDLA
15	de Valparaíso	State - CRUCH	UV	44	de Viña del Mar	Private	UVM
16	del Bío-Bío	State - CRUCH	UBB	45	del Alba	Private	UDALBA
17	Metropolitana de Cs. de la Educación	State - CRUCH	UMCE	46	del Desarrollo	Private	UDD
18	Tecnológica Metropolitana	State - CRUCH	UTEM	47	del Pacífico	Private	UPACIFICO

19	Austral de Chile	Non-State CRUCH	UACH	48	Finis Terrae	Private	UFT
20	Católica de Chile	Non-State CRUCH	PUCCH	49	Gabriela Mistral	Private	UGM
21	Católica de la Santísima Concepción	Non-State CRUCH	UCSC	50	Iberoamericana de Ciencias y Tecnología	Private	UNICIT
22	Católica de Temuco	Non-State CRUCH	UCT	51	La República	Private	ULARE
23	Católica de Valparaíso	Non-State CRUCH	PUCV	52	Los Leones	Private	ULL
24	Católica del Maule	Non-State CRUCH	UCM	53	Mayor	Private	UMAYOR
25	Católica del Norte	Non-State CRUCH	UCN	54	Miguel de Cervantes	Private	UMC
26	de Concepción	Non-State CRUCH	UDEC	55	San Sebastián	Private	USS
27	Técnica Federico Santa María	Non-State CRUCH	UTFSM	56	Santo Tomás	Private	UST
28	Alberto Hurtado	Private CRUCH	UAH	57	SEK	Private	USEK
29	de Los Andes	Private CRUCH	UANDES	58	Tecnológica de Chile INACAP	Private	UINACAP

Source: SIES (2023a) and Consejo de Rectores de las Universidades Chilenas (2023).

It is important to consider that the university system did not always have 58 institutions; therefore, to provide as much information as possible for the review of the results of Chilean universities in the international rankings, Table N°5 shows the number of institutions operating per year (as of 2003, the date of the first registration of a Chilean university in an international ranking).

**Table 5:** Universities operating in Chile by year.

Year	N.º of institutions	Year	N.º of institutions
2003	63	2013	60
2004	64	2014	60
2005	61	2015	60
2006	61	2016	60
2007	61	2017	61
2008	61	2018	61
2009	61	2019	59
2010	60	2020	59
2011	60	2021	59
2012	60	2022	58

Source: Author's elaboration, based on information from SIES (2023b).

### 3. Results and Discussion

#### 3.1. Academic Ranking of World Universities (ARWU) - Shanghai Ranking Consultancy

According to the Shanghai Ranking, Chilean universities have been present in all 20 editions with at least one institution listed, corresponding to 2003 and 2022. While the 500 best universities in the world were published (between

2003 and 2016), Chilean universities brought one or two institutions to the ranking; however, when the number of universities published in 2017 increased (from 500 to 800), it increased to four or five institutions, depending on the year reviewed. The inclusion of non-state universities contributed to this increase in the ranking.

Consequently, it can be seen that in 2003, 2004, 2005, 2006, and 2016, only one institution was listed, being a state institution (Universidad de Chile); while 2019 represented the year in which there was the highest participation of universities, with a total of five listed (distributed in one state, four non-state and one private).

The historical review of the ARWU shows that the only private institution to be listed in the ranking was the Universidad Andrés Bello, participating from 2017 to the last edition (2022). Furthermore, it is glimpsed that four out of five institutions that were once listed in the ARWU belong to the CRUCH (Universidad de Chile, Pontificia Universidad Católica de Chile, Universidad de Concepción and Universidad Técnica Federico Santa María). Figure N°1 shows the detail of the Chilean universities participating in the ARWU by year.

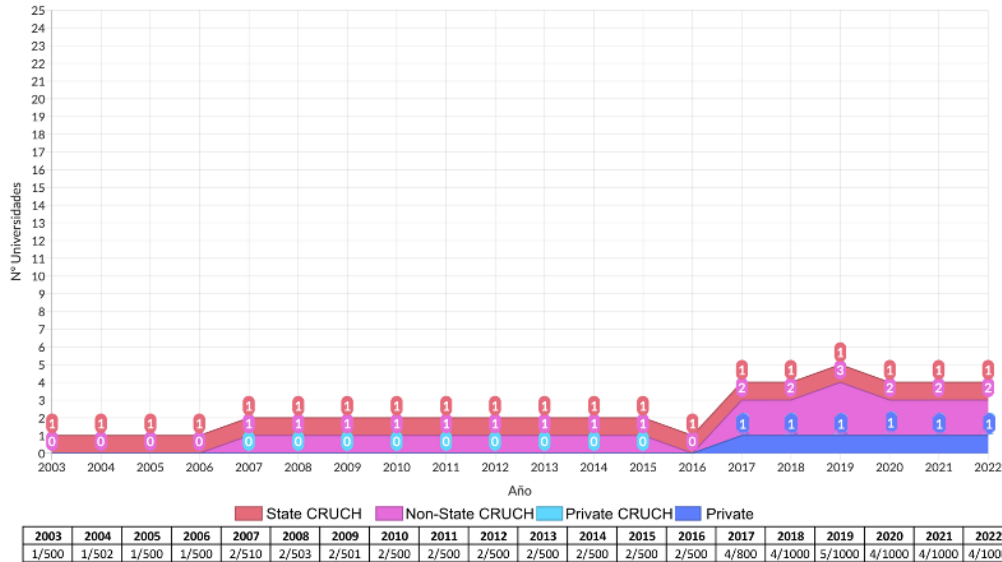


Fig. 1: Chilean universities participating in the ARWU.

Source: Author’s elaboration, based on ARWU (2003-2021; 2022b).

The positions obtained by the Chilean universities participating in the Academic Ranking World Universities (see Table N°6) show that the Universidad de Chile is the only Chilean institution to have taken part in all 20 editions of the measurement. Additionally, it is the institution with the best position among its peers in the university system, consistently in the top 500 worldwide.

Meanwhile, the Pontificia Universidad Católica de Chile is the second institution in the country with the highest number of participations in the ARWU (with 15 appearances) and also the second with the best historical position, moving between the ranks 401 and 600 according to the year reviewed. The other listed universities are Universidad de Concepción (with six participations), Andrés Bello (with six participations), and Técnica Federico Santa María (with only one participation in 2019).

Table 6: Historical positions of Chilean universities in the ARWU.

Uni./ Year	Universidad de Chile	Pontificia Universidad Católica de Chile	Universidad de Concepción	Universidad Andrés Bello	Universidad Técnica Federico Santa María
2003	401-450	-	-	-	-
2004	302-403	-	-	-	-
2005	301-400	-	-	-	-
2006	401-500	-	-	-	-
2007	403-510	403-510	-	-	-
2008	402-503	402-503	-	-	-
2009	402-501	402-501	-	-	-



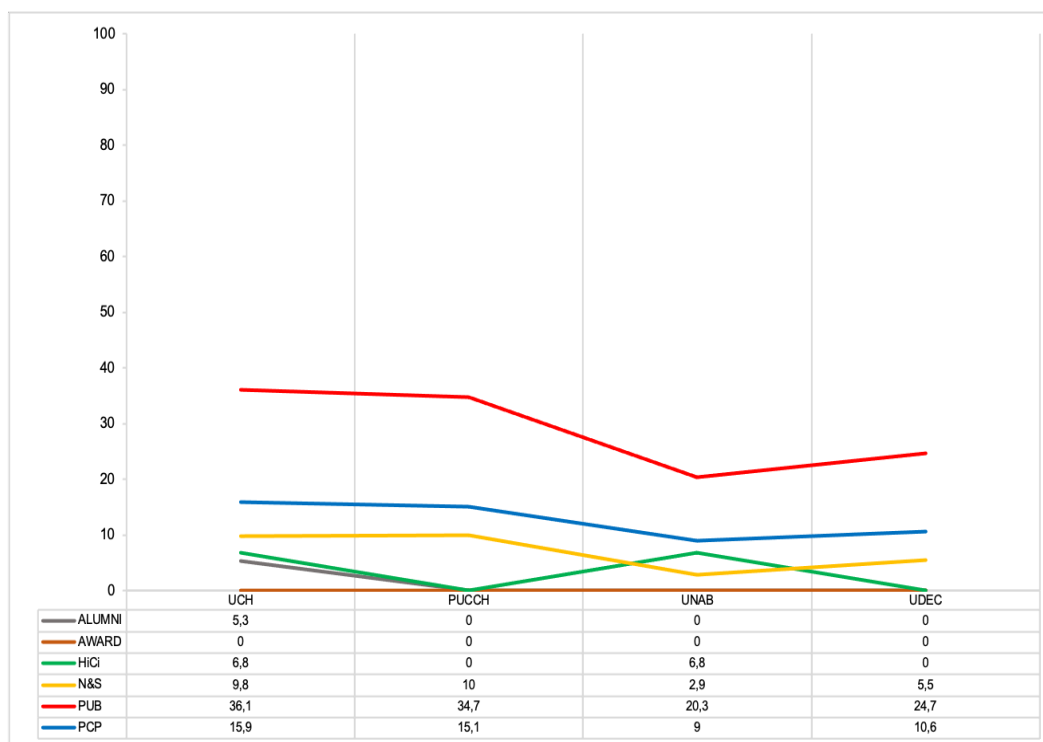
2010	401-500	401-500	-	-	-
2011	401-500	401-500	-	-	-
2012	401-500	401-500	-	-	-
2013	401-500	401-500	-	-	-
2014	401-500	401-500	-	-	-
2015	301-400	401-500	-	-	-
2016	301-400	-	-	-	-
2017	301-400	401-500	701-800	701-800	-
2018	301-400	401-500	701-800	701-800	-
2019	401-500	501-600	801-900	801-900	901-1000
2020	401-500	501-600	801-900	901-1000	-
2021	401-500	501-600	801-900	801-900	-
2022	401-500	501-600	901-1000	901-1000	-
<b>f<sub>i</sub></b>	<b>20</b>	<b>15</b>	<b>6</b>	<b>6</b>	<b>1</b>

Source: Author’s elaboration, based on ARWU (2003-2021; 2022b).

ARWU’s results for Chilean universities participating in the latest year under review (2022) show that the Universidad de Chile ranks 401-500th in the world and is ranked first nationally in this list, while the Pontificia Universidad Católica de Chile ranks 501-600th, occupying second place in the system; finally, the Universidad de Concepción and Universidad Andrés Bello share third place in Chile with their 901-1000th place in the ranking.

The data by indicator expresses that the highest scores for the four universities under review are found in PUB, with the Universidad de Chile being the best in this area, with a score of 36.1. The second-best overall result is in the PCP indicator, where the Universidad de Chile also leads (15.9), followed by the Pontificia Universidad Católica de Chile (15.1) and the Universidad de Concepción (10.6).

The results for the other indicators are more dissimilar: in ALUMNI, the only institution to score is the Universidad de Chile (5.3); in AWARD, no institution presents data; in HiCi, only the universities of Chile and Andrés Bello present information (both with a score of 6.8); Lastly, in N&S, all four universities teach scores, with the Pontificia Universidad Católica de Chile leading among its peers (with 10), followed by the Universidad de Chile (9.8), the Universidad de Concepción (5.5) and the Universidad Andrés Bello (2.9). The breakdown of all the figures by indicator can be seen in Figure N°2.



**Fig. 2:** Results of Chilean universities in ARWU 2022.

Source: Author's elaboration, based on ARWU (2022b).

### 3.2. World University Rankings – Times Higher Education (THE)

Tracking the participation of Chilean universities in THE's World University Rankings, it is possible to identify that as the number of institutions published in each version increases, the higher the presence of Chilean universities.

With the initial publication of the world's top 200 universities in 2011 and then the top 401 until 2015, only two Chilean institutions were part of the list during this period, both non-state institutions (PUCCH and UTFSM).

There has been a steady increase in the participation of Chilean universities in the THE Ranking since 2016 (except for a slight decrease in 2022), from six universities in 2016 to 23 in 2023. Regarding the number of universities listed per year, one of the elements that contributed to this is the total increase in the number of universities listed per year, which, in 2015, was around 400 institutions, a figure that in 2023 grew more than four times, reaching 1799 houses of study published.

The latest edition of THE Ranking (2023) listed 23 universities in Chile, covering 41% of the university system, distributed among nine state universities (50% of the total among their type), seven non-state universities (almost 78% among their type), two private universities belonging to the Rectors' Council (Diego Portales and Los Andes universities) and five private universities (representing only 18% among their peers). State universities in 2023 represent the highest participation of this type of institution in the three international rankings under analysis.

Finally, there is evidence of significant participation of universities belonging to the Council of Rectors in this latest edition, where, out of 30 institutions that make up the CRUCH, 18 were mentioned in the list, representing 60% of them. The number of Chilean universities by year and by type is shown in Figure N°3.

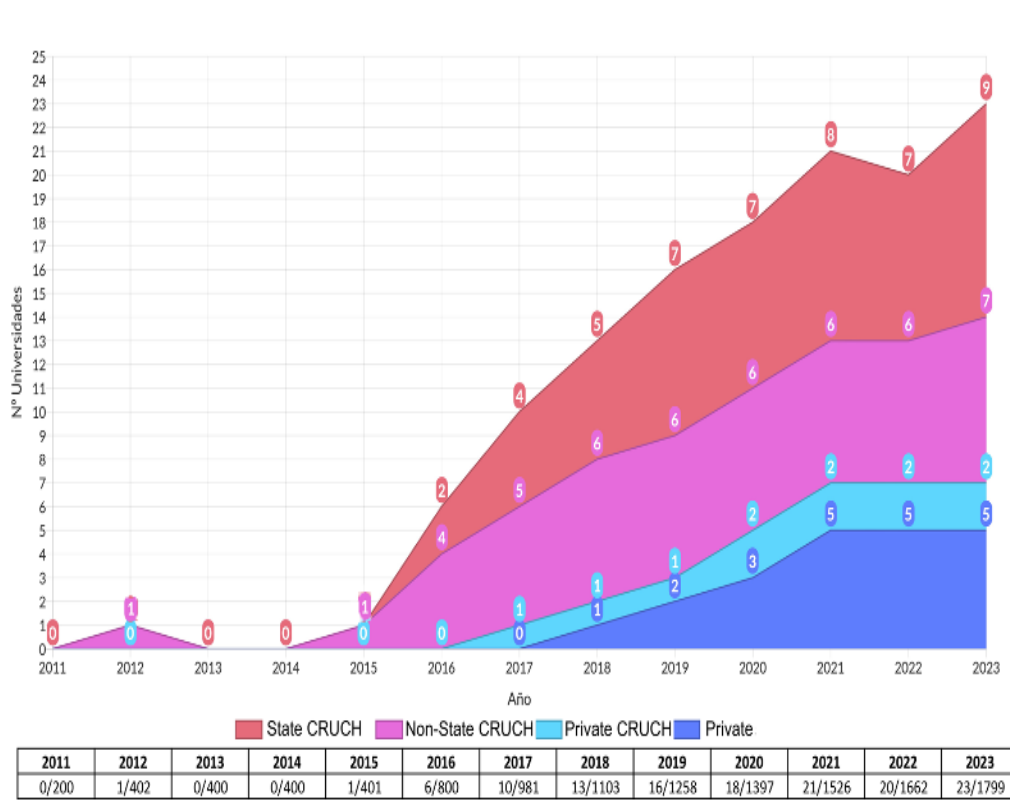


Fig. 3: Chilean universities participating in the THE Ranking.

Source: Author's elaboration, based on THE (2010-2021; 2022a).

Reviewing the historical ranks achieved by Chilean universities in the THE Ranking, it can be seen that the Pontificia Universidad Católica de Chile and the Universidad Técnico Federico Santa María are the most frequently included in the British list, with nine participations out of a total of 13. These universities are followed by the Universidad de Chile, Universidad Católica de Valparaíso, Universidad Austral de Chile, and Universidad de Santiago de Chile, with eight appearances each.

A Chilean university first appeared in the THE Ranking in 2012, placing the PUCCH in position 350-400 on the list; the next presentation came three years later, with the presence of the UTFSM in position 251-275 in 2015, the best historical place for a Chilean institution across all the years of measurement.

The positions achieved by Chilean universities vary relatively from year to year, with a general downward trend. For example, universities such as Universidad Técnica Federico Santa María and Universidad de Chile went from position 251-275 (in 2015) to 1201-1500 (in 2023) and from place 501-600 (in 2016) to 1001-1200 (in 2023), respectively. Detailed information on all the positions obtained by Chilean universities between 2011 and 2023 is shown in Table N°7.

**Table 7: Historical positions of Chilean universities in the THE Ranking.**

N°	Uni./ Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	f <sub>i</sub>
1	PUCCH	-	350-400	-	-	-	401-500	401-500	501-600	601-800	501-600	501-600	401-500	401-500	9
2	UA	-	-	-	-	-	-	-	-	-	-	601-800	-	601-800	2
3	UDD	-	-	-	-	-	-	-	-	401-500	401-500	401-500	501-600	601-800	5
4	UAUTONOMA	-	-	-	-	-	-	-	-	-	501-600	501-600	501-600	801-1000	4
5	ULS	-	-	-	-	-	-	-	-	-	-	-	-	801-1000	1
6	UDP	-	-	-	-	-	-	601-800	501-600	401-500	401-500	401-500	501-600	801-1000	7
7	UCH	-	-	-	-	-	501-600	501-600	601-800	601-800	801-1000	801-1000	801-1000	1001-1200	8
8	PUCV	-	-	-	-	-	601-800	801+	801-1000	1001+	1001+	1001+	1001-1200	1201-1500	8
9	UAI	-	-	-	-	-	-	-	-	-	-	1001+	1201+	1201-1500	3
10	UNAB	-	-	-	-	-	-	-	801-1000	1001+	1001+	1001+	1201+	1201-1500	6
11	UACH	-	-	-	-	-	601-800	601-800	801-1000	801-1000	1001+	1001+	1201+	1201-1500	8
12	UCN	-	-	-	-	-	-	-	801-1000	1001+	1001+	1001+	1201+	1201-1500	6
13	UDEC	-	-	-	-	-	-	601-800	801-1000	1001+	1001+	1001+	1001-1200	1201-1500	7
14	UFRO	-	-	-	-	-	-	601-800	801-1000	801-1000	801-1000	1001+	1001-1200	1201-1500	7
15	UANDES	-	-	-	-	-	-	-	-	-	1001+	1001+	1001-1200	1201-1500	4
16	USACH	-	-	-	-	-	601-800	801+	801-1000	1001+	1001+	1001+	1201+	1201-1500	8
17	UTAL	-	-	-	-	-	-	801+	801-1000	801-1000	1001+	1001+	1201+	1201-1500	7
18	UNAB	-	-	-	-	-	-	-	-	1001+	1001+	1001+	1201+	1201-1500	5
19	UTFSM	-	-	-	-	251-275	401-500	401-500	501-600	601-800	801-1000	1001+	1201+	1201-1500	9
20	UCT	-	-	-	-	-	-	-	-	-	-	-	-	1501+	1
21	UV	-	-	-	-	-	-	-	801-1000	1001+	1001+	1001+	1201+	1501+	6
22	UBB	-	-	-	-	-	-	-	-	1001+	1001+	1001+	1201+	1501+	5
23	USS	-	-	-	-	-	-	-	-	-	-	1001+	1201+	1501+	3

Source: Author’s elaboration, based on THE (2010-2021; 2022a).

On the one hand, the results of the Chilean institutions participating in the 2023 edition show that, of the six that make up the group of the best 1,000 universities in the world, two are state universities (UA and ULS), one is non-state (PUCCH), one is a CRUCH private university (UDP), and two are private (UDD and UAUTONOMA). Pontificia Universidad Católica de Chile leads the national ranking in place 401-500, followed by Universidad del Desarrollo and Universidad de Antofagasta, both ranked 601-800 worldwide.

On the other hand, the results of the institutions by indicator also show specific general orientations: the highest and lowest scores are found in the Citations dimension (81 for UA and 73.8 for UDD; 7.9 for UCT); the International Outlook dimension exhibits scores for all institutions between 40 and 61; A similar situation to Industry Income which, except for the PUCCH data, all results fluctuate between scores 36 and 50; and finally, the lowest scores, on average, are in the Teaching and Research dimensions.

Thus, it is possible to visualize that the Pontificia Universidad Católica de Chile leads the dimensions of Teaching, Research, and Industry Income with scores of 24.2, 31.9, and 70.3, respectively; the Universidad de Antofagasta leads the dimension of Citations with a score of 81; and the Universidad Adolfo Ibáñez leads the dimension of International Outlook with a score of 60.4.

Detailed results obtained by indicator for each Chilean university participating in the THE 2023 Ranking can be examined in Figure N°4.

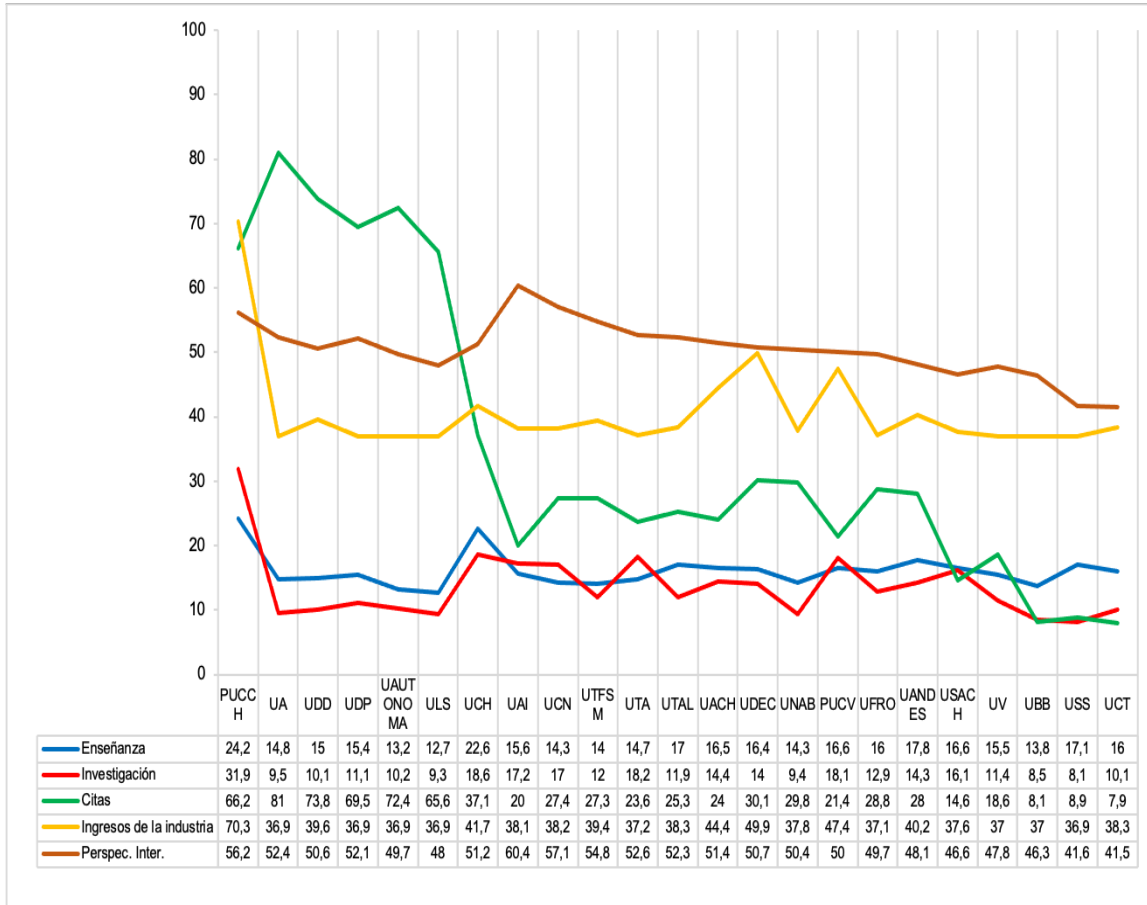


Fig. 4: THE 2023 Ranking Results of Chilean Universities.

Source: Author’s elaboration, based on THE (2022a).

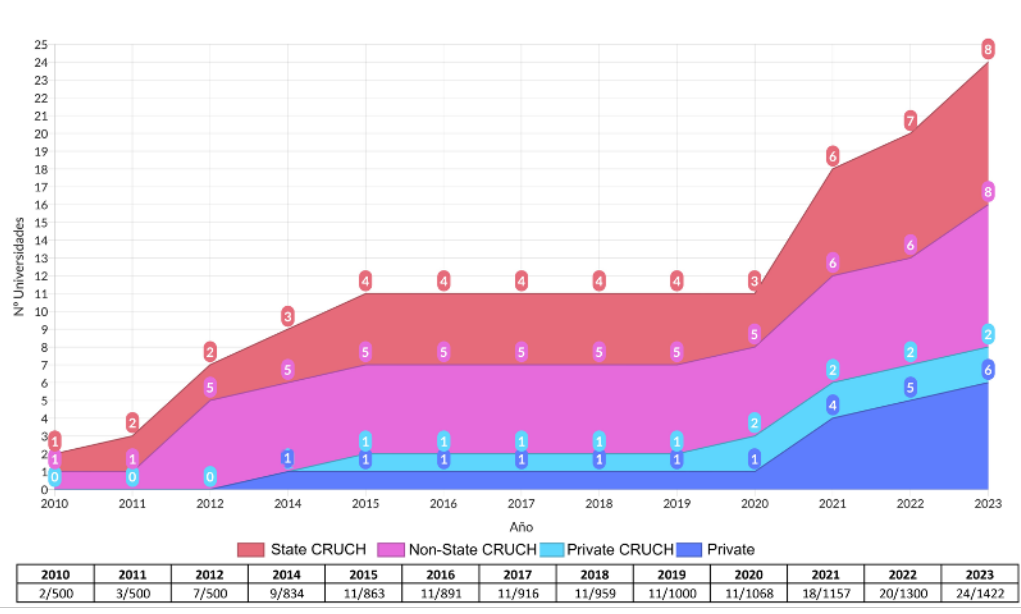
### 3.3. QS World University Rankings - Quacquarelli Symonds

Regarding the participation levels of Chilean universities in the QS Ranking, a significant increase can be observed over the last four editions, going from 11 universities in 2020 (a figure maintained since 2015) to 24 by 2023. This increase was the result of the incorporation of five state universities (from three to eight institutions mentioned), three non-state universities (from five to eight ranked universities), and five private universities (from one institution to six) to the 2023 edition, the latter being the ones with the highest proportional growth considering both years.

The increase in the number of institutions published each year by the ranking did not necessarily lead to more Chilean universities being included in the list. For example, during 2010, 2011, and 2012 editions, Chilean universities went from having two representatives (for the first year) to seven (for the third year cited), even though the number of institutions published remained at 500. This situation is similar, although in the opposite way, for the years given between 2015 and 2020, in which the number of published institutions went from 863 (for the first year mentioned) to 1068 houses of study (for the second year in question), an increase of 205 positions that did not increase the number of participating Chilean universities, which always remained at 11 for this period.

The 2023 edition contains the most significant number of Chilean universities listed, with a total of 24 institutions, which represents about 41% of the entire Chilean university system, divided into eight state universities (out of 18 potential ones), eight non-state universities (out of a total of nine), two private universities belonging to the CRUCH (out of a total of three) and six private universities (out of a possible 24). Furthermore, for that year, the universities

belonging to the CRUCH total 18, thus accounting for 60% of the total number of members (the same situation that occurs in the THE ranking for 2023). The number of private universities participating in the last edition establishes the QS Ranking as the measurement incorporating more institutions of this type in Chile, compared to the other two international rankings under study (excluding private universities belonging to the CRUCH). Details of the number of Chilean universities listed per year, and the type of institution, are shown in Figure N°5.



**Fig. 5:** Number of Chilean universities participating in the QS Ranking.

Source: Author’s elaboration, based on QS (2010-2021;2022b).

Regarding the positions that Chilean universities have historically achieved in the QS Ranking, it is determined that the Universidad de Chile, in conjunction with the Pontificia Universidad Católica de Chile, is the Chilean institution that has participated the most in the ranking (a total of 13 times each), closely followed by the Universidad de Santiago de Chile, with 12 appearances.

Regarding the movements the institutions have had in their ranking over the years, except for UCH and PUCCH, most of them have experienced downgrades considering the first time they were published compared to their last appearance. For instance, universities such as Austral de Chile and Técnica Federico Santa María were published for the first time in the 2012 edition, both located in position 601+, while for the last publication (2023), both are in the range 1001-1200.

Within the historical positions shown in Table N°8, Pontificia Universidad Católica de Chile has the best historical position among the country's institutions, with 121st place obtained in 2021 and 2023.

**Table 8:** Historical positions of Chilean universities in the QS Ranking.

N°	Uni./ Year	2010	2011	2012	2013	2015	2016	2017	2018	2019	2020	2021	2022	2023	f <sub>i</sub>
1	PUCCH	331	250	195	166	167	170	147	137	132	127	121	135	121	13
2	UCH	367	262	225	223	220	209	200	201	208	189	180	183	167	13
3	USACH	-	451-500	451-500	461-470	451-460	451-460	471-480	451-460	511-520	489	501-510	487	465	12
4	UDEC	-	-	551-600	551-600	601-650	601-650	601-650	651-700	651-700	601-650	601-650	601-650	601-650	11
5	PUCV	-	-	601+	651-700	601-650	601-650	601-650	701-750	751-800	701-750	801-1000	751-800	751-800	11
6	UAI	-	-	-	651-700	601-650	601-650	651-700	651-700	701-750	701-750	701-750	751-800	751-800	10
7	UANDES	-	-	-	-	-	-	-	-	-	801-1000	801-1000	801-1000	801-1000	4
8	UDP	-	-	-	-	651-700	651-700	701+	751-800	801-1000	801-1000	801-1000	801-1000	801-1000	9
9	UNAB	-	-	-	-	-	-	-	-	-	-	1001+	1001-1200	1001-1200	3
10	UACH	-	-	601+	701+	701+	701+	701+	801-1000	801-1000	801-1000	801-1000	1001-1200	1001-1200	11
11	UTAL	-	-	-	701+	701+	701+	701+	801-1000	801-1000	801-1000	1001+	1001-1200	1001-1200	10



12	UV	-	-	-	-	701+	701+	701+	801-1000	801-1000	-	1001+	1001-1200	1001-1200	8
13	UTFSM	-	-	601+	701+	701+	701+	701+	801-1000	801-1000	801-1000	801-1000	801-1000	1001-1200	11
14	UAUTONOMA	-	-	-	-	-	-	-	-	-	-	1001+	1201+	1201-1400	3
15	UBO	-	-	-	-	-	-	-	-	-	-	-	1201+	1201-1400	2
16	UCSC	-	-	-	-	-	-	-	-	-	-	-	-	1201-1400	1
17	UCN	-	-	-	-	-	-	-	-	-	-	1001+	1201+	1201-1400	3
18	UCEN	-	-	-	-	-	-	-	-	-	-	-	-	1201-1400	1
19	UFRO	-	-	-	-	-	-	-	-	-	-	1001+	1001-1200	1201-1400	3
20	ULS	-	-	-	-	-	-	-	-	-	-	-	1201+	1201-1400	2
21	UBB	-	-	-	-	-	-	-	-	-	-	1001+	1201+	1201-1400	3
22	UDD	-	-	-	-	-	-	-	-	-	-	1001+	1001-1200	1201-1400	3
23	UCT	-	-	-	-	-	-	-	-	-	-	-	-	1401+	1
24	UTA	-	-	-	-	-	-	-	-	-	-	-	-	1401+	1

Source: Author’s elaboration, based on QS (2010-2021;2022b).

Focusing exclusively on the results of Chilean universities in the QS Ranking for the year 2023, three institutions are ranked in the top 500 worldwide (PUCCH, UCH, and USACH), and eight if we expand to the top thousand (UDEEC, PUCV, UAI, UDP and UANDES are added). Additionally, this edition includes four new universities: Católica de la Santísima Concepción and Central de Chile in positions 1201-1400, and Católica de Temuco and Tarapacá in position 1401+.

Regarding the results in the indicators proposed by QS, the academic reputation and employer surveys are the ones that show the best scores among the rest, for example, with ratings of 91.8 and 98.1, respectively, for the Pontificia Universidad Católica de Chile and 80 and 92 for the Universidad de Chile.

For the indicators of the ratio of academics to students, appointments by faculty, academics, and international students, the figures, in general, are not at all outstanding, given that the majority (with honorable exceptions), present data below 15 points, registering in some cases figures close to one or zero. The information provided above can be seen in more detail in Figure N°6.

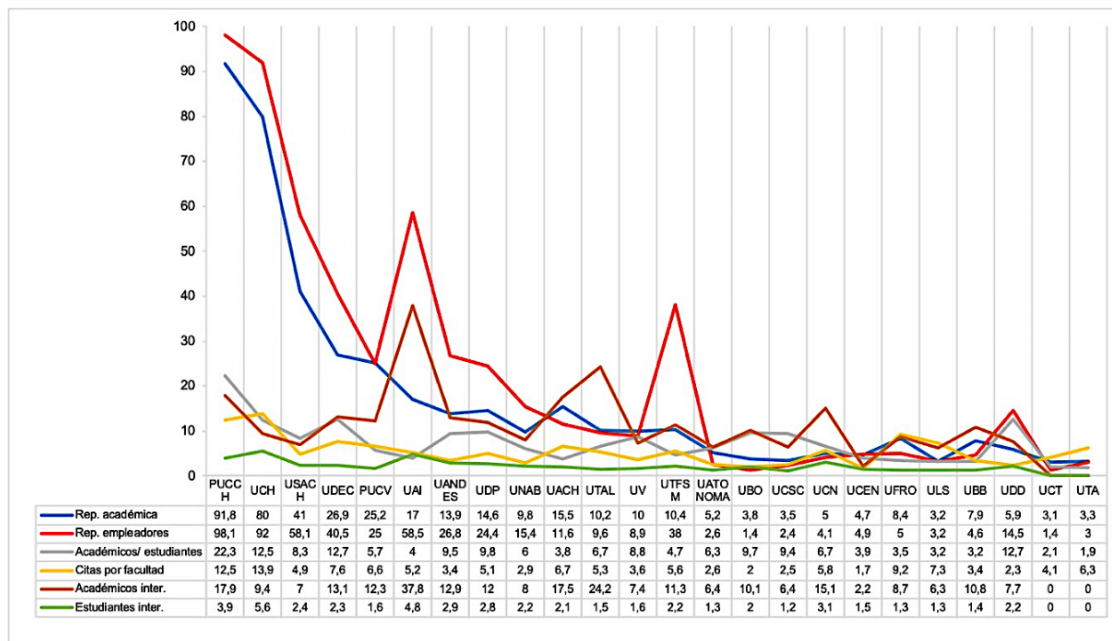


Fig. 6: Results of Chilean universities in the QS 2023 Ranking.

Source: Author’s elaboration, based on QS (2022b).

## 4. Conclusions

Regardless of the growing importance of the rankings at the international and regional levels, the work evidences the scarce prominence of Chilean universities in relevant positions, where, in the best of cases, one institution is located in the top 200 worldwide, a phenomenon that has encouraged some discussions on how to face this reality. The rankings could then be detrimental to Latin American universities since, on the one hand, they do not recognize their particularities, and, on the other, they undermine their legitimacy in the eyes of the public.

The international rankings use different methodologies to classify the world's universities, which, regardless of their mission, propose an ideal institution to be followed. From these methodologies arise standard dimensions (such as research and its impact measured through citations) and dissimilarities (such as using public and objective indicators instead of opinion polls). The trend towards product-based indicators is evident, mainly through information considered objective.

An examination of the Chilean universities participating in the leading international rankings reveals patterns and differences due to the methodologies used. Overall, 26 national entities are in one of the three international rankings published in 2022 (ARWU) or 2023 (THE and QS), led by two institutions: the ARWU by the University of Chile, the THE and QS by the Pontificia Universidad Católica de Chile.

Among the HEIs identified in the rankings, three groups can be established based on the number of their participation in the corresponding classifications. The first group includes four institutions of the system with positions and results in the three rankings under study: the Universidad de Chile, the Pontificia Universidad Católica de Chile, the Universidad de Concepción, and the Universidad Técnica Federico Santa María, divided into one state institution and three non-state institutions.

The second includes 17 HEIs with information in two of the measurements: Pontificia Universidad Católica de Valparaíso, Universidad Adolfo Ibáñez, Universidad Austral de Chile, Universidad Autónoma de Chile, Universidad Católica de Temuco, Universidad Católica del Norte, Universidad de la Frontera, Universidad de La Serena, Universidad de Los Andes, Universidad de Santiago de Chile, Universidad de Talca, Universidad de Tarapacá, Universidad de Valparaíso, Universidad del Bío-Bío, Universidad del Desarrollo, Universidad Diego Portales and Universidad Técnico Federico Santa María; distributed in seven state, five non-state, two private belonging to the CRUCH and three private.

The third group comprises five institutions: the universities of Antofagasta, San Sebastián, Bernardo O'Higgins, Católica de la Santísima Concepción, and Central de Chile, which have been observed in at least one of the rankings. According to their origin, in this last group, one is state-owned, one is non-state-owned, and three are private.

The presence of at least nine state universities in THE Ranking (in the 2023 edition), the most significant number among the three rankings analyzed, representing 50% of this type of institution in the country, was also observed. Meanwhile, the largest number of private universities are found in the QS Ranking, with six participations for the year 2023 out of a total of 28 of this type.

The review also shows the high participation of the Chilean universities that comprise the Council of Rectors in the leading international rankings. From 30 potentially eligible institutions, 20 were mentioned by any ranking in any of its years, representing about 67% of participation.

Generally speaking, the Chilean universities listed do not manage to maintain or climb in the rankings studied (only some improve exceptionally), which is a clear sign of the importance of accelerating their progress, considering that many of them are immersed in systematic and permanent processes of continuous improvement. Considering the phenomenon from an optimistic point of view, the work has shown that Chile's universities are advancing in presence as time goes by, even though the number of institutions in the system per year has tended to decrease. Thus, in the years that more Chilean institutions have appeared in each ranking, it can be mentioned that the ARWU shows about 9% of the total number of universities in the system in 2019 (five institutions among 59 in force), while THE covers almost 40% of the total in the version for 2023, finally, QS incorporates about 41% of the total number of study houses for the year 2023.

Additionally, a good performance is identified at the level of various indicators proposed by the rankings under study, such as the academic reputation and employers' surveys in QS, where the universities of Chile and Católica de Chile score above 80; a similar situation to that of THE, where universities such as Antofagasta, del Desarrollo, Diego Portales and Autónoma de Chile exhibit data close to 70 and above.

Thus, it is observed that there is in the Chilean university system an interesting group of entities that have consolidated and others that could be projected as universities of excellence at the regional level and, even eventually, worldwide,

but for this to become a reality, it is inevitable that society bets on it decisively and concretely, requiring the support of all actors, especially the State and the business world, considering that public funding is precarious, and the contribution of the business sector is more than insufficient.

This research line has a long way to go, and at first glance, it is possible to glimpse works that historically address the location of universities in local rankings. However, it would be helpful if these analyses could be expanded to the rest of the Latin American countries.

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