Executive Summary

Entrepreneurial Latin American higher education institutions (HEIs) have become important local stakeholders, promoting leadership, innovation and sustainability in their own communities. This evolution, shared by all case study HEIs involved in this report, reflects a broader trend in Latin America. More widely, opportunity-driven entrepreneurship has gained traction in the region over the last decade, changing the innovation landscape by bringing new products and services to markets. Technology-driven start-ups in the region have tripled since 2017 and have multiplied their estimated value from USD 7 billion to USD 221 billion over the last decade, according to the IADB. In 2021, the region had twenty-seven unicorns (privately held start-ups valued at more than USD 1 billion). Entrepreneurship has gained importance within national and subnational policy agendas, with several countries establishing public accelerators, or support programmes to help young start-ups and innovative SMEs scale-up their ventures. In some cases, universities in the region have actively connected to these programmes or established their own initiatives. The aim of the review is to identify good practices of entrepreneurship education and knowledge exchange efforts, which can help HEIs, generate economic and societal value for their ecosystems.

However, despite these positive trends, a number of Latin American countries are still characterised by low levels of public and private investment in research and development (R&D) and, in general, low levels of collaboration between universities and businesses. Indeed, investment in R&D in the region grew from a little over 0.5% of GDP in the early 2000s to 0.75% in 2015 before declining again in recent years. This trend contrasts starkly with the average of 2.3% in OECD countries over the last decade. Moreover, the tighter fiscal environment in the wake of COVID-19 has limited the ability of the state to allocate resources to research and innovation. Nevertheless, despite these challenges an increasing number of institutions are actively supporting a new generation of entrepreneurs and providing knowledge-based solutions to partners in their own local ecosystems, including in non-metropolitan areas; solutions that are increasingly oriented to the spatial challenges and opportunities of their ecosystems.

This review assesses the "geography of higher education" in six Latin American countries – Chile, Mexico, Colombia, Argentina, Brazil, and Uruguay – through the examination of eleven case studies. These case studies focus on universities with experience in supporting entrepreneurs. In particular, the review assesses the way in which these institutions contribute to economic growth, inclusion and societal and environmental objectives within their ecosystems, spurring the nascent entrepreneurial and start-up landscape in Latin America.

This review reflects the outcome of a joint collaboration between the IADB, Banco Santander and the OECD, that builds on a 2019 event organised in Paris that brought together several HEIs Latin-American and Spanish HEIs to discuss their entrepreneurial and innovative agenda. The event confirmed the interest of Latin-American HEIs in engaging in a review process, which has culminated in this report.

The methodology used in this review draws on the HEInnovate framework (jointly developed by the OECD and the European Commission) that studies the entrepreneurial and innovation agenda of HEIs. It also draws on IADB and Banco Santander's work mapping the role of selected HEIs within their own innovation ecosystems (entrepreneurial ecosystems in Mexico City, Montevideo, Santiago de Chile, São Paulo, Buenos Aires, Bogota and Cali). The review also draws on interviews of more than forty Latin American

stakeholders (university representatives, public authorities and firms collaborating with the universities) as well as a survey to all participant HEIs.

Main findings

All case-study universities have developed entrepreneurship activities. These universities have, to varying degrees, embedded entrepreneurship across their educational programmes, their strategies, governance and organisation, in the system of incentives offered to faculty, staff and students, and in the way, they cooperate with external stakeholders, including businesses and local governments.

While largely still nested in business and engineering schools, entrepreneurship education courses are becoming popular across different faculties, with some universities setting mandatory entrepreneurship courses for students across a number of disciplines. Entrepreneurship education is also delivered through extracurricular activities (hackathons, entrepreneurship contests, fairs, festivals) and internships, allowing flexibility and promoting interaction with external stakeholders in particular, with businesses of all sizes and levels of maturity.

There is a variety of approaches to the delivery of entrepreneurship education. In some of the universities studied, courses to help students develop a business idea are prevalent. For example, there are specific courses for science and engineering students, as well as PhD students, as a means to bridge science and research with the business world. In other case studies, entrepreneurship education goes beyond the creation of start-ups and spin-offs and the aim is to empower and stimulate students from all disciplines to acquire a growth-oriented, risk-taking mind-set that prepares them to become leaders of the future. Regardless of their approaches, all case-study universities were able to continue delivering their entrepreneurship education activities (including incubation and acceleration) during the pandemic by digitalising teaching and learning activities.

The review found that most case-study universities are becoming entrepreneurial hubs supporting innovation in their ecosystems. Many are host to accelerators, incubators, centres for entrepreneurship and innovation open to external stakeholders such as entrepreneurs and SMEs. In addition, many universities take advantage of their multi-campus strategy to amplify their impact and engagement. Multi-locality allows them to connect with a broader variety of actors including local governments and business communities. In some of the countries studied, local governments try to attract a campus of an entrepreneurial university as a way to promote innovation and jobs.

Most universities in this report centred their collaboration activities towards their surrounding communities, by building bridges with local entrepreneurs, SMEs, research institutes, and NGOs. HEIs in Brazil and Colombia are intensifying efforts to support innovation, by providing dedicated entrepreneurship training to researchers or conducting cross-disciplinary research to respond to challenges faced by external stakeholders. Multi-campus universities in countries such as Mexico and Uruguay have implemented a "decentralised" system, which allows each campus the flexibility to engage with local constituents. Several universities are collaborating with public authorities and NGOs to address the social challenges for case-study universities including unfavourable intellectual property regulations at the university level or at the national level that limit the capacity to patent innovation. Interviews with participants did not; explore however, the degree to which research produced had the potential to be patented, which could be examined in future studies.

Main Recommendations

Based on information collected in interviews and through desk research, the review provides the following recommendations to strengthen linkages between entrepreneurial HEIs and their regional ecosystems.

Increase awareness of good practices and establish continental networks among different HEIs to support mutual learning. Universities should connect with other Latin American universities to share best practices on how they entrepreneurship mainstreaming helps them connect with their communities, including businesses and civil society.

The legal framework to regulate intellectual property should be improved at a national level and at the university level. Technological transfer offices are understaffed and would particularly benefit from legal advice offering support for patent creation and licensing.

Universities should allocate more funding to support entrepreneurial activities and knowledge exchange and collaboration. A sustainable funding stream to maintain incubation or acceleration activities is a necessity in most cases. Sustainability and predictability of resources will also allow the creation of specialised professional skills connected to entrepreneurship (education and support). Improved access to seed funding can help. Venture capital funds, which are relatively more common, tend to offer support to start-ups that already have an effective business model. A larger venture capital system in Latin America could cover the full spectrum of needs of academic entrepreneurs at different stages of the development of their business idea. Concerning knowledge exchange and collaboration, more stable and predictable funding would also allow long-term collaborative projects with stakeholders, including firms of all size and maturity levels.

Develop a system of evaluation of impact, both at the national and regional level. This is an essential learning instrument to understand how to improve the performance of entrepreneurial universities in terms of knowledge exchange, and entrepreneurship support but also serves as a tracker that can unlock access to finance. Most universities are measuring their knowledge exchange activities using knowledge performance output-based indicators, such as number of patents, number of licenses, and number of spin-offs. Yet universities reported that a lack of a national evaluation framework on knowledge exchange hindered their ability to use harmonised indicators at a country level.



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