Analyzing the Internationalization of Higher Education in Argentina Through a Three-Dimensional Model

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As the result of an increasingly globalized and interconnected world, the internationalization of institutions of higher education grew and adopted established and regulated characteristics. An example of this evolution is the creation of the international relations offices (IROs). These sectors are responsible for formalizing collaborations with institutions from other countries to exchange students, academics, and knowledge. A three-dimensional internationalization model -organizational design, student mobility, and scientific production- is used to analyze three Argentine universities with varying degrees of overseas collaborations and their strategies and practices to increase their global presence and impact.

INTRODUCTION

The internationalization of higher education is a growing phenomenon that knows no bounds. Among all migrant groups, including refugees, or those who move countries for work or family reasons, international students make up the fastest-growing group (Riaño and Piguet 2016). In this globalized environment, the industrialized nations are the ones that attract the largest number of students and scientists from around the world. In fact, for every three international enrollees who choose an OECD member country in which to continue their university studies, these nations only send one overseas (OECD, 2021). Regarding scientific production, measured in terms of number of publications, dominance is again exercised by the OECD countries plus China and India (SJR, 2020). Likewise, the richest nations also monopolize how knowledge is distributed worldwide. Therefore, it is hardly a surprise that the main scientific journals and publishers have their headquarters in Europe or the United States, or that English is the predominant language of academic productions (Altbach, 2007).

While every nation has universities with attractive and unique features, these -and their international impact- are always shaped to some degree by their countries' context and particular realities. For example, in developing nations, the low funding received by institutions to promote their scientific and technological activities hinders and limits their international exposure. Therefore, it is unsurprising that they mainly use knowledge produced in universities in industrialized countries. Also, it is hardly astonishing that the flow of students and scientists between them to other non-industrialized countries is scarce. Hence, it is evident that higher education institutions interact within a stratified system with a dynamic "from the developing periphery towards the industrialized center" regarding academic student and researcher mobility. The opposite is true in terms of the distribution of knowledge among countries. Indeed, only five countries

belonging to the industrialized world recruit almost half of the more than six million foreign students that populate university classrooms worldwide (OECD, 2021). Argentine universities, public and private, have around 110,000 non-native students on degree programs, most of which come from neighboring countries (SPU, 2020). This percentage is significant about the other countries in the region. However, Argentina's performance in this regard is far lower than that of industrialized nations such as the United States, United Kingdom or Australia, which attract 15%, 8.2% y 7.2%, respectively, from the total number of international students (UNESCO, 2023).

This paper uses a model to categorize and analyze the different approaches used by universities to strengthen their degree of internationalization. To do so, it assesses the proportion of foreign students about the local ones; the flow of international academic and scientific exchange; the structural and organizational aspects, and their strategies and policies to foster internationalization. Three Argentine universities with different levels of internationalization were selected under a purposive approach.

Information was collected from primary and secondary sources. Regarding the latter, a documentary analysis was performed based on data obtained from the web pages of the universities themselves. Likewise, reports from public Science and Technology, and Evaluation and Accreditation agencies and official university statistics were consulted. The SCOPUS base served as a source for scientific production. The primary information was gathered through in-depth interviews with each university's main institutional actors in charge of internationalization. It is worth mentioning that this research is not representative of the different dynamics of internationalization present in the country, rather, it refers specifically to the three chosen cases.

The paper begins with a brief description of the Argentine university system. The second section describes what internationalization means, paying special attention to the impact of organizational designs and the flows from the dual perspective of student and research mobility. The methodological framework and the analysis model that allow comparing theory and evidence are explained in detail in the following part. The three university cases are presented and analyzed in the third section. The institutions were selected within a purposive sample, referencing the model developed in the previous section and according to the value obtained by each of them in every single one of the three dimensions (organizational design, academic mobility and scientific production). Thus, three types of universities were defined according to their degree of internationalization (high, medium, and low). Discussions and final considerations conclude this paper.

The Argentine University

The university sector in Argentina has 2.5 million students at the undergraduate level (approximately 19% in the private sector) distributed among 132 educational institutions (65 private). At the graduate level, the number is substantially lower (approx. 180,000), although it has seen sustained growth over the last decade (SPU, 2021). At the latter, there is a higher participation in the private sector (27%) compared to the undergraduate one.

Regarding research, public universities contribute almost half (49%) of the total number of full-time researchers, while private universities have only 2% of the total. The remaining 49% is distributed among public organizations (40%), private companies, and non-profit institutions. Most researchers (including fellows) in public (52%) and private universities (66%) work part-time. The distribution by discipline shows that 54% of the research done at private universities focuses on areas related to the social sciences. The distribution is more homogeneous at public universities, although the social sciences also stand out with the highest number of researchers (30%). Grouping "hard" and "applied" sciences into a single conglomerate, 46% of researchers at public universities specialize in these areas, while in private universities, only 23% (DNIC, 2021a; DNIC, 2021b).

Over the past years, Argentina has witnessed a considerable increase of international students. This mobility has made the country a net exporter of higher education services. From 2015 to 2021 (last available official statistics), the number grew by 103%. In 2021, there were more than 117,000 international enrollees at both the undergraduate and graduate levels (SPU, 2021). Nonetheless, the proportion of non-locals concerning that in highly internationalized countries is low (4.3% of the system). This figure is in alignment

with that in the rest of the region. Additionally, the majority of international students came from the American continent (95%), mainly South America, followed by Europe (4%), and an almost non-existent incidence from Asia.

INTERNATIONALIZATION OF HIGHER EDUCATION: MEANING AND CHARACTERISTICS

The concept of internationalization is not new; it has been used previously in political science to describe the dynamics that permeate government relations (Knight, 2004). However, when referring to the university sector, the phenomenon of internationalization gained ground in the late 1980s. New concepts such as *transnational*, *borderless*, and *cross-border education* emerged. Internationalization may be the integrative process incorporating an international and intercultural perspective to every aspect of a post-secondary institution`s activities (Knight, 1997). Scott (1998) proposes four dimensions for analyzing higher education from an international perspective: 1) exchange of students among countries; 2) the flow of faculty and researchers between universities beyond their own geographical borders; 3) international inter-institutional collaboration; and 4) the circulation of ideas among countries.

Despite the great benefits of internationalization, it also has unfavorable aspects. Examples are the commercialization of the sector and brain drain to more developed nations (Jibeen and Asad Khan, 2015). Indeed, the high dependence that universities, especially those in more industrialized countries have on international students, became evident during the COVID-19 pandemic, when border closures ceased mobilities, causing significant financial stress to many institutions (Rabossi, e. al., 2021a).

Internationalization: Characteristics and Flows

Organizational Design: Functions and Impact On Internationalization Processes

Any institution that aims to be a relevant actor in the global discussion should have an area of international relations to develop and promote its links with the rest of the world. Even in peripheral countries where internationalization processes are still not mature, 97.4% of universities have a sector dedicated to promoting relations with foreign institutions (Massiona and Mejía, 2019). Regardless of the name they are known by, the sector that is in charge of internationalization mostly deals with promoting and administering collaboration agreements for mobility and joint academic activities, including double degrees; coordinating and collaborating in the implementation of international cooperation initiatives; recruiting students from overseas; and guiding the institutions' global positioning.

The teams that make up the so-called International Relations Offices (IROs) in Latin America are smaller than their counterparts in central countries. 61.5% of the IROs in the region are made up of teams of one to five people (Massiona and Mejía, 2019). Additionally, they tend to have a more general and local professional profile. The opposite occurs at the universities of industrialized nations, where IRO staff usually have more specific professional skills with a broader international outlook.

Organizational designs and strategies impact how student and research exchanges are generated and promoted, regardless of the personal motivations of the participants of these mobilities. As a result, the type of regulations universities impose when developing partnership agreements with local and international counterparts, can hinder or encourage cooperation among institutions in different countries (Cummings and Kiesler, 2005; Fox and Mohapatra, 2007). Marketing and communication strategies can also lead to a greater degree of internationalization. For instance, a better position in an international ranking grants greater visibility, making the institution more attractive to foreign students and researchers.

Student Mobility

The exchange of students between countries has consolidated over the past two decades. Indeed, in 1975 there were approximately 800,000 foreign students globally, which doubled by the end of 1995. Nonetheless, this rapid expansion continued, increasing from 3 to 6.1 million international students worldwide from the mid-2000s to 2019 (OECD, 2021). Although the distribution of international students does not follow a proportional logic, a group of countries benefits more than others. Along with the United States, which recruits more than 15% of all foreign students, Great Britain, France, Germany, and Australia

account for almost half of the total student flow among nations. It is therefore not surprising that 80% of the export of higher education is in the hands of OECD countries. Regarding the region of origin of international students, Asia accounts for 53%, Europe 25%, Africa 8% and Latin America 6% (OECD, 2021). Around 1.5% of the international flow of university students chooses Argentina as a study destination; this is a significant proportion about other countries of the Latin American region.

An important point regarding student mobility is that, while higher education institutions recognize the benefits of internationalizing their student body, recent discussions question the unrestricted growth of English-language programs to attract foreign students. This matter has been broadly debated in countries such as Germany, Denmark, and the Netherlands, to name a few, where it has been argued that the use of English has impacted negatively on the quality of courses since professors are chosen based on their language knowledge rather than their expertise in a particular discipline (Altbach and De Wit, 2018).

Mobility of Knowledge

International scientific production has grown exponentially in the past decades. While at the beginning of the 20th century, only a dozen countries contributed to the generation of knowledge, it is estimated that currently around 200 countries produce science (Mihay and Reiz, 2017). Regarding the 2020 publications, according to Scimago Journal Rank (SJR), China, the United States, the United Kingdom, India, and Germany are global leaders in knowledge production. In Latin America, the region is led by Brazil, followed by Mexico, Chile, Argentina, and Colombia (SJR, 2020).

Although universities in developing countries, even the elite ones, are more focused on teaching than on cutting-edge research, partnerships with institutions in industrialized countries are decisive and fundamental for advancing scientific research and a country's development (Ynalvez and Shrum, 2011). Such collaborations aim to improve academic productivity while also increasing and improving their human resources. However, beyond organizational strategies, interpersonal relationships among international colleagues are a key factor for undertaking and developing joint research projects (García de Fanelli et al., 2018). Indeed, Bozeman, Fay and Slade (2013) describe scientific cooperation as a "...social process in which people share their human capital to produce knowledge" (p. 3). For this type of collaboration to be successful, there needs to be interaction between the protagonists, an effective exchange of information between the parties involved, and competencies and resources to produce a result during joint research (Ynalvez and Shrum, 2011).

THE METHODOLOGICAL FRAMEWORK, THE ANALYSIS MODEL OF INTERNATIONALIZATION IN HIGHER EDUCATION AND THE SELECTION OF THE CASES

In order to evaluate and categorize the degree of internationalization of a higher education institution (high; medium; low) this model uses three dimensions of analysis:

a. Organizational design
b. Student mobility
c. Scientific production

A. To define the dimension "organizational design," the following three variables were used:

1. Decision-making:
    - Centralized: rests solely with the central administration of the university;
    - Decentralized: is decided by the faculty, school or academic department;
    - Decentralized – mixed: decision-making is shared between the central administration of the university and the faculties, schools or academic departments.
2. Management structure. Refers to the existence or not of a formal structure dedicated to promoting the institution´s internationalization.
3. Human Resources. Indicates the number of people dedicated exclusively to promoting the internationalization of the university. Three values are considered:
    - High: >= 6 people;

- Medium: 3 to 5 people;
- Low: 1 to 2 persons.

B. To analyze the dimension "student mobility," four variables were considered:

1. Number of international students: Refers to the proportion of international students in relation to the total number of undergraduate enrollees;
2. Exchange agreements: Refers to active bilateral cooperation agreements for the joint development of academic activities, exchange of undergraduate students, short-term stays, and exchanges of professors and researchers per 1,000 undergraduate students;
3. Double degrees: Refers to the active number of agreements between an Argentine and a foreign institution for every 1,000 undergraduate students, where students have access to curricular tracks that allow them to obtain a degree from both institutions;
4. Participation in networks and/or associations: Refers to the number of active participation in networks and/or associations for the development of international cooperation per 1,000 undergraduate students.

C. The dimension "scientific production," comprises the activity carried out by researchers at a given university. The following four variables were considered:

1. Quantity of Products. Refers to the number of publications during the period 2016-2020[1] according to Scopus.
2. Productivity Index. The *proxy* variable that arises by dividing the number of products per 100 undergraduate students[2].
3. Publications with foreign collaboration: Identifies the percentage in relation to the total number of publications of that institution.
4. Country with the Greatest Interaction (CGI). Represents the foreign country with the highest scientific production in collaboration with a given university according to the Scopus database.

To select the three case studies, an analysis was made of the 132 universities (public and private) that currently comprise the Argentine higher education system. Information available on the web pages of each institution was used, as well as other documentary sources available on the Internet, such as the news media, reports from public organizations and networks, and national and international institutions. To define each university's internationalization degree, two cardinal values were used (scientific activity with other countries and number of international collaborations) and an ordinal value (organizational design). In terms of organizational design, an institution is considered to have a higher degree or predisposition towards internationalization if it has a decentralized-mixed decision-making structure, a formal structure dedicated to internationalization, and employs four or more human resources dedicated exclusively to such activities.

Following these criteria, three categories of universities were defined:

1. High internationalization
2. Medium internationalization
3. Low internationalization

Two private and one public university were selected under the logic of purposive sampling. This method is defined as choosing case studies that meet, ex-ante, the conditions sought by the researcher (Schutt, 2004). Next, in-depth interviews were conducted with key actors using the three-dimensional model described above. The case study modality was selected since it allowed us to observe comprehensively the actions carried out by each of the three universities in their internationalization objective (King, Keohane and Verba, 1994). Likewise, pseudonyms were defined to protect the identity of the three institutions, in which P (private university), E (public university), and H, M, L (high, medium and low degree of internationalization respectively) were used. For example, EM refers to a public institution with medium internationalization. Table 1 summarizes three main characteristics of each institution's profile.

TABLE 1
BASIC DATA OF SELECTED INSTITUTIONS, 2020

University	PH	EM	PL
Sector	Private	Public	Private
Decade of creation	1990	2000	1990
Size of institution*	Small	Large	Medium

*Notes: *Refers to the number of undergraduate students. Large size corresponds to institutions with more than 15,000 students; Medium size refers to institutions with 5,000 to 15,000 students; Small size makes reference to institutions with less than 5,000 students.*
Source: Authors' preparation based on data from SPU (2020).

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"Organizational Design" Dimension

Table 2 summarizes each institution's characteristics analyzed about their organizational design and the resources used to promote a higher degree of internationalization.

TABLE 2
ORGANIZATIONAL DESIGN OF THE SECTOR IN CHARGE OF THE INTERNATIONALIZATION IN SELECTED ARGENTINE UNIVERSITIES, 2020

University	PH	EM	PL
Decision-making	Decentralized - Mixed	Decentralized - Mixed	Centralized
Existence of a management structure dedicated to internationalization	Yes	Yes	Yes
Human Resources	Medium	High	Low

Sources: Institutional web pages, interviews with institutional actors. Authors' preparation.

According to what has been observed, most of the internationalization actions put in place by PH are decentralized within a mixed organizational logic. PH has a formal departmental structure, each with its own financial and human resources and significant numbers of incoming and outgoing exchange students. This horizontal design allows each unit to function within its particular logic. Hence, PH presents a non-hierarchical organizational structure, where the internationalization department is weakly coupled to the schools and academic units. As a result of this dynamic, the synergies between these sectors are spontaneous, unplanned and somewhat inorganic, with each academic area promoting internationalization according to its own interest or development strategy rather than following an institutional directive. At EM, internationalization is central for the institution and its future development plan. The university's strategy was reformulated last year to strengthen the institution´s international positioning. As a result of the new master plan, the IRO gained importance within the organization; the Chancellor´s support was fundamental for this upgrade.

Regarding PL, it presents a centralized organizational model in which the IRO management reports to the chancellor. This positioning within the organizational structure denotes the importance, at least symbolically, that the institution gives to internationalization. Nonetheless, this unit does not have its budget and is staffed by three people, out of which one is part-time, as she also works in the Graduate Studies Department. The University has had a strategic internationalization plan since before the pandemic; this was modified due to the increased activities and operational changes brought about by COVID-19. Nonetheless, there seems to be a decoupling between what was established formally in terms of the organization's internationalization and the resources and capacity that are available for this purpose.

"Academic Mobility" Dimension

Table 3 synthesizes quantitatively the value of the four dimensions selected to define the degree of internationalization regarding academic mobility.

TABLE 3
ACADEMIC MOBILITY IN SELECTED ARGENTINE UNIVERSITIES ACCORDING TO THEIR LEVEL OF INTERNATIONALIZATION, 2020

University	PH	EM	PL
Percentage of international students	10.0%	0.9%	0.8%
Exchange agreements per 1,000 students	55.9	14.3	3.6
Double degrees per 1,000 students	3.0	0.3	0.4
Participation in networks and/or associations per 1,000 students	1.0	1.1	0.2

Sources: institutional web pages, interviews with institutional actors.

Since its founding PH has had significant academic mobility. In fact, in its third year of operation, some of its students participated in international exchange programs. Likewise, since day one, PH has accepted students from overseas. Indeed, 10% of its undergraduate students come from other countries. This is a significant percentage compared to other universities in Argentina. Although this internationalist tendency is explicit in its institutional mission, PH lacks a detailed strategic internationalization plan. The reason for this is that its internationalization logic results in a great measure from the profile of its academic human resources, mostly trained in foreign universities. This aspect greatly differentiates PH from other Argentine institutions where faculty are mostly trained in-country. As a result of this trait, PH evidences an inclination to "look up" to the global North with which it maintains a wide number of student and academic staff mobilities.

Regarding EM, approximately 1% of all undergraduate and graduate students are international, a percentage that is well below the national average. EM has started to take its first steps toward increasing its international student numbers, mainly at the graduate level. Even though it does not currently offer double degrees, it is finalizing one with France. As a national university, it is a member of several Latin American university networks, as this region is a priority. However, EM has also focused on Europe. Indeed, this institution has recently signed collaboration agreements with France, Spain, and Italy. A future objective is to enter the Australian market. EM currently has 115 international collaboration agreements, 60% active. EM's International Relations Director considers that the funding available for internationalization initiatives is sufficient as, over the past 10 years, it has allowed them to grant 300 international mobility scholarships to its students. The current priority for EM is to finance its academic staff mobilities.

In the case of PL, student mobility accounts for 30 to 50 students per year, a low number compared to the other universities studied. PL has 18 active mobility agreements and has developed undergraduate double degree programs with Colombia and at the graduate level with Spain. As a private university, PL does not receive any public funding for its internationalization activities. It is a member of one international network, evidencing a low articulation with the international academic system.

"Scientific Production" Dimension

From a quantitative perspective, Table 4 indicates the number of papers produced by each of the three universities with international co-authorship, a proxy variable for international research productivity, and the percentage of publications not written in Spanish. It also indicates the country where the most joint research has been generated.

TABLE 4
SCIENTIFIC PRODUCTION (2016-2020) IN SELECTED ARGENTINE UNIVERSITIES ACCORDING TO THEIR LEVEL OF INTERNATIONALIZATION

Scientific production	PH	EM	PL
Quantity of products	312	91	29
Productivity index	11.4	1.2	0.6
Publications with foreign collaboration (%)	58%	42%	34%
Country with highest interaction (CHI)	USA	Brazil	Spain

Source: SPU. 2020; Scopus. 2016-2020; and authors' preparation.

PH encourages its academics to visit overseas universities as visiting professors and/or for research. In this way, it promotes international academic collaborations. A particular feature at PH is that a large part of its academic staff has a doctoral degree, a rare situation in Argentina. Indeed, more than 80% of its full-time professors have completed graduate studies in foreign universities, mostly in English-speaking institutions. This trait facilitates collaborative scientific production with peers from those countries. Therefore, the propensity to publish in international English-language scientific journals is not surprising.

EM does not have a department to promote international collaborative research; this depends mainly on each researcher. Thus, the IRO's role is to accompany them, as needed, to ease the process. Although the research produced with an international component is relatively low, a key objective for EM is to increase the participation of faculty and researchers in internationalization initiatives. Indeed, the central aspects of its strategy are to internationalize the curricula and increase the number of publications in international journals and with researchers from other parts of the world. This goal also aims to positively impact the University's position in global rankings. The main disciplines with international research collaborations are Agriculture and Biological Sciences, which amount to 30% of all joint initiatives, and Physics, Astronomy, and Medicine, which add to 20%.

PL's main international scientific collaboration results from the preexisting partnership agreements that were mostly generated due to personal connections between local researchers and their peers abroad. By and large, these are Iberoamerican and focused on kinesiology, environmental and social sciences, and engineering. Agreements have been formalized thanks to a joint effort between the IRO, the University's authorities, and its researchers. Spain accounts for almost 50% of all international research collaborations, and the scientific cooperation with Iberoamerican institutions is in its initial stages. In this sense, PL have materialized into institutional agreements and co-authored scientific productions.

DISCUSSION AND FINAL CONSIDERATIONS

Argentina is not foreign to the process of internationalization of universities, which is a universal and growing phenomenon. Therefore, to integrate into the world, the three universities analyzed have implemented specific actions. Nonetheless, certain inconsistencies are evident in their pursuit of this objective. For example, a significant lack of coordination was observed within and among universities and government agencies. Likewise, the deficiency in funding for both the private and public sectors are barriers that hinder their increased participation in the global higher education game.

Still, the analysis shows that, to a greater or lesser extent, and especially since the pandemic, all the three institutions have further formalized their internationalization processes. This is especially true in the cases of EM and PL as, since its origin, PH has placed internationalization as a key aspect of its institutional strategy. COVID-19 brought about an upgrade within the institutional hierarchy and increased the IROs' prominence in the three analyzed universities. This new positioning resulted in the growth of international mobility programs and more participation of IRO representatives in international fairs and congresses.

Despite the efforts made, PL's situation exemplifies how hard it is to find a place on the international academic arena for universities in peripherical countries. There are several reasons for this weakness, among them a low participation in international fairs and congresses where universities develop their networks and build their social capital. Additionally, the human resources employed to promote internationalization are few. Furthermore, PL maintains a somewhat limited perspective due to only pursuing collaborations with Spanish-speaking countries. In this way, it limits its global positioning and alliances to its own vicinity.

There is a disciplinary distinction in terms of international research productivity. This results from the intrinsic nature of the field of study, as some areas of knowledge tend to be more comprehensive than others. The research done in Argentina with peers from overseas varies significantly between disciplines. For instance, in medicine, 52.3% of the scientific production is done with international researchers, while in the social sciences, this type of collaboration accounts for 30% (Scimago Journal Rank, 2020). The international production of PH, an institution almost exclusively focused on the social sciences, is notably higher than that of PL, which offers a more diversified curricular. This trait confirms that the type of human resources an institution has, plays a key role in its internationalization processes. With a faculty mostly trained in foreign universities, the links with universities abroad in PH are quite dynamic, mainly in terms of knowledge production. Although both institutions are quite young, unlike PH, which has most of its human resources trained at European and English-speaking universities, at PL, the faculty is mostly educated in Argentina. Consequently, it is more difficult for them to expand their social capital beyond the national borders.

A characteristic repeated in all three cases is the independence between the internationalization areas and the academic schools or departments, primarily in terms of research. Worthy of mention is EM`s goal to further internationalize its faculty. Unlike PH, which has a highly internationalized academic body, EM has started a process to increase its international profile by growing their publications in SCOPUS. Although their productivity in this aspect is double than that at PL (1.2 vs 0.6, see table 4), it is still quite far from PH's level (11.4). At EM the President's decision, together with the IRO's strategy are central to the accomplishment of this goal.

Although Latin America is relatively isolated from the main flow of international students, in recent years Argentina has seen a significant increase in its numbers. Indeed, the country in the region receives the largest number of international students (UNESCO, 2023).It is worth noting that after the pandemic, there has been a growth in this regard, even at universities that were hardly internationalized prior to COVID-19. This provincialism, in Argentina, is oftentimes the result of a lack of public policies rather than due to the universities' own deficiencies. Out of the three cases studied, in only one do foreign students exceed 10% of the total number of students enrolled, while in the other two, it represents less than 1% of the total number of enrollees. Similarly, regarding the researcher's profile, there is a clear tendency toward self-management and individual development regarding participation in congresses and publications, whether local or international. Regardless of the field of study or discipline, individual links with local or international peers set the trend and define an institution's degree of internationalization about its scientific production. These individualistic behaviors result in information asymmetries between the researchers and the administration. As a result, the university, especially the internationalization area, loses contact with the international scientific production processes.

The formal structure at PH to connect this university with the outside world fosters and facilitates student mobilities. Regardless of what is stated in bylaws, missions or strategic plans, having an organizational structure with competent human resources and board members with an internationalist outlook, is key in defining the direction an institution will take towards its internationalization. For instance, EM has developed policies and processes to strengthen its degree of internationalization. Indeed, its President has provided the internationalization department with appropriate management mechanisms, has prioritized some of its prioritizing processes, and has granted it an institutionalized and independent budget. Despite these actions, this university recognizes its need to strengthen some aspects of the institutional interaction among and with the different academic units. Indeed, it would want to achieve a more balanced development of internationalization policies among the different disciplinary areas in terms of researcher

and student mobility. As for PL, this institution is currently focused on developing and growing remote internationalization activities and expanding collaborations beyond Ibero-America through its incorporation in a European-American university network. Nonetheless, language, human resources, and budget constraints represent key barriers for achieving this goal.

Since the 2018 national budget cut, which was a result of fiscal issues, public universities have been suffering. Indeed, several internationalization programs funded by the national government have been discontinued. Therefore, beyond EM's wishes to increase its international visibility, its dependence on public funds as a national institution is a difficult financial constraint to overcome. Similarly, although PL has shown interest and effort to develop internationalization policies, its main obstacles reside in the university's limited human and financial resources for international activities. Furthermore, as a private university, PL can't access competitive public funding.

In summary, this analysis led us to conclude that when measured by the number of academic publications in foreign journals—mostly English-speaking—and the percentage of students from other countries, Argentine universities' internationalization degree is still low. However, regardless of their degree of internationalization, the three institutions share an evident interest in developing links beyond their borders. The key obstacles to a more efficient internationalization of higher education in Argentina are the scarcity of financing, the insufficient use of English by students and professors, migration requirements that complicate academic mobility, and the limited number of courses taught in languages other than Spanish (Rabossi, et al., 2022b). Likewise, it was evident that the State plays a key role in increasing a university's relations with its foreign peers, especially when the institution takes its first steps. On the other hand, regardless of the discipline, informal links among researchers from different countries are decisive in increasing a university's degree of internationalization in relation to its scientific production. In this sense, it should be noted that in spite of how much effort is put into the institutional internationalization policy, this can only complement but never replace the personal relationships that researchers generate with colleagues from other countries.

ENDNOTES

1. The five years are intended to avoid abrupt variations that may occur from one year to the next. The objective is to reduce the risk of over or undervaluing an institution's scientific production.
2. Since the number of faculty per university was not available in all cases, productivity was derived through the number of undergraduate students.

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