Return Scientific Mobility and the Internationalization of Research Capacities in Latin America



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Abstract The chapter examines the return of scientists to their countries of origin in Latin America resulting from active policies introduced by countries affected by massive emigration of their highly qualified personnel. Data on highly skilled emigration of Latin Americans is presented, focusing on assessments of the relevance of return programs. The most obvious policies in this regard have been those of repatriation, re-linkage and recruitment programs for foreign academics. Examples from Mexico are used to examine how this return, whether induced by government policies or based on personal decisions, affects the consolidation of local disciplinary areas and the establishment of globalized knowledge exchange networks.

Keywords Return migration • International academics • Brain drain • Repatriation programs • Scientific diasporas

1 Introduction

Pioneering studies on the international migration of professionals from Latin America date back to the late 1960s, both for the region as a whole and for Argentina and Colombia (Eusse Hoyos 1981; Houssay 1966; Oteiza 1970). At the end of the 1990s, two research lines appeared, on brain drain and on international student mobility and the asymmetric circulation of skills. Faced with negative flows of highly qualified personnel, many governments in the region implemented programs to reverse international mobility, organize the diaspora and recruit international scientists. These programs involve government authorities, regional blocs and international agencies as well as higher education and science institutions in the countries of origin and destination. The literature on the subject is, however, heterogeneous. Much of it is journalistic, sensationalist rather than informative, and limited to individual experiences. As a research subject, professional mobility attracts the attention of specialists

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in disciplines such as demography and, to a lesser extent, economics, political science and sociology. Although most specialists are interested in quantifying migration flow, some do it from a public policy perspective, looking at the operation of government programs in countries that send or receive the migrants (Luchilo 2010). Since the intellectual tradition in demography privileges the study of outgoing rather than incoming migrations (IOM 2009), the return of scientists to their places of origin arouses less interest than their departure.¹ Some contributions deal with counter-flow scientific migration programs for Mexico (Didou and Villalobos 2013), Argentina (Luchilo and Stubrin 2013) and Peru (Piscoya 2013), and their impact on knowledge management policies. Others analyze the signing by Latin American countries of the Hague Convention on the apostille of diplomas, bilateral or macro-regional agreements on the recognition of foreign qualifications or teacher training (Pedroza et al. 2018) and the ongoing adoption of the new UNESCO Regional Convention on the Recognition of Studies, Degrees and Diplomas in Higher Education in Latin America and the Caribbean (1974), known as the Buenos Aires Convention (Skjerven and Schwitters 2019).

In this chapter, we are interested in programs that deal with the return of emigrating citizens and the attraction of foreigners for their incorporation into academic markets in Latin America. We describe the scope of reverse mobility programs and recruitment of international scientists in the region. We point out ways of improving knowledge of return migration and some results from articles and empirical research carried out in Mexico.

2 Brain Drain and Emigration of Scientists in Latin America

The works, mainly on demography, published in the last 20 years and the information compiled by data banks of international organizations (Migration Panorama by the International Organization for Migration, International Migration Outlook by OECD) and regional programs (*Programa de Investigación sobre Migración Internacional en Latinoamérica-IMILA*) show that information about Latin American emigrant professionals is dispersed. The criteria for identifying the "scientist" category are not homogeneous, in terms of years of schooling, ages, occupations and time spent abroad. This is confirmed by revisions done in Spain and the United States (Fiori and Koolhaas 2012).

Nevertheless, experts agree that the regional rate of highly skilled emigration from Latin America has increased since the 1990s (Docquier and Marfouk 2004; Docquier

¹ "Returned migration is a relatively new area that has no standard meaning in national or international policies or law. Different types of return have been proposed to describe the level of development of countries linked to migration and return, time spent in the country of origin, the intention of migrants to the effective outcome or the sociological environment of the returnee" (IOM 2009, p. 276).

and Rapoport 2012; Dumont and Lemaître 2005; Ozden and Schiff 2006; Pellegrino and Vigorito 2009). It grew from 10.1% in 1990 to 11.3% in 2007 and reached 15% in Central America (except Costa Rica) and the Caribbean. By destination, high percentages of such migration go to the United States as a country and to the whole OECD area as a block (Lozano-Ascencio and Gandini 2009).

Despite this increase, in the United States, the percentage of Latin Americans with studies corresponding to higher vocational level or above among the foreign-born population remain below the average. They also vary according to country of origin. Between 2005 and 2007, of the 1,192,746 Latin Americans with higher education over the age of 25, with jobs and resident status in the US, 68% had bachelor's degrees, 20.4% master's degrees and 11.4% doctorates. Colombia, with 15%, Chile with 16.2%, Uruguay with 24.1%, Argentina with 24.5% and Paraguay (44.6%) exceed the regional average of doctorate holders over total human resources with thirteen or more years of schooling (Lozano-Ascencio and Gandini 2012, pp. 13–15). In 2007, 136,306 salaried Latin Americans 25 years of age or older employed in the United States had a doctorate: 38.08% of them obtained it in the United States on average. At the extremes are the Caribbean countries with 50.8%, on the positive side and, on the negative side, the Andean countries with 24.5% (Lozano-Ascencio and Gandini 2011).

Less detailed but more recent figures confirm the heterogeneity of highly skilled migration to the United States, by nationality of origin. In 2016, among South Americans, the percentage of total US migrants aged 25 and over with a bachelor's degree or more in relation to the total reference group was 32.3%. Among the Caribbean countries, it reaches 20.4%, among Central Americans, 9.2%, and among Mexicans, it remains at a low percentage, 6.2% (Krogstad and Radford 2018).

The relative proportion of postgraduates who stay in their country compared with those who leave also varies according to school, socio-economic and political factors, including among others: the existence of established national post-graduate systems; government policies to provide scholarships abroad; national and international accreditation of programs; discipline-related training traditions; and language facilities for international mobility. Factors leading to emigration include work opportunities abroad, living conditions and the pre-existence of host family networks. Other factors leading to emigration include political instability and the upsurge of populism on the left or right, which may target students and their institutions, and the reduction of public support for science and higher education (Nicaragua, Brazil, Mexico).

Different combinations of these factors explain the differences in the age at which professionals migrate. 45.5% of Caribbeans with higher education, 41% of Central Americans, including Mexicans, and 25% of South Americans left their home countries before the age of eighteen, attending primary, secondary and/or preparatory school in the United States (Esteban 2011), probably due to family migration. These percentages suggest the need to revise the predominant discourses on the loss of "educational investment" made by the countries of origin. They show that it is important to focus recruitment, bonding and repatriation programs on groups that are in a personal and cultural position to return or re-link. These subgroups are less extensive than the diaspora, defined in broad terms as anyone belong to an ethnic group or

nationality, or all doctoral students of a given nationality who study abroad and do not return. Those more prone to return are, by age, students who come to a foreign country to complete university studies and maintain their main socio-affective or professional networks in their countries of origin. Professionally, they are made up of postdoctoral candidates who cannot find stable employment either in their country of origin or of destination (Ramirez García 2016), workers in the education sector, or students fleeing political or economic crises (Venezuela, El Salvador, Honduras). In contrast, migrants who left young for family reunification are less likely to return. This is demonstrated by interviews with young illegals (Mexican or Central American) enrolled in the Deferred Action for Childhood Arrivals (DACA) program, which since 2012 has been seeking to improve their opportunities to stay in the United States (Torre-Cantalapiedra 2017). But to say that 179,000 South Americans. 170,000 Caribbean and 145,000 Central Americans work as scientists and engineers in that country, of which 93,000 are Mexicans, 64,000 Cubans, 54,000 Argentines and 36,000 Colombians, only gives an order of magnitude of absolute emigration. The concrete bases of re-linking and/or repatriation are actually much smaller, and the better working conditions for scientists in developed countries, compared with those in Latin America, ensure that mass repatriation of Latin American scientists living abroad is very unlikely.

The attractiveness of policies for the return and recruitment of international researchers depends on their ability to provide professional stability and decent salaries, in national and international terms, to those willing to come back. The duration of the stay in the country where the holders of foreign post-graduate degrees obtained their diploma, migration policies (mainly immigration quotas and conditions for obtaining work visas by nationality), and accessible positions (precarious or definitive) also determine return decisions.

From time to time, Argentina, Uruguay, Colombia or Mexico look at the figures of their programs and identify the host institutions of the returnees. Consultants from the Economic Commission for Latin America and the Caribbean (ECLAC) call the results "lukewarm" and point out that, to get better results, it would be necessary to align the programs to the expectations of those interested in scientific collaboration with their country of origin, by means of inverse mobility or knowledge transfer schemes.

Data on Latin American migrants with doctorates are outdated, since they are from the early 1990s, and incomplete. Still, their analysis helps to identify some issues that have yet to be incorporated into the design of science policies. The first, which follows the analytical approach to the brain drain proposed by UNESCO, is the estimation of the financial cost of pre-university and, probably, university education, which could be charged respectively to the countries of origin and destination on the one hand, and to families or governments on the other, depending on whether the emigrant has studied in public or private education institutions.² A second, normative

²UNESCO warns that a significant proportion of highly qualified migrants have been trained in private institutions of higher education, so the calculations on the waste of public investments in the education of migrants in their countries of origin should be reviewed at least in countries that,

topic, concerns procedures for recognition and validation of degrees obtained abroad. The UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC) has drawn attention to the significance of the issue in the region, but concrete progress varies according to the existence of bilateral agreements. For instance, degrees granted by Mercosur countries are automatically recognized in Brazil, but just for research and teaching purposes. Mexico has bilateral agreements for automatic recognition of qualifications with Argentina, Chile, China, Colombia, Ecuador, Paraguay and Spain. Nicaragua validates professional degrees issued by other countries in South America. Paraguay and Uruguay recognize degrees issued by other Mercosur countries or registered according to the Hague Convention. Besides the differences in criteria and products, the time it takes to get a degree recognized in other countries varies from 15 days in Peru, when registered according to the Hague Convention, to 14 to 16 months in Argentina (Pedroza et al. 2018).

A third issue is the systematic compilation of national legislation on, in particular, the recertification of professional skills. A fourth is the comparative documentation of the contributions of international academics to the consolidation of endogenous capacities in scientific systems in the region. The last is the opening of new lines of research, regional in scope, to establish the empirical determinants of the international circulation of scientists in the region, based on the characteristics of Latin American PhDs abroad and in their countries of origin.³ The professional nomenclature related to research posts⁴ and the profiles of the in situ internationalization of science versus those consolidated in countries with high proportions of foreign scientists in strategic fields (engineering, university teaching or health) are mainly topics of academic interest.⁵

A comparison between the degrees of internationalization of different professions in foreign and Latin American countries would contribute to improving national regulatory standards or provisions on the free transit of professionals contained in trade agreements and/or educational agreements such as Mercosur, and to alleviating the tensions produced in the universities of Latin America and the Caribbean by the

like most of those in Latin America, have expanded their coverage by strengthening the private provision of educational services. http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/projects/skilled-migration-and-brain-drain/.

³Aibo and Ordaz Diaz (2011) estimate that 20,218 Mexican PhD holders live in the United States, compared with a similar group of 80,000 people in Mexico, 73,000 of whom were born in the country.

⁴"Indeed, the use of the term "researcher", if it provides a general category of analysis, conceals a heterogeneity of professional situations. This heterogeneity does not allow us to add either the mobility of doctors, post-doctors and incumbent researchers or that which takes place in research organisations and within private companies" (Harfi and Mathieu 2006 p. 12).

⁵"According to US census data, as recently as 2007, highly skilled "legal" immigrants had become essential in many key economic sectors, constituting fully 44% of all medical scientists, 37% of all physical scientists, 34% of all computer software engineers, 31% of all economists, 30% of all computer engineers, and 27% of all physicians and surgeons. With citizen members of the "baby boom" generation entering retirement in ever-increasing numbers, demographers predict that pressure to recruit highly educated and highly skilled immigrants will continue" (Gutiérrez and Almaguer 2016, p. 108).

recruitment of international PhDs. Indirectly, it would help with the measurement and monitoring of the growing number of applications for revalidation of degrees.

3 Return, Invitation and Re-linking Programs in Latin America

These programs were driven by international agencies in their initial stages. In 1974, the International Organization for Migration (IOM) launched a talent return program for Latin America (Esteban 2011, p. 113). In 1986, the United Nations Development Programme financed the Basic Sciences Development Programme, through an agreement with the Ministry of Education and Culture and the University of the Republic in Uruguay, to repatriate and organize the collaboration of Uruguayans living abroad. The World Bank has co-financed the Program to Support Science in Mexico (PACIME) for foreign scientists since 1991, and UNESCO has been supplying courses for Venezuelan talent abroad since 1995. The Inter-American Development Bank grants loans to Argentina for the Root Plan for the repatriation of scientists in 2003 and is currently doing the same in Peru.

Thanks to their own funds, donations or international co-financing, most countries in the region now administer repatriation programs. Many organize temporary return events for members of their diasporas. Others enact migration incentive laws: Peru did so in 2004 to encourage the return of professionals living abroad (Ponce and Quispe 2012).

Several countries in the region have achieved interesting results. Argentina (Bayle 2015), Brazil (Schwartzman and Paiva 2016) and Mexico (Didou 2017) have rethought their reverse mobility policies from co-development or transnationalism perspectives. With a vision of migration as a polycentric, circulatory, temporary phenomenon subject to diverse patterns of geographical displacement (Beltrame 2007, p. 10), they are seeking to recruit foreign scientists and involve "definite" emigrants in (occasional or recurrent) cooperation activities, invoking a principle of mutual benefit in strategic development projects. For this, they set up diaspora organization programs and temporary invitation or recruitment of foreign scientists, parallel to return programs. They have shifted from a policy to compensate for brain drain that emphasizes its negative externalities to a proactive approach that encourages a relative and beneficial brain gain (Beine et al. 2008). They promote transnational epistemic networks and permanent knowledge transfer chains (Faist 2008) supported by information and communication technologies. Countries that have traditionally been lax in their demands for the return and qualification of their trainees abroad have tightened up their controls on obtaining the diploma and the obligation to return.

Despite its obvious relevance in Latin America there are no reliable estimates of the number of foreign or national academics, graduates of institutions in other countries, who are working in national and foreign systems of higher education and science. However, a growing number of questions are raised by the scope of diaspora repatriation, attraction and organization programs, including costs and benefits, and the contribution of these programs to the introduction of innovative lines of research in the host universities of returned or foreign academics. Some studies show, in fact, that the settlement patterns of "returnees" and the distribution of their workloads in teaching, administration and research are out of line with their training profiles (Balbachevsky and Marques 2009 on Brazil). It has similarly been suggested that the effectiveness of the Patrimonial Chairs program in Mexico and Prometheus program in Ecuador decreases if the receiving institutions do not put institutional programs in place to provide resources for returnees' scientific careers (Pedone and Izquierdo 2018).

Despite the limited reach of these programs, they work both as a demonstration of possibilities and by achieving some effective reversal of outgoing mobility. The number of returned "re-linked" scientists in the diasporas is growing in Latin America, but their rate of increase is lower than the number of highly skilled migrants going abroad. The Network of Mexican Talents Abroad, coordinated by the Institute of Mexicans Abroad (IME) in collaboration with the National Council for Science and Technology (CONACYT) and the United States-Mexico Foundation for Science (FUMEC) included 231 Mexicans in 2009. In 2019, the Network, renamed Global MX Network, registered 3,000 members in its 36 chapters located in eighteen countries.⁶ This increase in migrants abroad is not reflected in a parallel increase in returnees: thus, the number of Mexican researchers residing abroad accepted by the National System of Researchers (NSR), meaning that they return to the country for short or long stays, is almost stable: in 2010, the NSR accepted 236 beneficiaries and in 2017, 262.⁷

Regarding the choice of partners to implement programs of cyclical return or scientific reconnection between researchers inside and outside the country, governments and science management agencies cooperate with other public administration bodies, private associations, international foundations and local immigrant organizations. For Latin America, those covered by these associations are a minority, compared with other nationals abroad. In the United States, they account for 8.89% of all Colombians, 14.12% of Dominicans and 0.70% of Mexicans (Portes 2011, pp. 8–9). They are regarded as organizational and linking devices, alternatively underused or questioned, having been selected as counterparts without explicit criteria or evaluation of their representativeness, which opens the way to suspicions of clientelism (Agunias 2009).

In general, investments in repatriation and attraction programs seek to respond to individual demand. They are not usually governed by public policy priorities on areas, lines of research or establishments to be supported. In Mexico, starting in 2014, CONACYT has tried to connect the institutional needs and profiles of recent graduates. Its Young Researchers Chairs Program centralizes candidates' resumes and institutional applications to link collective requirements to individual competencies. However, their contributions to the internationalization of research, to the

⁶https://consulmex.sre.gob.mx/santaana/index.php/red-global-mx.

⁷http://conacyt.gob.mx/SNI/2009/SNI-mexicanos-en-el-extranjero-2009.pdf.

capitalization of the advantages acquired by PhD holders trained abroad and to the interactions, substitutive or not, between returns and outflows of competencies have not been assessed (Ramirez García 2016).

Thus, the return of highly qualified personnel is an issue to be further explored in Latin America, preferably in comparative frameworks on a national scale, because of its relevance in understanding the dynamics of the scientific field. Systematic observation and follow-ups would make it possible to identify innovative programs, useful for activating discipline internationalization practices, and to scale up the number of international publications and scientific cooperation networks, intensifying mobility and the transfer of knowledge and improving the degrees of internationalization of academics.

4 Visibility and Contributions of Foreigners to the Mexican Scientific Community: A Case Study

As in all of Latin America, in Mexico, there is a lack of research on incoming mobility related to sabbaticals, postdocs (i.e., of a temporary type) or hiring for a definitive professional incorporation. These issues have yet to be included in a national research agenda that would close the information gap and reveal the international positioning strategies of higher education institutions.

Nevertheless, due to its tradition of political solidarity, Mexico has received significant contingents of intellectual migrants (Castaños 2011). In the 1930s and 1940s it opened its doors to Republicans fleeing from civil war in Spain and from refugee camps in France; in the 1960s and 1970s, the country welcomed political exiles from Peru, Brazil, Chile, Argentina and Uruguay. These Latin Americans are today the oldest group of foreign researchers belonging to the NSR, so their importance is diminishing as they approach retirement.

In a second and more programmed phase of attraction between 1991 and 1997, CONACYT's Patrimonial Chairs II program stands out. It attracted almost 700 scientists, many from former Eastern Europe and Russia, out of a total of 6,278 NSR members (Izquierdo 2011). Although the estimate should be modified according to how many settle permanently in the country,⁸ it represents the first attempt to strategically consolidate research groups with international profiles in public institutions interested in reinforcing research, especially in the arts, mathematics and hard sciences. It enhances the status of these establishments in a national scientific environment that measures the quality of institutions according to the percentages of international PhD holders and activities carried out (publications, attendance at international congresses, and so on).

⁸"In the period 1991–1997, CONACYT (1999) reported that, of the 689 foreign scientists who obtained a CPE [Patrimonial Chair of Excellence], Level II, 218 ended up settling permanently in Mexico and estimated that 90 of them joined the National University" (Izquierdo 2008).

From the year 2000, in a third phase, support for scientists willing to return depends on their individual situation and is based on an analysis of the professional and social advantages resulting from labor insertion in a foreign scientific system of medium prestige. Arriving scientists may maintain some of their professional relationships in their countries of origin, due to the multiplication of programs supporting bilateral cooperation in Mexico, which may eventually mitigate the psychologically negative impact of migration.

The data on the incorporation of foreign scientists refer to 2009 because, since 2011, the NSR no longer reports the countries of birth, highest school grade and citizenship of its members, due to a restrictive interpretation of data protection legislation (Oliva and Didou 2019). Recent studies therefore do not provide any indicators with respect to international scientists (Rodríguez 2016). In 2009, 12.9% of the 15,654 members of the NSR were born abroad (Didou and Gérard 2010) and about 10% of foreigners older than 25 living in the country held a doctoral degree (INEGI 2010). They are present, in decreasing order, in the humanities and behavioral sciences, mathematical physics, earth sciences and social sciences. Few of them have lived in places other than their country of origin and Mexico, although this pattern is changing among the younger generation. A third of the foreigners, mostly political exiles from the 1970s, obtained their degrees in Mexico, but the others completed their doctorates in Europe or the United States. However, if we measure the degree of internationalization of the NSR not only by the number of foreign scientists but also by that of Mexican academics who graduated abroad, the figure is 36% of members, showing the historical importance of CONACYT's foreign scholarship policy.

In 2019, 19,529 of the 28,632 scientists in NSR reported their institutional affiliation; only 724 locate it abroad.⁹ They are likely to be scientists who commute periodically between Mexico and other countries, suggesting that the arrival of foreign academics is associated with diasporic returns, whose dynamics deserves to be studied.

Interviews carried out in 2013–14 with 116 foreign researchers permanently based in Mexico allow us to see other qualitative aspects of scientific immigration, such as the strategies they adopt to become well known and the roles of international academics as promoters of innovative lines of inquiry and participants in international networks. The career paths vary according to chronological, disciplinary and institutional factors. For the recently arrived, there is more variation in places of origin, with a still small number of persons coming from China, the Maghreb and India. Their professional insertion takes longer, and is more competitive and complicated. To make it easier, they move from Mexico City to other states and are willing to put up with precarious working conditions before getting a satisfactory job with a stable income and working conditions. They express interest in maintaining an academic interaction with their countries of origin, depending on individual (circumstances of departure, family or individual situation and time of life) and institutional factors (regulations related to affiliation and full-time contracts, assessment of international activities, teaching loads, support for international mobility and networks). They

⁹www.conacyt.gob.mx/images/SNI/Vigentes_Enero_2019.xlsx.

admit they would be interested in returning to their original places in the country of origin, if they could (Gongora 2018; Jung 2019).

The researchers interviewed consider that their role as intermediaries between scientific groups in the countries of origin and of insertion depends on maintaining a relationship with their thesis director (for the youngest), on the knowledge of exchange opportunities with the country of origin, on their inclusion in associations of graduates and specialists, and on their ability to lead networks. They believe that their main contribution to Mexico is not bringing knowledge that did not exist in the country, but bringing new ways of producing it, based on different disciplinary and professional traditions. In more technical areas, they believe that international mobility is linked with their knowledge of equipment that the country lacks.

However, integration into the local professional environment may be difficult. Some feel they are in a delicate position because their own behavior differs from that of their local peers, which may give rise to jealousies. They believe that making an effort to develop strong intercultural communication and negotiation skills and the acquisition of another language makes it easier for them to take part in multinational networks and teams. To improve their integration in their discipline, they combine interacting at the same time with close and distant colleagues.

Professionally, international academics socialize by joining scientific teams interested in attracting recognized foreigners or recent graduates. They are hired because of their disciplinary specialization or specific techniques that enable them to open up innovative lines of research. Their main contributions to the national scientific field include the articulation of international networks between countries of origin and arrival, and third countries, the establishment of research nuclei and supporting their doctoral students to spend time abroad.

Policy decisions announced or implemented since 2019, however, are affecting the research community and this process of international opening. They include the drafting of an Austerity Law that provides for the abolition of performance bonuses and premiums, the withdrawal of major medical expenses insurance from researchers in public research centers and similar institutions, CONACYT's delay in channeling authorized resources to various programs and basic science projects approved in 2018, and the reduction of public universities' budgets. The government discourse in favor of a "nationalist science" raises concerns about the pay and professionalization of scientists in the coming years. If these trends are confirmed, a reduction in international scientific migration to Mexico and an increase in departures abroad or the non-return of national scientists, mainly among the youngest, can be expected.

5 Conclusions

The circulation of scientific flows depends on the interest of scientific communities and institutions and on government programs to support the academic profession and its internationalization. The incoming mobility of researchers results from the interaction of individual decisions, political or economic conjunctures, and attraction programs (Didou and Villalobos 2013). Each combination implies distinct types of linkage with the country of origin, which can lead to various kinds of professional and scientific arrangements.

Return, re-linking and international recruitment programs allow institutions that benefit from them to improve their performance in fields that lie between the local and the global. They have a positive impact on the exchange of people and the joint production of knowledge. In favorable circumstances, they encourage intergenerational mobility of young researchers or doctoral students.

Perceiving this, many Latin American countries are complementing their traditional policies of sending students abroad with policies to attract international academics. For this, several mechanisms of international cooperation are being created. Examples are chairs supported by multilateral organizations (UNESCO), higher education institutions (Sciences Po-Poitiers in France and the College of Mexico) or associations (CONAHEC Chair), and joint degree programs provided by institutions in different countries. It will be important to see if these mechanisms are supported by research communities that already have experience in the integration of multinational research groups and whether they expand the scientific circuits involved in internationalization.

However, the publication of opinions critical of the benefits of internationalization, whether in academic (Brandenburg and De Wit 2011; Knight 2011) or political terms (Redden 2019 for Brazil), and the recent reconfiguration of scientific mobility to and from Latin America brought about by economic and political crises, raise questions about the future evolution of outgoing and incoming migration of highly qualified human resources, both from South–South (for instance, the Venezuela–Peru corridor) and South–North perspectives (Mexico–United States).

It is therefore necessary to reactivate the debate, moving from rhetorical arguments about the benefits of internationalization to a systematic and comparative analysis of the patterns of international mobility and the promising practices of networked scientific research. This is urgent in contexts where political authorities linked to governments of different political persuasions express their skepticism about the benefits of internationalization and, in general, question the contributions of science to their national development projects.

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