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Accelerating Deep Tech in Latin America

Opportunities, Challenges & Recommendations

SEPTEMBER 2025

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“Having a report on Deep Tech in Latin America is undoubtedly an essential contribution to the advancement of these technologies in our region. For us, who support startups and pre-scaleups seeking to expand beyond the region, relevant information like the one we find in this report will help us progress even further in a sector where we have immense development potential to generate global companies”.

Sandra Sinicco,
CEO of LatamScaleup and GrupoCASA



“This report gives a clear view of the state of Deep Tech in Latin America, showing both the opportunities and the challenges. By sharing success stories and practical recommendations, it brings attention to an ecosystem that often does not get enough visibility. The region has big market needs in food, energy, and mobility, good access to international markets, and in some cases more flexible regulations — all of which make it a good place to test and grow new technologies. From a European point of view, but with Latin American roots, it is clear that the region already has companies that can compete at the highest level. What is needed now is more global awareness, capital, and partnerships to help Latin American Deep Tech scale worldwide”.

Orlando Ramírez,
Deep Tech Pioneer & Global Challenge Specialist at
Hello Tomorrow



“The report provides actionable insights for policymakers, investors, and technology leaders seeking to understand how Latin America can harness Deep Technology innovation to enhance its strategic autonomy, economic competitiveness, and influence in this global geopolitical transition where technological capabilities will define the new world order. As digital infrastructure, advanced manufacturing, and emerging technologies become the new battlegrounds of international relations, Latin America’s choices today will determine its position in tomorrow’s technology-driven international system.”.

Fausto Carbajal Glass,
Senior Advisor on Political Risk at Miranda Partners



“Latin America has tremendous potential to transform scientific knowledge into global solutions, especially in biosciences. Organizations like SF500 and LADP play a crucial role in converting science into startups and connecting them with global markets. Though challenges exist, what matters most is taking action, learning from mistakes, and consistently working toward creating a diverse, thriving ecosystem. This report systematizes experiences and guides us in building Latin America’s Deep Tech future”.

Juan Soria,
Managing Partner of SF500



Foreword

Geopolitics is re-shaping the geography of innovation. In 2025, countries compete for technological superiority, splitting the world back into spheres of influence. In a way, the 2020s are the new 1970s. **Nations have restored Cold War aims: to outcompete rivals by appropriating the resources necessary to develop critical technologies with strategic autonomy.**

There are, however, significant differences between now and the Cold War era. First, the portfolio of technologies that are considered critical to national interests is broader and deeper, ranging from advanced artificial intelligence to quantum technologies and biotechnologies.

Second, the supply chain necessary to construct these technologies is inherently global. Thus, protectionist strategies to re-shore production clash against the networked nature of innovation. Today, “no country alone can make an iPhone” – as Economist Eric Beinhocker put it. **Deep Tech** presents even greater barriers to autonomous development, given the complexity and distribution of inputs it requires, from rare minerals to skilled labor.

Finally, with traditional alliances fading, the global race for competitiveness is participated by more players with their own interests. **Today's world has more than two poles of influence. These new geometries of power leave room for new players to affirm themselves on the global stage. Latin America is one such player.**

Latin America has the resources to move from a battleground for technological appropriation to a strategic actor in tech-driven geopolitics.

Latin America has traditionally had a passive role in the development of the global technology industry. It has traded at a deficit with bigger partners, serving skills, resources, and market opportunities at a discount, an effect widely known as the “Latin American Discount.” It is a function of the institutional fragility of individual countries in the region and of the region's fragmentation, which prevents it from leveraging its size and competitive advantages as a bloc. **Foreign investors cannot value opportunities at their actual worth when the context is plagued by uncertain rules, frequent corruption, and inadequate public sector de-risking of emerging markets.**

Yet, current changes in geopolitics can change the position of Latin America from a **Deep Tech** vassal to a stronghold. This is the thesis behind the Latin American Dynamism Project, which is to accelerate the development and investment of frontier technologies in Latin

This report shows regional and global decision-makers a path to making LATAM an autonomous and reputable player in the global race for technological competitiveness.

America. The region is home to 42% of the world's biodiversity; controls the lithium triangle, which contains 58% of global reserves; possesses abundant clean-energy potential—critical for scaling compute-intensive industries; and benefits from a booming nearshoring trend. With a GDP of roughly USD 6 trillion—almost double that of India but with barely half the population—the region combines large-market scale with significant availability for greenfield development.

What Latin America lacks is the network effects—in infrastructure, capital, and human talent—that can catalyse its potential into strategic autonomy, founded upon technological competitiveness. Realizing this potential will require coordinated action across the region: **no single country has the scale, resources, and institutional reach to compete alone in the global Deep Tech race.** The LADP addresses this gap by pro-

viding unprecedented insights to public and private decision-makers.

This inaugural LADP report reveals more than a set of surprising data, which shows that LATAM is already a theatre for overlooked inventions. It shows regional and global decision-makers a path to making LATAM an autonomous and reputable player in the global race for technological competitiveness. Some countries, such as China, have long understood this, undertaking for a decade now policies of appropriation of natural resources. Others, from Latin American countries to traditional Western Allies, have been slower to realise the potential of the region as more than the sum of its parts.

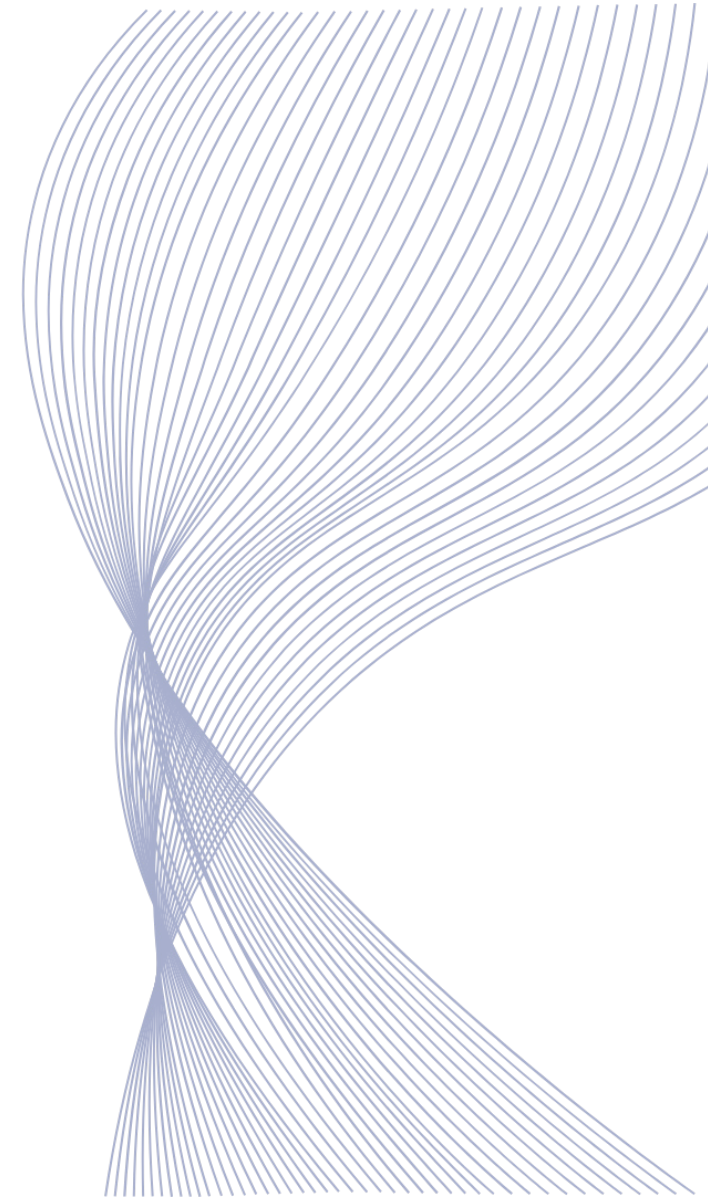
We publish these insights with the ambition to catalyze conversations, communities, and ecosystems that accelerate the transition of Latin America from a battleground for technological appropriation to a strategic actor in tech-driven geopolitics.

Leonardo Quattrucci

Co-founder of the Latin American Dynamism Project.

Marcus Alburez Myers

Co-founder of the Latin American Dynamism Project.



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Production, design, data science, and communications were handled by Lucía Fenoglio, Solange Rodríguez, Milene Broche, Sebastián Díaz, Agustina Sojit, and Marco Tebelán.

To shape our findings, we spoke with almost **100 contributors and partnered with 17 organizations** —ven-

ture-capital executives, policy-makers and ecosystem leaders—who generously shared their time and candid perspectives. Their efforts ensured we captured both quantitative metrics and rich qualitative insights from developers, community organizers, and institutional stakeholders throughout Latin America.

This report was made possible by a grant from the International Strategy Forum, founded by Dr. Eric Schmidt, former CEO and Chariman of Google. We appreciate the institutions and platforms that provided proprietary datasets and analytical tools, as well as our advisory board and academic peers whose feedback strengthened our methodology.

Executive Summary

Why is LATAM Primed for Deep Tech

Problems		Opportunities	
USD 15 per-capita Deep Tech investment in LATAM—half of Europe’s and 13 times lower than the U.S. (LADP)	60% of R&D in LATAM is government-funded—roughly triple the typical OECD country share (ECLAC)	865k STEM researchers in LATAM—but less than 1% work in deep tech, revealing a 100x runway of untapped talent (IDB)	72% was the gross average return generated by LATAM biotech startups 2015–2023 (SOSV/IndieBio)
-51% valuation discount compared to the world, above the historical average of -13.9%. (MSCI Index)	72% of startups remain in Seed Stage, with only 19% advancing to Series A (LADP)	219% YoY Deep Tech funding growth in 2024, making it the fastest-growing tech sector in LATAM (SlingHub)	189% YoY growth in equity funding in 2024, making Deep Tech the YoY leader across all tech verticals (SlingHub)
40% of corporations in LATAM had CVC arms in 2021, vs. 57% in Southeast Asia and 90% in the U.S. (IESE)	0 pension funds allocated to LATAM’s Deep Tech	4x growth for Corporate Venture Capital (CVC) in LATAM deep tech from 2020 to 2024 (Dealroom)	20x Deep Tech ecosystem growth by 2032 estimated by (IDB)

Recommendations: Market Readiness

01.

Venture Building–Train, Fund, Validate

Launch structured match-making to build balanced science–business founding teams, and plug those teams into sequenced pipelines of non-dilutive grants and CVC pilot lanes so they can validate products in real-world settings.

02.

Metrics & Success Stories–Deep Tech KPI framework

Collect, validate, and publicize key metrics alongside high-impact regional case studies to enable like-for-like comparisons across markets.

03.

Showcase & Visibility– Educate Privately, Convene Publicly

Launch targeted educational initiatives for VCs, family offices, and CVCs to demystify Deep Tech fundamentals, showcase regional ROI data, and build confidence for larger, strategic funding commitments.

04.

Impact-Driven Narratives–Deep Tech for SDGs

Embed structured storytelling programs to translate complex science into clear, emotionally resonant stories of global impact. Embedding institutional frameworks like the SDGs is a plus.

05.

Global Mindset–Language First, Structure Next

Require English upskilling for founders and technical leads. Adopt English-first artifacts and international structures to reduce diligence friction and speed cross-border commercialization.

Recommendations: Investors Readiness

06.

**R&D Skepticism–
Regional
International
Scientific Advisory
Boards**

Establish vertical-specific scientific boards to run peer reviews, issue endorsement seals, provide targeted support, plus an annual “State of Deep Tech Science” brief to broadcast validated breakthroughs and de-risked tech

07.

**Uneven Clinical
Trials–Alignment
Through
Interoperability**

Align with global frameworks (FDA/EMA) from day one, while exploring Special Economic Zones to accelerate permits and advocating for mutual recognition of scientific approvals across LATAM states.

08.

**Regulatory
Portability–The 34th
Regime**

Champion a voluntary, pan-LATAM regulatory framework providing standardized approvals, digital filings, and sandboxes to overcome the region’s regulatory fragmentation and accelerate Deep Tech commercialization.

09.

**Corporate
Venture Capital–
Matchmaking
Bridges &
Observatory**

Create a CVC Bridge to facilitate sector-specific matchmaking programs, plus an Observatory to track key metrics, turning ad-hoc connections into reliable pipelines for strategic capital and first customers.

10.

**Social Clusters–
Guilds & Ecosystem-
as-a-Service**

Build social infrastructure alongside R&D labs by creating mixed domestic-international founder cohorts and consolidating Ecosystem-as-a-Service operators that connect key stakeholders.

Recommendations: Regional Coalition

11.

Anchor Public R&D to a Sovereign-Tech Agenda

Advocate for Deep Tech to be classified as critical infrastructure, with upgraded Special Economic Zones, matching-funds, and sovereign vehicles to secure long-term R&D investment.

12.

Pensions—A Fund-of-Funds for Domestic Deep Tech

Advocate for pension fund participation through local co-investment vehicles, transforming public budgets into patient capital while providing trustees with de-risked pathways to support science-based ventures.

13.

Geopolitical Lens—Strategical Autonomy

Form a working group to map technological flows and broker strategic corridors with superpowers and Middle Powers. Create quarterly heatmaps and deal playbooks to help LATAM maintain technological independence.

14.

Research & Visibility—Open Data Commons & Grants Portal

Build a standardized data commons for deals/IP alongside a unified grants portal that normalizes funding opportunities. Add AI-powered tools to help founders and policymakers find and secure capital more efficiently.

15.

Forge a Pan-LATAM Deep-Tech Forum

Launch a rotating flagship event co-branded by leading funds and accelerators to pool sponsors, attract international investors, and project one regional narrative.

Further Research Initiatives

16.

Extended Funders Mapping

Create a comprehensive directory of VC/CVC/family offices active in LATAM deep tech with key tags and quarterly updates via web-scrapes and partner validations.

17.

Deep Tech LATAM Discount Index

Develop an MSCI-style framework to quantify the valuation gap between LATAM and global Deep Tech markets specifically, using regulator stats and deal-level data to guide policy and investment decisions.

18.

CVC Survival Effect

Measure survival rates of CVC-backed vs. non-CVC startups in LATAM to establish if they show the same reduced bankruptcy rates (50% lower) seen in European markets.

19.

Internal Rate of Return

Establish LATAM-specific IRR benchmarks for deep tech to enable proper comparison with global markets and strengthen the case for patient capital investment.

20.

\$1 Test—LATAM vs. Global Gross Average Return

Compare LATAM's 72% gross average return (per SOSV data) with matched US/EU/Asia investments using standardized metrics to build a credible regional investment case with proper confidence bands.

Methodology

This report combines quantitative and qualitative research methods to provide a comprehensive overview of the Deep Tech ecosystem in Latin America.

Quantitative Approach

We began with a dataset of **5,000 Deep Tech companies from LATAM**, sourced primarily from Tracxn. After a review process, we retained ~2,500 companies for our final analysis. The data cutoff date was **March 2025**.

To assist with accuracy in classification, we employed **large language models (LLMs)** for initial categorization, supplemented by meticulous manual validation.

For the manual checks, our team reviewed open-source materials—including patents, scientific publications, documentation, and corporate disclosures—to verify whether companies met established criteria for Deep Tech classification. The primary challenge in this process involved distinguishing companies that leverage trendy technologies like Artificial Intelligence primarily as superficial marketing strategies from those genuinely developing novel, scientifically rigorous solutions.

Another critical obstacle we encountered was the lack of a shared, comprehensive, and openly accessible re-

gional database. During our literature review, we found that **existing reports frequently rely on proprietary datasets or private data brokers, limiting their value as a universally acceptable benchmark for ecosystem mapping**. Therefore, it is important to note that this is **not an exhaustive database, but the most complete mapping we have seen to date**.

For our statistical analysis, we identified additional companies through secondary sources that were **not included in the statistical analysis**, due to incomplete data on key variables such as funding history or country of origin. However, these companies were incorporated into the overall mapping to better reflect the breadth of the ecosystem.

To classify the companies by Deep Tech vertical, we took the 12 categories proposed by the 2023 Deep Tech: The New Wave report, backed by the Inter-American Development Bank's: Robotics, Space-tech, Advanced Mobility, Biotechnology, Blockchain, Artificial Intelligence, Cleantech, Advanced Materials, Healthtech, Infinite Computing, Advanced Manufacturing, and Nanotechnology.

To classify the companies by industries, we took the 8 categories proposed by EMERGE's 2024 Relatorio Deep Tech Brasil: Agribusiness & Animal Health, Food & Beverages, Cosmetics & Wellness, Energy, Chemicals, Petrochemicals & Materials, Human Health & Pharmaceuticals, Sustainability & Environment, Other.

Qualitative Approach

Our qualitative research consisted of **5 roundtables and 100+ interviews with stakeholders** across the ecosystem, including founders, investors, accelerators, researchers, and government actors. We asked them: What key gaps make LATAM investment less attractive to global VCs, and which resources would help bridge that gap? What do investors in LATAM's Deep Tech ecosystem look for when deciding to fund startups at both the regional and global levels? How would you design a regional coalition that bridges local startups with global investment?

This report synthesizes insights from these conversations without attributing specific comments. **We applied an obstacles-first lens to surface the binding constraints blocking ecosystem transformation, synthesizing them from interviews, roundtables, and document review**. This framing grounds our recommendations in removing root causes rather than proposing generic, solution-first fixes.

This mixed-methods approach allows for a nuanced understanding of both the structural patterns and lived experiences shaping Deep Tech in the region. It aims to describe transformative opportunities in the structural context of LATAM, and most importantly outline actionable levers in a way that balances strategic vision with the operational realities of ecosystem building.

What is Deep Tech?

At its core, Deep Tech is the business of turning frontier science into products—the commercialisation of laboratory breakthroughs through structured technology-transfer processes.

Whether the advance comes from a new material, a novel bioprocess, or a cutting-edge AI algorithm, the venture's value proposition hinges on owning (or licensing) that underlying intellectual property and engineering it into a scalable solution that can redefine an industry.

These technologies share five hallmarks, as noted in previous literature¹:

- 1 **Radical novelty** – they introduce genuinely new technical capabilities;
- 2 **Fast growth** – research, patents and investment expand rapidly;
- 3 **Coherence** – a recognizable knowledge base and community forms around them;
- 4 **High-impact potential**, often with long development timelines – their main socioeconomic effects are expected, not fully realised;
- 5 **Uncertainty & ambiguity** – outcomes, markets and standards are still fluid.

By contrast, sectors such as fintech or general consumer software build mainly on technologies that already exist. They remix mature stacks of code and cloud infrastructure to create new user experiences or business models, but do not introduce a fundamentally new technology layer. In that sense they are sometimes dubbed “shallow tech” or “regular tech”—innovations driven more by application design than by scientific discovery.

In Latin America Deep Tech ventures are commonly labelled **Emprendimientos de Base Científico-Tecnológica (EBCT)** amongst policy papers, innovation-law frameworks and regional multilaterals like the ECLAC².

In China, we have found that the homologous term is “**New Infrastructure**”, which is embedded in State Council guidelines and provincial five-year plans as the umbrella for AI, advanced manufacturing, and other Deep Tech priorities³.

1. Josemaria Siota and M^a Julia Prats, Open Innovation: How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups. The Case of East and Southeast Asia (IESE Business School, May 2021).

2. Comisión Económica para América Latina y el Caribe (CEPAL), Ciencia, tecnología e innovación: cooperación, integración y desafíos regionales (LC/TS.2022/156) (Santiago: CEPAL, 2022).

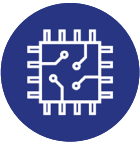
3. Ahead of the curve: Why the EU and US risk falling behind China in Latin America, European Council on Foreign Relations (2024).

Seven common Deep Tech categories: Definitions and examples of use cases

CATEGORY	DEFINITION	EXAMPLES OF USE CASES	VALUE OF THE USE CASE
 Artificial Intelligence	The ability of a machine or computer system to perform cognitive functions that are usually associated with humans, such as learning, problem-solving, and decision-making.	In healthcare, for improving diagnosis accuracy with medical imaging devices (e.g., Samsung developed a tool based on ultrasound images). Its AI algorithms facilitated an about 5% increase in the diagnosis accuracy of breast lesions.	To enhance the relationship with customers by suggesting better deals, trying virtual products, managing and reviewing subscriptions, verifying payments, and conducting follow-ups in a safe and privacy-friendly way.
 Advanced Materials	Technology that modifies or engineers new materials at a molecular level to create superior performance properties, such as enhanced durability, conductivity, or sustainability.	In the automotive and transportation sectors, for the production of environmentally friendly batteries for electric vehicles (e.g., Tesla, General Motors). The technology enables materials to store and release energy more efficiently.	To support climate change impact and eco-friendly sustainable transformations. These materials are foundational to a wide range of innovations, from renewable energy systems to lightweight structures.
 Biotechnology	The use of living organisms or biological systems to create or develop new products, technologies, or processes that benefit humanity in fields such as health, agriculture, and energy.	In energy and utilities, for the production of liquid biofuels and methane from organic waste (e.g., ENI, ExxonMobil). The use of microorganisms transforms waste into a valuable energy source.	To improve climate change impact and eco-friendly sustainable developments. Additionally, it can address global health challenges through new medicines, or food scarcity through enhanced agricultural products.
 Blockchain	A decentralized and immutable ledger technology that stores transactions and tracks assets, enabling a secure and transparent record without the need for a central authority.	In the financial sector, for tracking negotiating conditions of a loan between borrowers and lenders, or to understand the loan's process from start to finish (e.g., consultancy Indra borrowed €75 million from BBVA).	To enhance tracking, traceability, and safety in the area of distribution; to achieve greater transparency in negotiations, and to improve the supply chain.

Source: Source: IESE, How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups.

Seven common Deep Tech categories: Definitions and examples of use cases

CATEGORY	DEFINITION	EXAMPLES OF USE CASES	VALUE OF THE USE CASE
 Robotics and Drones	The use of machines to perform automated tasks, often in complex or hazardous environments. This subcategory includes flying crafts and remote-controlled systems for various industrial and logistical activities.	In retail, for managing stores via an automated system that retrieves products from shelves (e.g., Amazon Robotics). In logistics, drones enable pre-sequencing of items or final delivery to customers (e.g., the use of drones for home delivery).	To speed up traditional processes such as the movement of pallets or the barcode scan, and to reduce the customer order cycle by improving order accuracy and decreasing waiting periods.
 Photonics and Electronics	Technology that enhances the properties of photons (light) to transmit information or to actuate. As a subset, a similar process is followed with electrons in electronic devices.	In the food and beverage sector, it incorporates machine elements such as advanced cameras, thermal, or multi-spectral sensors for food safety (e.g., PepsiCo installs vision-inspection systems to detect color defects in whole potatoes).	To increase transparency and customer trust. These technologies are also critical for advancing fields like telecommunications, computing, and medical diagnostics.
 Quantum Computing	Another way of processing information, this technology leverages the properties of matter at a nanoscale to perform complex calculations that are impossible for classical computers.	In telecommunications, to optimize radio cells (e.g., the operator TIM, optimized with an algorithm that uses quantum principles) in collaboration with the hardware producer D-Wave. The algorithms enhance signal quality and network efficiency.	To ensure reliable mobile services with high performance; to increase transparency and a generally trusted network. Quantum computing has the potential to solve complex problems in fields like medicine, finance, and materials science.

Source: Source: IESE, How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups.

Deep Tech Investment

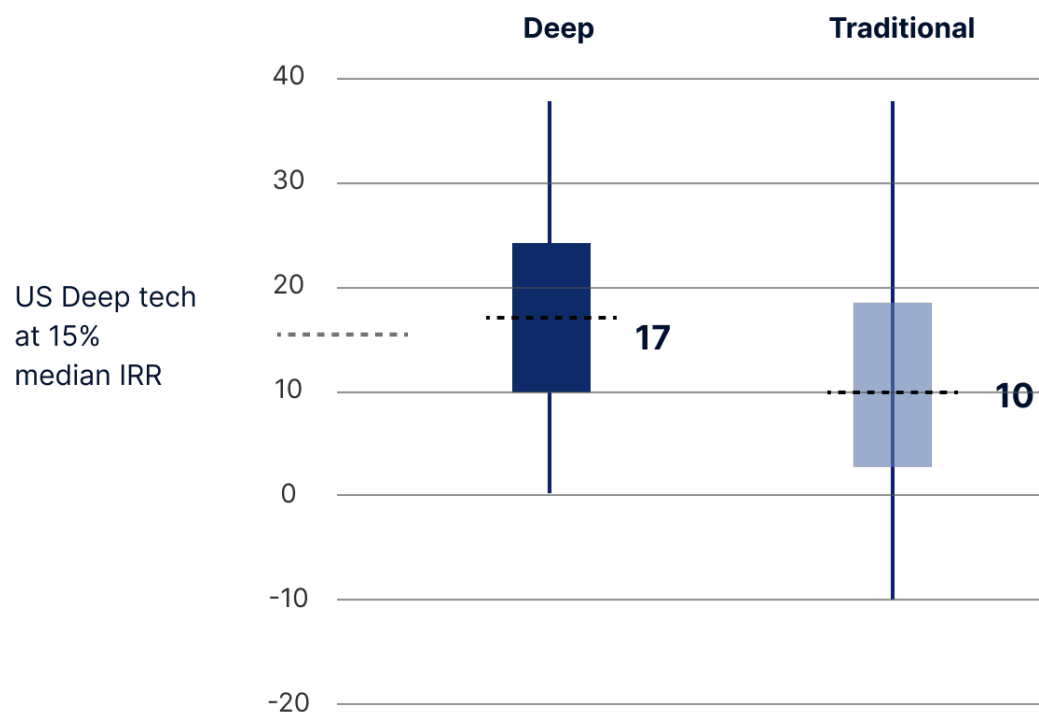
Beyond defining Deep Tech itself, the primary hesitation surrounding investment in this sector often emerges from evaluating critical metrics—particularly funding cycles and return on investment—in comparison to traditional technology sectors such as fintech. For instance, **conventional tech typically demonstrates immediate and steady growth upon receiving capital injections.**

This concern can be especially pronounced in LATAM, where investors are familiar with shorter, traditional business cycles and may be reluctant to wait several years to see tangible returns.

Fortunately, various studies have started to quantify these concerns, aiding in demystifying the risks. For example, a McKinsey report analyzing **European and U.S. Deep Tech funds reveals an average net internal rate of return (IRR) of 17%, outperforming traditional tech funds, which yield an average of 10%**⁴. However, the absence of directly comparable data specific to LATAM complicates the task of contextualizing these findings within the regional ecosystem, underscoring the need for localized research and data collection.

The 2025 European Deep Tech Report identified and addressed eight prevalent misconceptions about Deep Tech investments. The report clarifies common misunderstandings around factors such as the amount of capital required, timeframes to achieve exits, revenue timelines, and overall success rates⁵.

Net IRR for deep vs traditional tech funds, %



Source: McKinsey, European deep tech: What investors and corporations need to know

4.European Deep Tech: What investors and corporations need to know, McKinsey & Company (2024).

5.Steven Jacobs, Lukas Leitner, Nicolas Autret, and Lorenzo Chiavarini, The 2025 European Deep Tech Report (Dealroom.co, March 2025).

There are common (mis)conceptions about Deep Tech

Is Deep Tech an undefined term?

NO

Deep Tech is novel science being shipped in a first of a kind product

Is Deep Tech a new phenomenon in venture capital?

NO

Deep Tech venture financing has always existed and shaped sovereignty of nations

Do Deep Tech companies need more capital?

YES

But often money is spent on building moats

Do Deep Tech companies take longer to achieve revenue?

YES & NO

True in the early years, false at later stages

Do Deep Tech companies fail more often?

NO

Similar failure rates compared to Regular Tech

Do Deep Tech companies need more time to exit?

NO

Similar exit timelines compared to Regular Tech

Do Deep Tech companies have larger exits?

INCONCLUSIVE

While some large outcomes exist, Europe needs more big exits

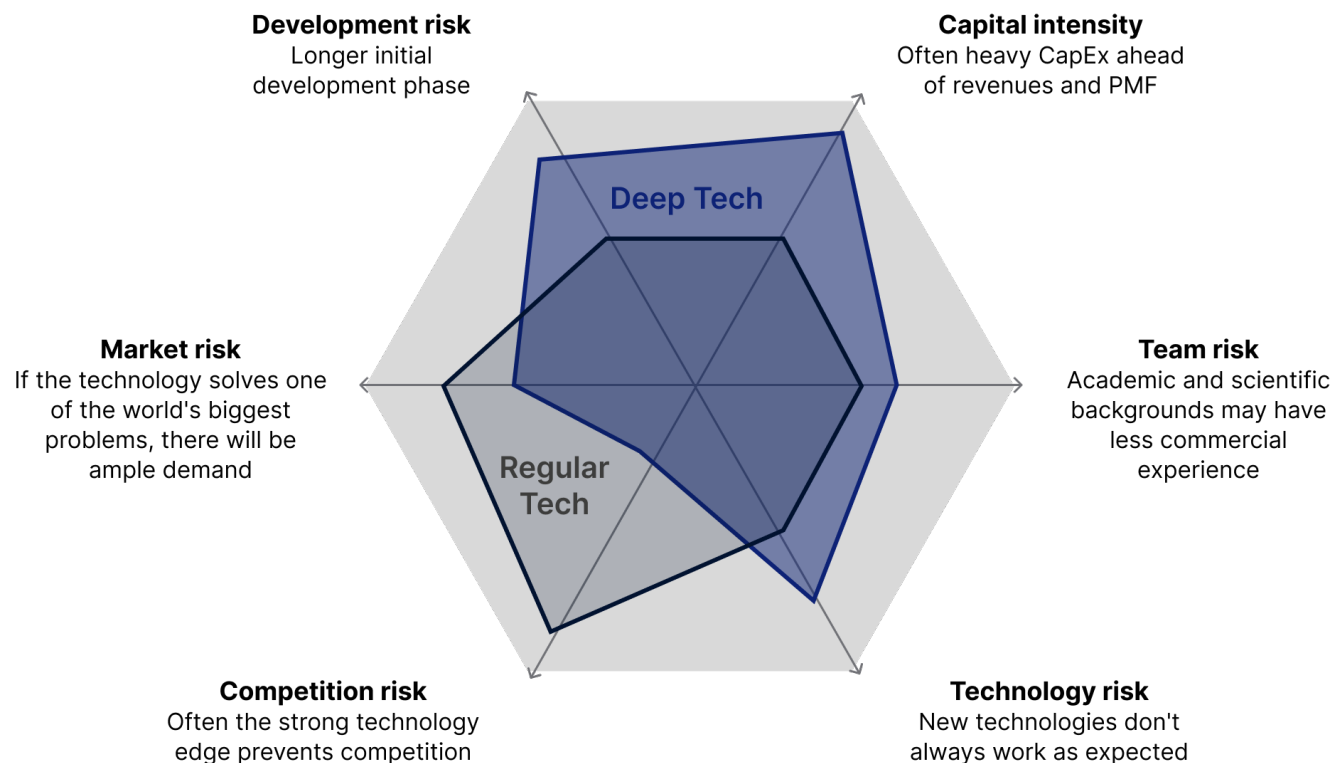
Does Deep Tech investing deliver top returns?

YES

Some data shows higher IRRS than Regular Tech

Source: Hello Tomorrow, The 2025 European Deep Tech Report

Deep Tech companies risk profiles



Source: Hello Tomorrow, The 2025 European Deep Tech Report

While precise metrics for Latin America's Deep Tech ecosystem—and granular KPIs for each vertical—are still under development, a high-level risk-profile comparison helps illustrate the fundamental differences between Deep Tech and conventional tech ventures. Deep Tech startups carry substantially higher technology risk, require large upfront capital

expenditures, and face protracted development cycles measured in years rather than months. Yet, once past those hurdles, they enjoy a powerful competitive moat—anchored in proprietary scientific breakthroughs, extensive IP portfolios, and teams of niche technical experts—that most “regular” tech firms simply cannot replicate.

Structural Challenges and Technological Opportunities in Latin America

Latin America sits at a pivotal crossroads. On one flank, a web of long-standing deficits—in healthcare, learning, public trust, labor formality, financial inclusion, infrastructure, energy, and cybersecurity—continues to sap productivity and widen inequality. **Roughly 140 million people still lack reliable access to basic health services⁶, and the latest PISA results reveal that teenagers in the region perform the equivalent of three to seven school-years behind their OECD peers in mathematics⁷.** While this significant educational gap acts as a barrier to economic and social development, it also presents a prime opportunity for innovative edtech solutions.

Confidence in government has slipped so far **that sev-**

en in ten citizens express little or no trust in their national institutions⁸, fuelling political volatility just as the digital economy demands stable rules of the game. Add to this a labor market in which nearly **one-half of jobs are informal⁹,** a persistent digital divide that leaves **230 million Latin Americans offline¹⁰,** and rising cyber-incidents (LATAM became the world's fastest-growing region for disclosed cyber-incidents by 2024¹¹), and Deep Tech innovation can seem a distant luxury.

Yet the very scale of these gaps hints at outsized opportunity. **The region commands world-class biodiversity, booming renewable-energy corridors, and a growing cadre of STEM researchers eager to found science-based companies.** This potential is most evi-

dent in lithium, where **Latin America holds nearly two thirds of global lithium reserves,** concentrated in the “Lithium Triangle” of Bolivia (24%), Argentina (22%) and Chile (11%), although Chile has led the way by turning its reserves into commercial production¹².

Beyond the momentum of its resources, Latin America offers compelling opportunities for **greenfield FDI**—that is, projects where companies establish new subsidiaries and build facilities from the ground up rather than acquiring existing assets. Greenfields are attractive in the region given abundant land and natural resources, improving logistics links, and the ability to tailor plants to modern standards (energy efficiency, automation, and export compliance). For aerospace specifically, for

6. More 140 million denied access health care Latin America and Caribbean, International Labour Organization.

7. Inter-American Development Bank, Latin America and the Caribbean in PISA 2022: How did the Region Perform (IADB, 2022).

8. OECD, Government at a Glance: Latin America and the Caribbean 2024 (OECD Publishing, 2024).

9. International Labour Organization, Executive Summary (ILO, 2025).

10. Pau Castells, Lucrecia Corvalan, and Facundo Rattel, Connectivity Gaps in Latin America: A Roadmap for Argentina, Brazil, Colombia, Costa Rica and Ecuador (GSMA, February 2023).

11. From Fiction to Reality: How Latin America became the world's most critical cyber battleground, World Bank Blogs (2024).

12. Lithium: Here's why Latin America is key to the global energy transition, World Economic Forum (January 2023).

instance, **select geographies near the equator** offer orbital-mechanics advantages for certain launch profiles, adding a niche location edge¹³.

In fact, according to the UNCTAD World Investment Report 2025, developing countries attracted more than \$530 billion in greenfield digital economy projects between 2020 and 2024. Notably, close to **80% of this investment was concentrated in just ten countries, with Brazil and Mexico the only Latin American economies represented in this group**¹⁴:

Moreover, amid intensifying U.S.-China strategic competition, **near-shoring** –the practice of relocating operations to nearby countries rather than distant off-shore locations– is fundamentally disrupting the decades old model of prioritizing lowest-cost production, by instead emphasizing supply chain resilience and regional proximity. **Latin America has emerged as a prime beneficiary of this shift as companies in North America**, for instance, move focus “from pure cost efficiency toward resilience, redundancy, and regional integration,” according to Fausto Carbajal from the Mexican Institute for Strategic Studies¹⁵.

Mexico leads LATAM's nearshoring wave, thanks to its geographic proximity, free-trade agreements, skilled and cost-competitive labor, and an extensive logistics network—advantages expected to favor semiconductors, automotive, electrical equipment, medical devices, agribusiness, and food sectors¹⁶. Santander Mexico estimates that near-shoring could drive FDI to levels exceeding remittances as soon as 2025¹⁷. Beyond Mexico, countries like Colombia are becoming specialized IT hubs, creating complementary regional ecosystems¹⁸.

In other words, **Latin America possesses the natural endowments, human capital and early-stage funding momentum to turn Deep Tech from a remote aspiration into a practical engine of inclusive growth.**

Understanding this dual reality—the entrenched gaps and the emergent assets—is the first step. The pages that follow map the region's structural challenges, spotlight global case studies of successful leap-frogging, and lay out the policy, capital-market and talent interventions to close the region's long-standing '**LatAm Discount**'.

13. UNCTAD, World Investment Report 2025: International investment in the digital economy (Geneva: United Nations, 2025).

14. UNCTAD, World Investment Report 2025: International investment in the digital economy (Geneva: United Nations, 2025).

15. Fausto Carbajal Glass, Strategic Reconfiguration of North American Competitiveness: Mexico's Role in Regional Value Network Integration, ISF Voices 2025, Special Competitive Studies Project, 2025.

16. Nearshoring in Mexico: Seizing Opportunities and Facing Challenges, Baker Institute for Public Policy, Rice University, July 16, 2024.

17. Latin America: Nearshoring Boost, Global Finance Magazine, March 7, 2024.

18. Nearshoring in Mexico: Seizing Opportunities and Facing Challenges, Baker Institute for Public Policy, Rice University, July 16, 2024.

LatAm's Structural Problems - A Snapshot



Health

35% of the population reports unmet health care needs (PAHO)



Education

75% of students are below basic proficiency levels in maths (PISA)



Governance

36% of the population trusts its government (OECD)



Work

48% of the labor force works in the informal economy (OIT)



Agroecology

50% of the workforce is employed in agri-food systems (FAO)



Energy

17 million people have no access to electricity (IEA)



Finance

27% of population remain unbanked (WB)



Urbanisation

80% of Latin Americans live in cities (WB)



Cybersecurity

US \$90 billions are lost annually to cyber-attacks (OEA-IDB)

Yet LATAM is singularly primed for Deep Tech



Biodiversity

42% of the world's biodiversity sits in LATAM (Deep Tech Colombia)



Lithium

LATAM contains an estimated 58% of the world's lithium resources (USGS)



Renewables

65% of LATAM's electricity comes from renewable sources—well above the global average of 41% (EMBER)



STEM Researchers

865k STEM researchers in LATAM—but less than 1% work in Deep Tech, revealing a 100x runway of untapped talent (IDB)



Fintech

28% CAGR in fintech startups, 2017-2023 (Finnovista)



Internet and Mobile Penetration

Internet coverage and usage in LATAM stands at approximately 83%, with countries like Costa Rica, Argentina and Chile exceeding 85%. (GSMA)



EdTech

The EdTech market in Latin America is projected to reach \$3 billion by 2023, growing at a CAGR of 15% (Heimi)



E-commerce

E-commerce sales revenue in Latin America is predicted to reach over \$125 billion in 2027 (Parcelmonitor)



Nearshoring Trends

Companies are shifting supply chains to LATAM to mitigate risks exposed by the COVID-19 pandemic and geopolitical tensions elsewhere

And is already steadily venturing towards Deep Tech

2019-2023 Investment growth

600% growth in Deep Tech investment was recorded between 2019-2023 (IDB)

2024 Funding growth

219% YoY Deep Tech funding growth in 2024, making it the fastest-growing tech sector in LATAM (Sling Hub)

2024 Equity Funding growth

189% YoY growth in equity funding in 2024, making Deep Tech the YoY leader across all tech verticals (Slinghub)

Corporate Venture Capital

4× growth for Corporate Venture Capital (CVC) in LATAM Deep Tech from 2020 to 2024 (Dealroom)

Gross Average Return

72% was the gross average return generated by LATAM biotech startups 2015-2023 (SOSV/IndieBio)

2032 projection

20× Deep Tech ecosystem growth by 2032 estimated by (IDB)

LATAM's Deep Tech Landscape

The database used for this analysis comprises 2,566 LATAM startups. This specific count differs from our initial estimate of over 5,000 startups in the region after a filtering; a more detailed explanation of our methodology is provided in the Methodology section.

For context, the IDB mapped 340 Deep Tech startups in LATAM in 2023¹⁹, and EMERGE reported over 1,300 in 2025²⁰. Our higher count reflects an expanded sector scope that includes AI and cryptography, two verticals that have grown sharply in the last five years.

The main discrepancy comes mainly because we expanded the scope of the database to AI and cryptography, 2 verticals that have significantly grown in the last 2 years. This is work in progress and will expand as we validate additional rounds.

This underscores the limits of closed, proprietary databases maintained in parallel by different actors—divergent definitions, methods, and limited auditability—driving many of the discrepancies across reports. The robust path is a regional, open, versioned, auditable dataset with a shared taxonomy, transparent inclusion criteria, and a public correction/contribution workflow—ideally API-interoperable and stewarded by multi-stakeholder governance.

The main discrepancy comes mainly because we expanded the scope of the database to AI and cryptography, 2 verticals that have significantly grown in the last 2 years. This is work in progress and will expand as we validate additional rounds.

Geographical Analysis

LATAM's Deep Tech landscape is sharply concentrated: **Brazil hosts about 41% of all startups—driven by São Paulo's 29% share—while Mexico, Argentina, Chile and Colombia, together with their leading capitals (Buenos Aires, Santiago, Mexico City and Bogotá),** gather most of the rest, leaving a long tail of smaller countries and cities that underscores both the ecosystem's strength and its geographic imbalance.

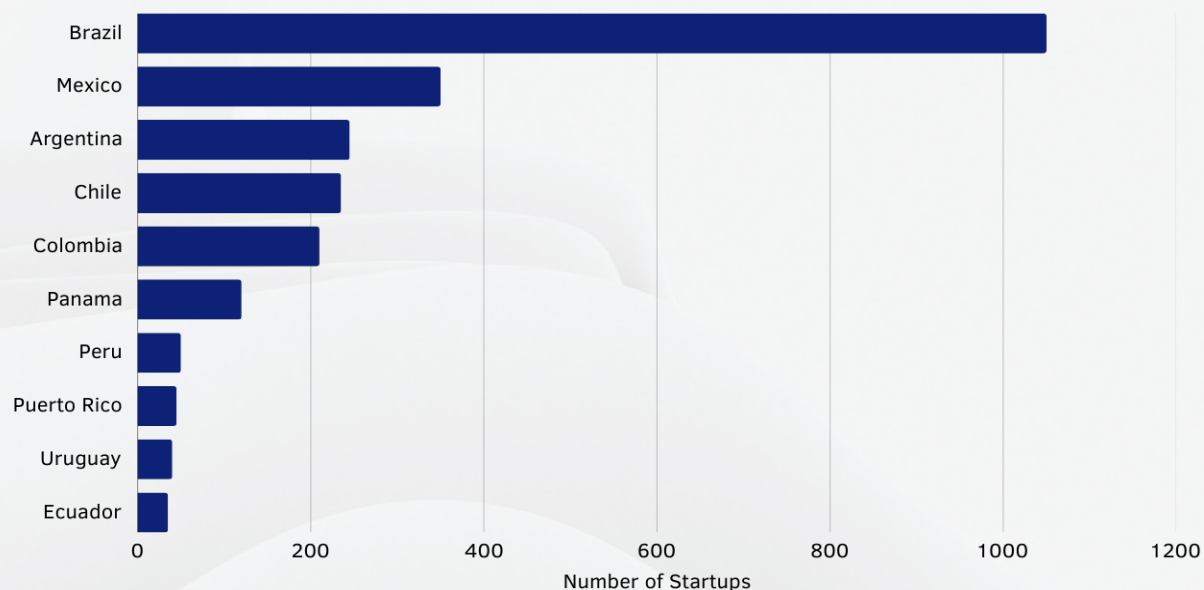
19. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

20. EMERGE, Deep Tech Radar LATAM 2025 (2025)

Country distribution

- **Brazil dominates the landscape with 1,048 Deep Tech startups—about 40.8% of the entire regional database.** Brazil's share is larger than that of the next four countries combined, underscoring its role as the focal point for venture creation, talent and capital in Latin America.
- **Mexico (358 startups, 14%), Argentina (256, 10%), Chile (251, 9.8%) and Colombia (219, 8.5%)** form a solid "second tier." Together with Brazil, these five countries host 83% of all mapped companies, illustrating a highly concentrated ecosystem.
- Beyond the "Big 5", there is a **long tail of emerging hubs comprising Panama, Peru, Puerto Rico, Uruguay and Ecuador.** Their smaller—but growing—communities highlight fresh opportunities for investors looking for earlier-stage, less-crowded markets.

Top 10 countries by number of startups



Source: LADP's analysis, Traxcn data

Cultivating a distributed tech ecosystem depends on a dual-approach strategy that both reinforces major existing hubs—like São Paulo, and Mexico City— while simultaneously nurturing new ecosystems across the region such as Uruguay and Costa Rica, for instance.

To do so, we will examine coordinated networks of companies, universities, labs, investors, and public agencies

that create collective competitive advantage in the chapter ***Social Clusters: International Cohorts & Ecosystem-as-a-Service (page 82).***

Specifically, two strategies documented in Chile and

Colombia: first, mixed cohorts that place international and local founders in the same programs to maximize peer-learning; and second, ecosystem-as-a-service (EaaS) operators that provide shared services so startups can progress faster.

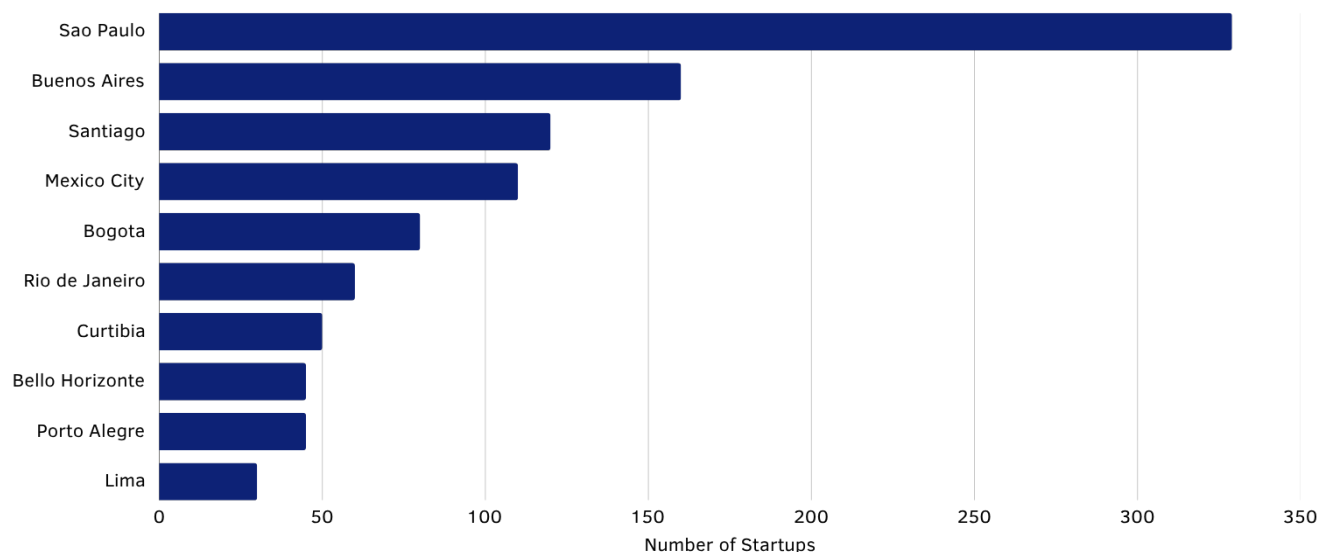
City-level distribution

- **São Paulo is Latin America's undisputed Deep Tech largest hub** with 329 startups, roughly 29 % of all ventures in the top-10 cities—more than the next three hubs combined.
- **Buenos Aires, Santiago and Mexico City form a strong second tier.** Together with São Paulo they account for 63 % of the mapped activity, making them the primary gateways for talent, capital and corporate partnerships.
- **Bogotá** anchors the Andean corridor, but its scale remains half that of the tier-two group, signalling room for growth of seed and Series A funding.
- **Brazil fields five of the top-ten hubs—São Paulo plus Rio de Janeiro, Curitiba, Belo Horizonte and Porto Alegre**—highlighting powerful domestic network effects and sectoral specialisation.

In parallel to Social Cluster strategies, another concrete initiative for promoting a more decentralized and equitable tech ecosystem is the development of Special Economic Zones (SEZs) specifically tailored for Deep Tech ventures.

Special Economic Zones (SEZs) are specific areas within a country's borders that operate under unique business regulations, often with special rules for investment, trade, and taxation²¹. SEZs have a proven record: Shenzhen vaulted from a fishing village to a

Top 10 Cities by Number of Startups



Source: LADP's analysis, Traxcn data

tech metropolis that contributes a meaningful slice of China's GDP and millions of jobs²². In Latin America, Costa Rica's free-zone regime now drives a significant share of GDP and high-skill employment²³, while Uruguay's twelve free zones have helped deliver near-record exports²⁴. By strategically building these zones on greenfield sites, away from the established, dominant

hubs like São Paulo, the goal is to redistribute startup activity and foster new, vibrant communities.

The concept of using these zones to address the geographic concentration of Deep Tech talent and capital is explored in the chapter *How SEZs 4.0 Convert the LATAM Discount into a Defensible Edge* (page 94).

21. Claudio Cifuentes, Investors Roundtable: A Stronger Regional Coalition with Global Reach, LADP Blog (2025).

22. Shenzhen hits national firsts in 2024, targets 5.5% GDP growth in 2025, ECNS (2025)

23. CINDE and PROCIMER FTZ Impact studies; Intel and Databricks company releases.

24. Uruguay XXI reports; Satellogic and Newlab announcements; Ministry of Economy trade data.

Funding Stage and Tickets

Our analysis indicates a significant funding gap in Latin America's Deep Tech landscape. **While capital flow has rebounded since the 2021 pandemic and big tech crisis, few startups progress beyond Seed rounds as of 2025.** Only a small fraction secure Series A funding, and even fewer reach Series B or later stages.

This is consistent with the Inter-American Development Bank findings of 2023, which identified that up until 2022, 65% of Deep Tech startups in LATAM were still in their pre-seed and seed phases, having raised less than \$1 million. In stark contrast, a scant 8% of these startups have progressed to secure Series B investments, those exceeding \$10 million, roughly.

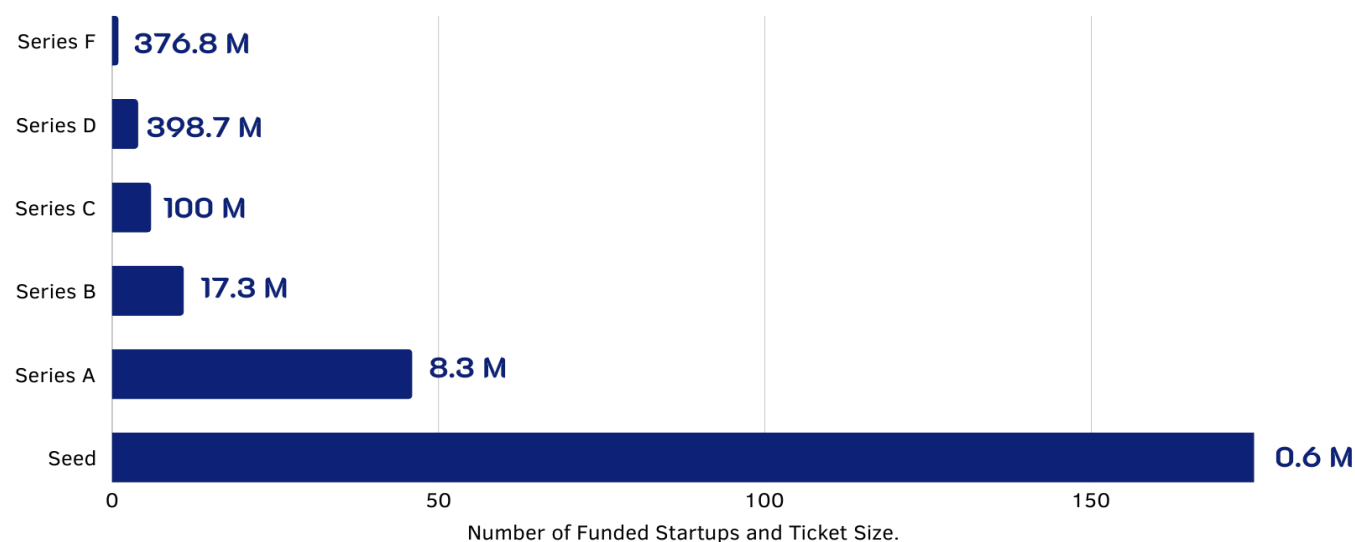
The ecosystem is heavily front-loaded: **72% of ventures are still at Seed stage funding, and only 19% have secured a Series A.**

Dramatically, only 22 startups (10%) have secured a Series B round or beyond, confirming a steep funnel from validation to scale-up funding.

This drop-off mirrors other Latin-American Deep Tech reports that flag a chronic shortage of growth capital. According to Dealroom's data, even as overall Deep Tech funding remained robust at \$138 million in 2024, not a single Series B or later round closed in LATAM²⁵.

Additionally, our data reveals the **median round size**

Funding Stage by Number of Startups



Source: LADP's analysis, Traxcn data

for Deep Tech ventures scales from US\$0.6 M (Seed) to US\$8.3 M (Series A), then leaps to US\$17 M (Series B) and US\$100 M (Series C).

While capital flow has rebounded since the 2021 pandemic and big tech crisis, few startups progress beyond Seed rounds as of 2025. Only a small fraction secure Series A funding, and even fewer reach Series B or later stages.

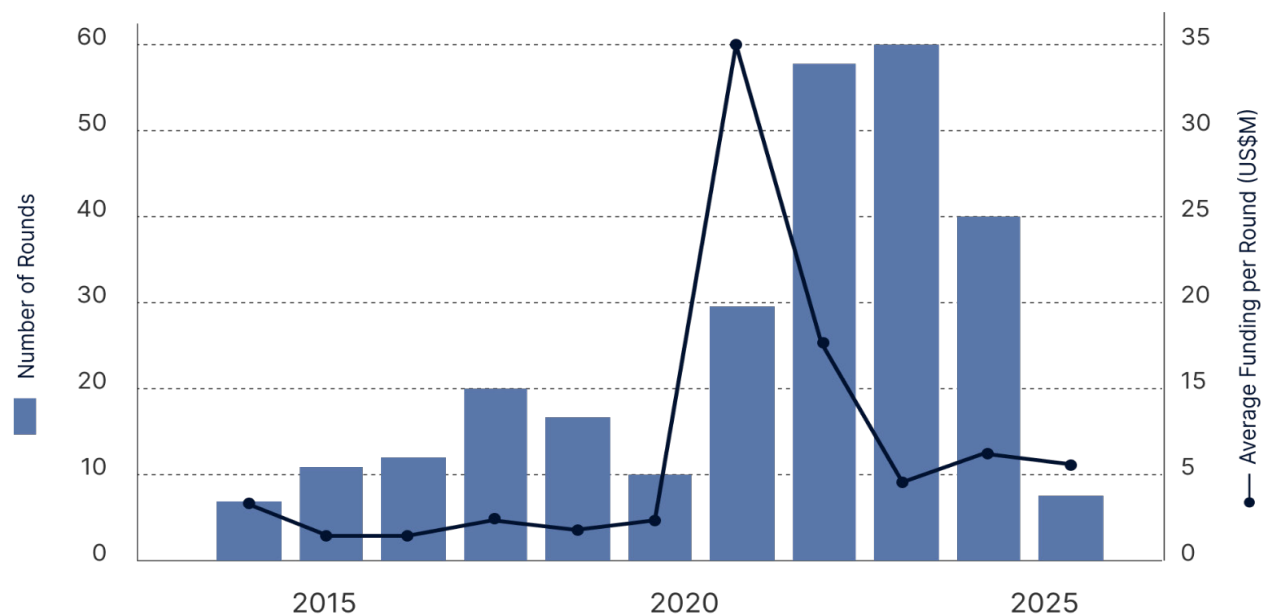
25. Deep Tech Overview: Latin America, Dealroom.co

Funding Rounds and Size Over Time

Over the past five years, the number of funding rounds in LATAM's Deep Tech sector has increased, yet the average cheque size has fallen dramatically from its 2021 high. While more startups are attracting investors, capital is being spread across a larger pool of early-stage companies, which further highlights the Series A+ funding gap.

- In 2021, there were only 27 rounds recorded, which nonetheless coincided with unusually large tickets, signalling investor preference for fewer, late-stage bets straight out of the pandemic.
- In 2022, deal activity more than doubled as capital dispersed into a wider set of companies—an early sign that investors were shifting toward earlier-stage and smaller cheques.
- In 2023, the round-count fell by 30% from 2022, and, more dramatically, a 70% drop in the size of the average check, reflecting heightened caution towards larger rounds.
- But in 2024, activity rebounded to its highest level by round count, yet still skewed toward early-stage financing, underscoring that confidence in Deep Tech fundamentals returned faster than appetite for large growth cheques.
- Overall, this shows investors retreating to safer, smaller bets—leaving the Series B–C “scale-up gap” even wider.

Number of Rounds & Average Funding per Round by Year (US\$M)



Source: LADP's analysis, Traxcn data

Sector Coverage

Given the absence of sector-level disaggregation in our data, we use the Inter-American Development Bank's Deep Tech: The New Wave as the reference framework for sector coverage and benchmarking.

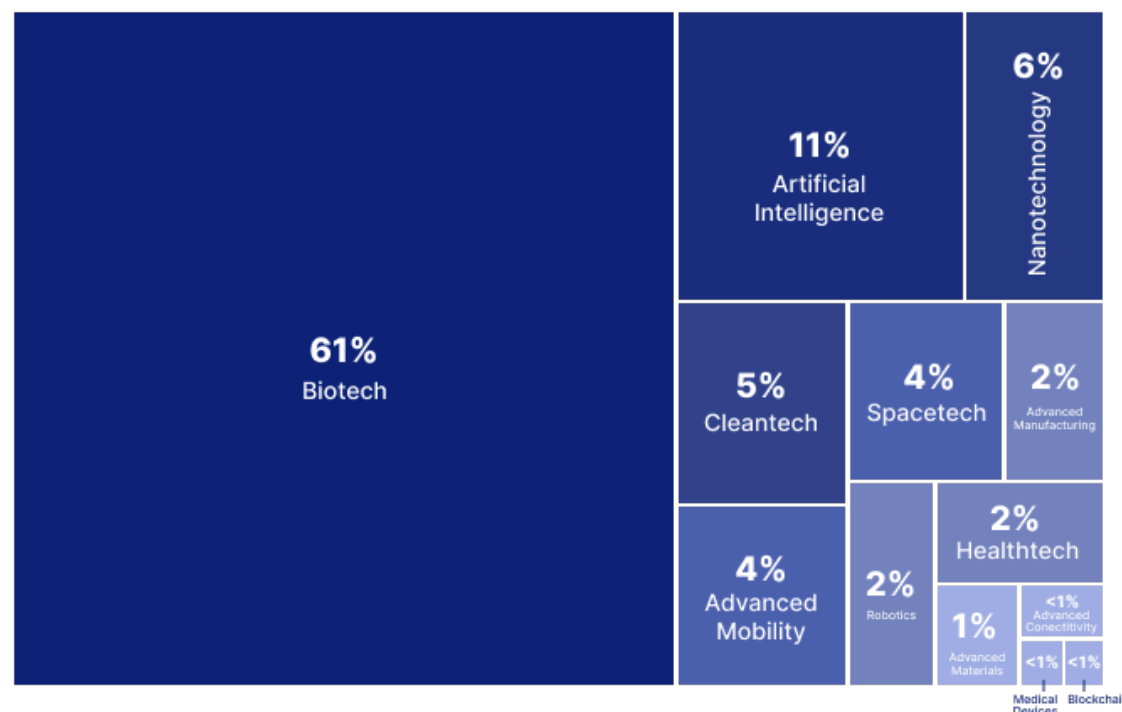
By 2023, **Biotechnology (61%) dominated LATAM's Deep Tech, followed by Artificial Intelligence (11%)**. Together they represented 72% of regional startups. This balance reflects the critical role these technologies play in tackling challenges like sustainable agriculture, food security, and healthcare.

According to the IDB, the prevalence of biotech aligns with the region's "abundant specialized talent in biological sciences, the international competitiveness of the agricultural sector, and the remarkable biodiversity that serves as a resource for researchers."

1. **Costa Rica and Argentina illustrate this concentration, with 97% and 80% of their respective Deep Tech ecosystem value coming from biotech.**
2. Establishment Labs, a Costa Rica-based biotech company, stands as the region's most valuable player (USD 1.8 billion).
3. SOSV/IndieBio reported a 72% gross average return on investment in LATAM Deep Tech startups between 2015 and 2023, underscoring the potential of this burgeoning sector.

Beyond these two leading areas, the landscape includes: Nanotechnology (6%), Clean Tech (5%), Spacotech (4%),

Percentage of LAC Deep Tech startups by technology sector



Source: IDB, Deep Tech: The New Wave

Advanced Mobility (4%), Robotics (2%), Advanced Manufacturing (2%), Health Tech (2%), Advanced Materials (1%), Medical Devices & Others (<1%).

While these sectors are carving out promising niches, the region's Deep Tech ecosystem remains starved for capital—receiving just a fraction of the investment per

researcher seen in leading markets. Indeed, **venture funding for R&D in LATAM is roughly 13 times lower than in China and 70 times lower than in the U.S.**, a shortfall that chokes off early-stage growth and risks leaving many of these emerging technologies under-developed²⁶.

26. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

Who Is Investing

By 2023, there were 65 VC funds with at least one Deep Tech investment in LATAM, according to the IDB, both regional and international. By 2025, Hello Tomorrow's Deep Tech Investor Mapping has identified nearly 40 VC funds active in the region²⁷.

Further initiatives should combine doing targeted desk research (manual scanning for programs), open calls for submissions to capture emerging funds, and cross-referencing against other existing exercises.

Beyond updating coverage, the analysis should move from presence to intensity. Instead of simply listing who invests, quantify how often each investor backs Deep Tech startups (deal counts over the last 24–36 months), at which stages and ticket sizes, their follow-on behavior, and the graduation rate of portfolio companies (e.g., progression from pre-seed/seed to Series A within 12–24 months).

This pass should also isolate corporate venture capital activity—where checks, pilots, and timelines can differ from traditional VC—and explicitly add family offices and sovereign wealth funds, which emerged in our interviews as increasingly relevant co-investors and partners.

Below, we present a non-exhaustive selection of funds.

For subsequent editions, it is crucial to incorporate sector-level disaggregation at the source. We recommend adopting the IDB's taxonomy for consistency and building an open-source, versioned map of projects (with minimum fields such as sector, sub-sector, TRL, location, funding stage, investors, and public links), so the community can audit entries, submit updates, and cross-check against existing mappings—ultimately consolidating a single, centralized directory for the Deep Tech startups in the region.

27. Hello Tomorrow, Deep Tech Investors Mapping - Public version, , Hello Tomorrow (Google Sheets) (n.d.).

Accelerators and VC Funds Focused on LATAM's Deep Tech

Regional Funds Investing in LATAM's Deep Tech

International Funds Investing in LATAM's Deep Tech

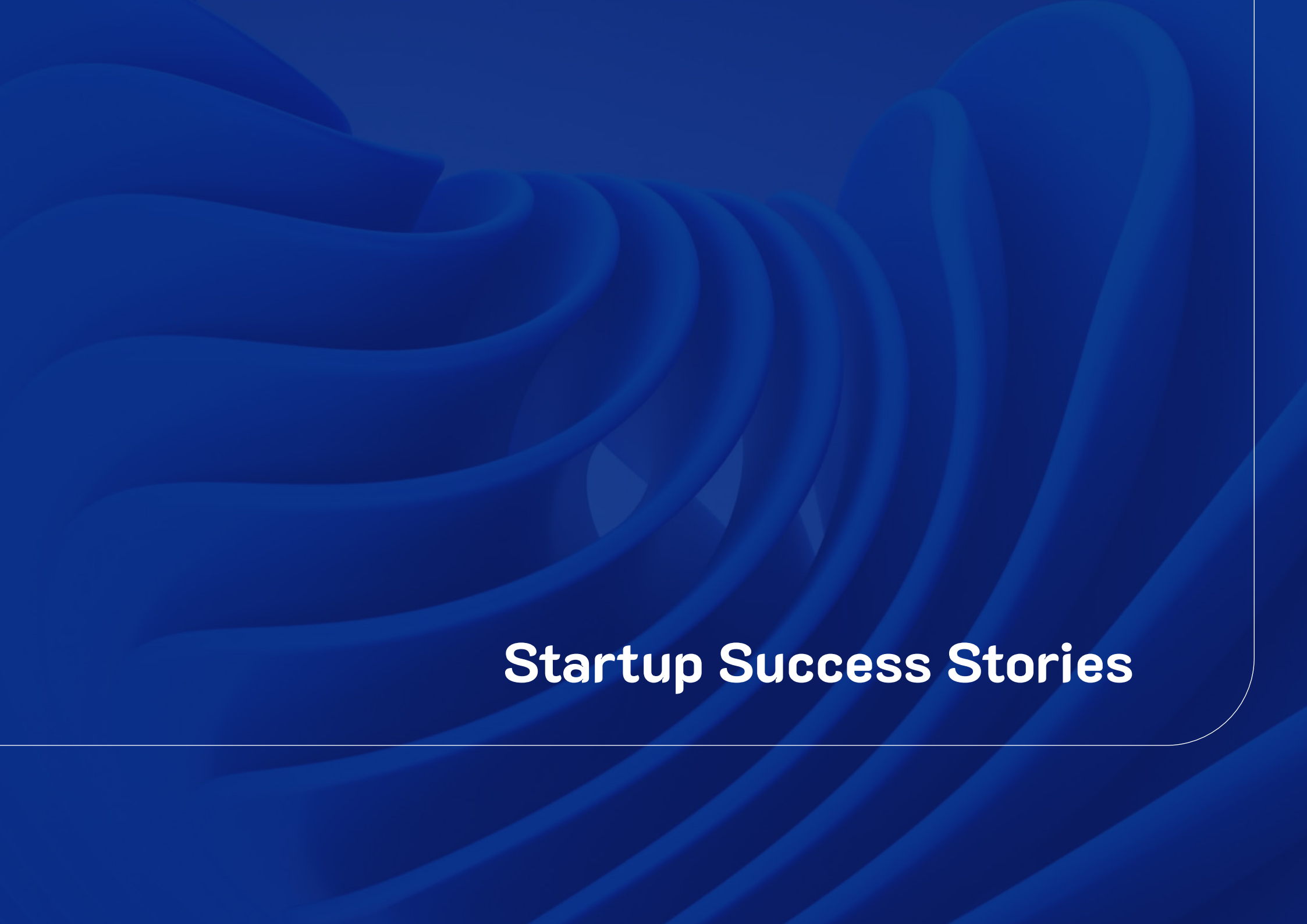
Early stage



Accelerator / incubator



Source: IDB, Deep Tech: The New Wave



Startup Success Stories

Startup Success Stories



Puna Bio

Puna Bio develops biological inputs for agriculture from extremophile microbes found in high-altitude deserts, capable of increasing yields and improving soil health in a sustainable way. These microbes help plants withstand extreme weather conditions, reducing the need for chemical fertilizers.

Backed by The Gates Foundation and SOSV/IndieBio, the company was selected as a Deep Tech Pioneer in Hello Tomorrow's 2024 Challenge in the Food & Agriculture category. Additional support comes from Cleantech 50 to Watch and Grid Exponential recognition.

Location	Creation Date
Buenos Aires	2021
Sector	Tech Maturity
Biotechnology	TRL 9
Stage	Total Funding:
Series A	USD 24.3M



Satellogic

Satellogic operates a scalable Earth observation platform through a constellation of 34 high-resolution Low Earth Orbit satellites, providing affordable geospatial data for various industries. The company's satellite technology enables real-time monitoring and analysis of global environmental and economic activities.

With \$239 million in total equity funding from investors including Liberty Strategic Capital and Tencent, the company completed its most recent \$10 million post-IPO round in December 2024. The Inter-American Development Bank has also provided significant backing for their space technology platform.

Location	Creation Date
Buenos Aires	2010
Sector	Tech Maturity
Technology	TRL 9
Stage	Total Funding:
IPO	USD 134.5M



M4Life

M4Life applies biologically trained microbes to seeds for soil restoration and deforestation prevention, with additional CO₂ capture capabilities. The company is developing an organism-free metabolite version for large-scale commercialization of their sustainable agriculture solutions.

Recognized through MassChallenge and SF500, this CONICET spinoff was selected as a Deep Tech Pioneer & Finalist in Hello Tomorrow's 2024 Challenge. Their innovative approach represents a promising solution for environmental restoration while maintaining agricultural productivity.

Location	Creation Date
Tucumán	2023
Sector	Tech Maturity
Biotechnology	TRL 6-7
Stage	Total Funding:
Pre-Seed	USD 276.3 K

Startup Success Stories



Auth0

Auth0 was founded to simplify and secure authentication and authorization for modern applications. From its inception, the platform embraced open standards—such as JSON Web Tokens, OpenID Connect, and SAML—to ensure developers could integrate identity features without lock-in and easily migrate if needs changed. The core product offers a drop-in solution that supports username/password, social logins, enterprise directories, and passwordless flows.

By mid-2020, it had raised over US \$210 million across multiple rounds, culminating in a US \$120 million Series E led by Salesforce Ventures at a US \$1.92 billion valuation. In March 2021, Okta acquired Auth0 in an

Location	Creation Date
Argentina	2013
Sector	Tech Maturity
Cryptography	TRL 9
Stage	Total Funding:
Acquired	USD 332.3 M



Traction

Traction combines integrated hardware, software, and AI to democratize predictive and preventive maintenance capabilities for industrial operations. Their comprehensive platform helps companies optimize equipment performance and reduce downtime through advanced monitoring and analytics.

The company has raised \$200 million in total funding, with their notable \$120 million Series C led by Sapphire Ventures. Previous backers include prestigious investors General Catalyst, Next47, NGP Capital, and Y Combinator, reflecting strong confidence in their industrial AI solutions.

Location	Creation Date
Atlanta (Brazilian roots)	Not specified
Sector	Tech Maturity
Industrial Technology	TRL 9
Stage	Total Funding:
Series C	USD 185.6M



Nintx

Nintx translates inter-species biology from plants and microorganisms into multi-target therapies that act on biological pathways and gut microbiome modulation. Their innovative approach leverages natural biological mechanisms from Brazilian ecosystems to develop novel therapeutic solutions.

Following a \$3 million seed round in 2022, the biotech startup closed a \$10 million Series A led by Brazilian investors Pitanga, Ecoa Capital, and MOV Investimentos. They also secured a \$2.5 million FINEP grant, bringing total funding to \$13 million and demonstrating strong validation of their therapeutic development approach.

Location	Creation Date
Brazil	2021
Sector	Tech Maturity
Biotechnology	TRL 9
Stage	Total Funding:
Series A	USD 15 M

Startup Success Stories



Symbiomics

Symbiomics utilizes advanced microbiome, genomic, and machine-learning platforms to develop biological products for sustainable agriculture. Their technology increases agricultural productivity while reducing reliance on traditional agrochemicals through biological innovation and carbon sequestration.

With \$4.11 million raised across multiple seed rounds, the company secured backing from The Yield Lab Lat-am, Vesper Ventures, MOV Investimentos, Baraúna Investimentos, and Ecoa Capital. Their most recent \$2.15 million seed infusion in H1 2024 supports expansion of their sustainable agriculture platform.

Location	Creation Date
Florianópolis	2021
Sector	Tech Maturity
Biotechnology	TRL 9
Stage	Total Funding:
Series A	USD 2 M



FabNS

FabNS develops advanced nanoscale analysis using TERS (Tip-Enhanced Raman Spectroscopy), combining patented nanoantenna tips with probe microscopy for chemical imaging with nanometric resolution. Their technology enables unprecedented precision in materials analysis at one-third of market price.

Selected as a Deep Tech Pioneer in Hello Tomorrow's 2024 Challenge for Industry & Machines, the company was also recognized as MIT Innovators Under 35 and received Seed4Science support. This university spinoff from Federal University of Minas Gerais addresses critical needs in scientific instrumentation.

Location	Creation Date
Belo Horizonte	2020
Sector	Tech Maturity
Scientific Instrumentation	TRL 9
Stage	Total Funding:
Seed	N/A



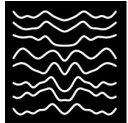
Photio

Photio creates nanoparticle additives that transform urban surfaces into air purification agents, degrading atmospheric pollutants when exposed to light through synergistic photocatalysts. Their technology offers a scalable solution for passive urban air quality improvement.

Selected as Deep Tech Pioneer & Track Winner in Hello Tomorrow's 2023 Challenge for Sustainable Construction & Infrastructure, the startup received Startup Chile Growth support and won Premio de Innovación PwC. Their CORFO Alumni status demonstrates strong validation in the environmental technology sector.

Location	Creation Date
Huechuraba	2019
Sector	Tech Maturity
Environmental Technology	TRL 9
Stage	Total Funding:
Accelerator	N/A

Startup Success Stories



strong
by
form



Strong by Form

Strong by Form uses bio-inspired digital manufacturing to create high-performance structural wood components through computational optimization and robotic manufacturing. Their proprietary processes enable wood products to replace traditional materials like steel, concrete, and aluminum in construction.

Selected as Deep Tech Pioneer & Track Winner in Hello Tomorrow's 2022 Challenge for Sustainable Construction & Infrastructure, the company received Leonard SEED Program support and Latam Cleantech 25 recognition. Their CORFO Alumni status reinforces credibility in sustainable construction innovation.

Location	Creation Date
Santiago	2018
Sector	Tech Maturity
Construction Technology	TRL 7
Stage	Total Funding:
Series A	USD 6.2 M



Splight

Splight develops advanced grid operations AI technologies that address energy curtailment and grid congestion through innovative renewable energy resource management. Their platform optimizes electrical grid performance to maximize renewable energy integration efficiency.

The energy AI startup raised \$12 million in seed funding led by noa (formerly A/O), with participation from energy-focused investors including EDP Ventures, Elewit, Draper Cygnus, Ascent Energy Ventures, and UC Berkeley Foundation. This substantial seed round reflects strong investor interest in AI-powered energy solutions.

Location	Creation Date
Chile	Not specified
Sector	Tech Maturity
Energy Technology	TRL 9
Stage	Total Funding:
N/A	USD 26.1 M



Establishment
Labs

Establishment Labs

Establishment Labs manufactures minimally invasive, next-generation breast implants under the Motiva Implants® brand, with 25 patents and 200 patent applications across 25 jurisdictions. The company distributes to over 70 countries and has established itself as a leader in medical device innovation.

With \$121 million raised across eight rounds and NASDAQ listing at \$1.8 billion valuation, the company represents Latin America's most valuable medical technology venture. Key investors include Madryn Asset Management, JW Asset Management, and Crown Predator Holdings, with their \$55 million Series D as the largest single round.

Location	Creation Date
Costa Rica	2004
Sector	Tech Maturity
Medical Technology	TRL 9
Stage	Total Funding:
IPO	USD 580.7 M

Startup Success Stories



Sistema.bio

Sistema.bio provides biodigester solutions for sustainable waste management and renewable energy generation, empowering farmers and rural communities while reducing greenhouse gas emissions. Their technology converts organic waste into clean energy and nutrient-rich fertilizer across Latin America.

Operating major hubs in Mexico and Colombia with partnerships in a dozen LATAM countries, the company raised \$22.8 million across three Series B rounds between 2024-2025. Notable investors include KawiSafi, AXA Investment Managers, EcoEnterprises Fund, and Novastar Ventures, demonstrating strong support for their sustainable energy solutions.

Location	Creation Date
Mexico	Not specified
Sector	Tech Maturity
Clean Technology	TRL 9
Stage	Total Funding:
Series B	USD 22.8 M



Antarka

Antarka develops DNA repair enzymes from Antarctic extremophile organisms for skincare applications, achieving 100% UV damage repair efficacy in ex vivo human skin using visible light-activated photolyases. Their biotechnology harnesses extreme environment adaptations for consumer cosmetic applications.

Selected as Deep Tech Pioneer in Hello Tomorrow's 2023 Challenge for Medical Biotech & Pharmaceuticals, the startup received backing from SOSV/IndieBio and Grid Exponential. As a spinoff from Universidad de la República, they position themselves uniquely at the intersection of biotechnology and cosmetics innovation.

Location	Creation Date
Montevideo	2023
Sector	Tech Maturity
Biotechnology	TRL 8
Stage	Total Funding:
Accelerator	USD 400 K

Deep Tech Investment in LATAM

Deep Tech Investment in LATAM:

A promising but still nascent ecosystem

By 2023, investment in LATAM increased by nearly 600% between 2019 and 2023—rising from under USD 300 million to USD 2 billion in just four years, according to the Deep Tech: The New Wave report by the Inter-American Development Bank (IDB)²⁸.

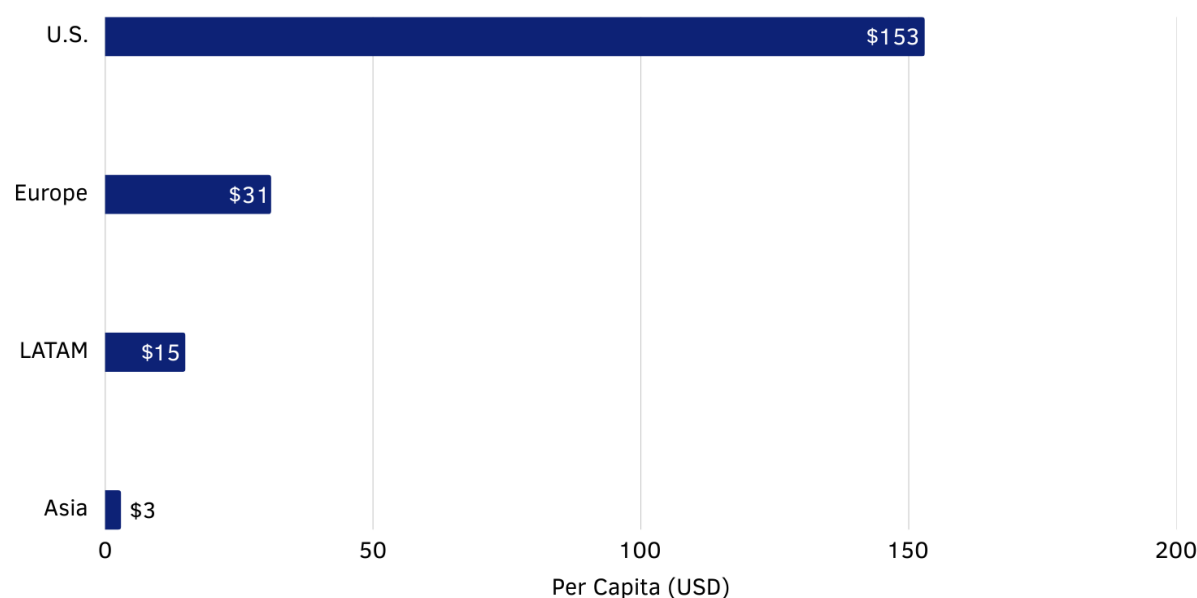
As of September 2024, LATAM's cumulative investment had grown by an additional USD 536 million, bringing the regional total to roughly USD 2.54 billion. Even at this higher level, LATAM still trails other regions: roughly USD 13 billion in Asia, USD 14 billion in Europe, and USD 52 billion in the United States²⁹.

To place this in macroeconomic context, those volumes correspond to about 0.04% of Latin America's GDP, versus approximately 0.08% in Europe, 0.20% in Asia, and 0.22% in the U.S. The per capita analysis provides additional context, showing Latin America's \$15.25 per person investment, higher than Asia's modest \$2.7, but still half of Europe's \$31 and the United States' \$153.

This data illustrates that while other regions have more mature Deep Tech ecosystems, Latin America has an immense and largely untapped opportunity for both capital and innovation to drive the Deep Tech ecosystem.

Per-capita Deep Tech Investment (USD)

LATAM investment is half of Europe's and 10 times lower than the U.S.

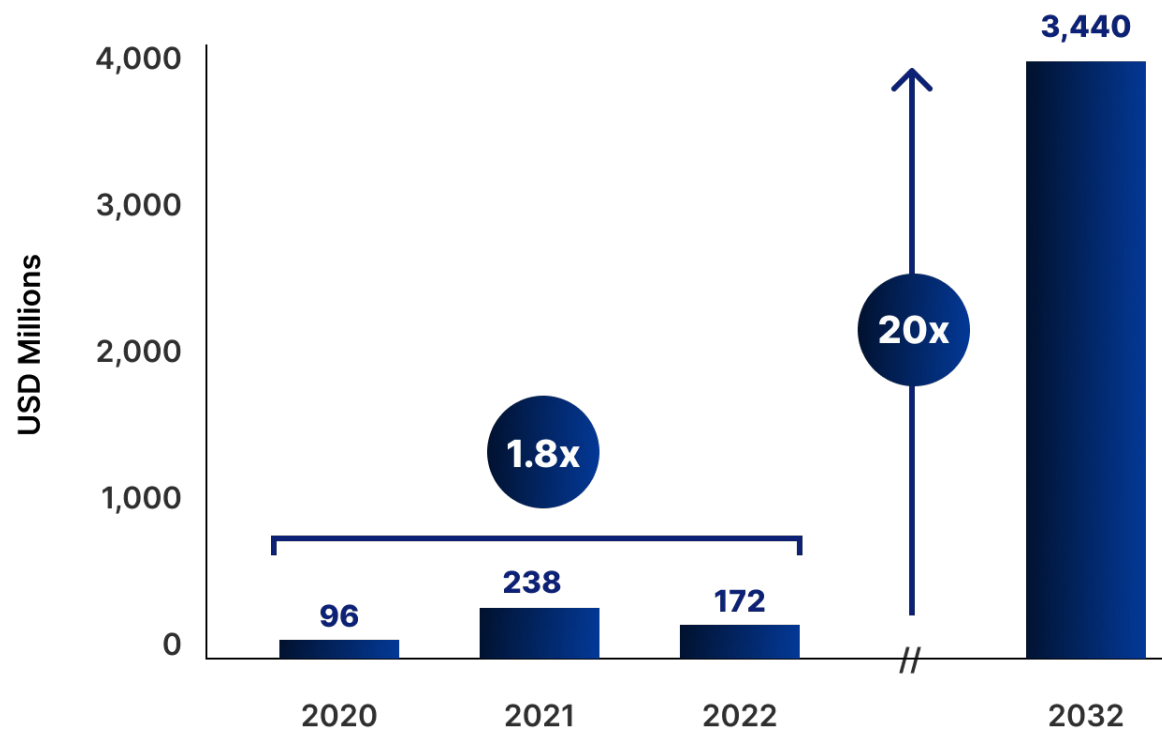


Sources: IDB, SlingHub; Atomico; LADP's calculations.

28. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

29. David Matthews, Europe overtakes Asia on Deep Tech investment, Science | Business (2024).

VC investment in LATAM Deep Tech can grow 20x over the next decade



Looking ahead, the IDB projected in 2023 a twentyfold increase in VC investment into LATAM Deep Tech start-ups over the next decade, underpinned by a growing pool of researchers and engineers, cost advantages in technology development, lower early-stage valuations with attractive return profiles, and the region's exceptional biodiversity.

The model rests on three points: Europe's deep-tech VC 18x growth from 2012 to 2022, LATAM's general 20x VC growth between 2012-2022, and LATAM's 1.8x Deep Tech growth from 2020 to 2022³⁰.

The IDB attributes this potential to a growing pool of researchers and engineers, cost arbitrage in tech development, lower early-stage valuations with attractive return profiles, and the region's exceptional biodiversity.

We present this as a **high-end scenario**—credible but contingent on progress in talent retention, later-stage capital depth, regulatory coherence, and exit pathways, which will be explored in the following sections.

Source: IDB, Deep Tech: The New Wave

30. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

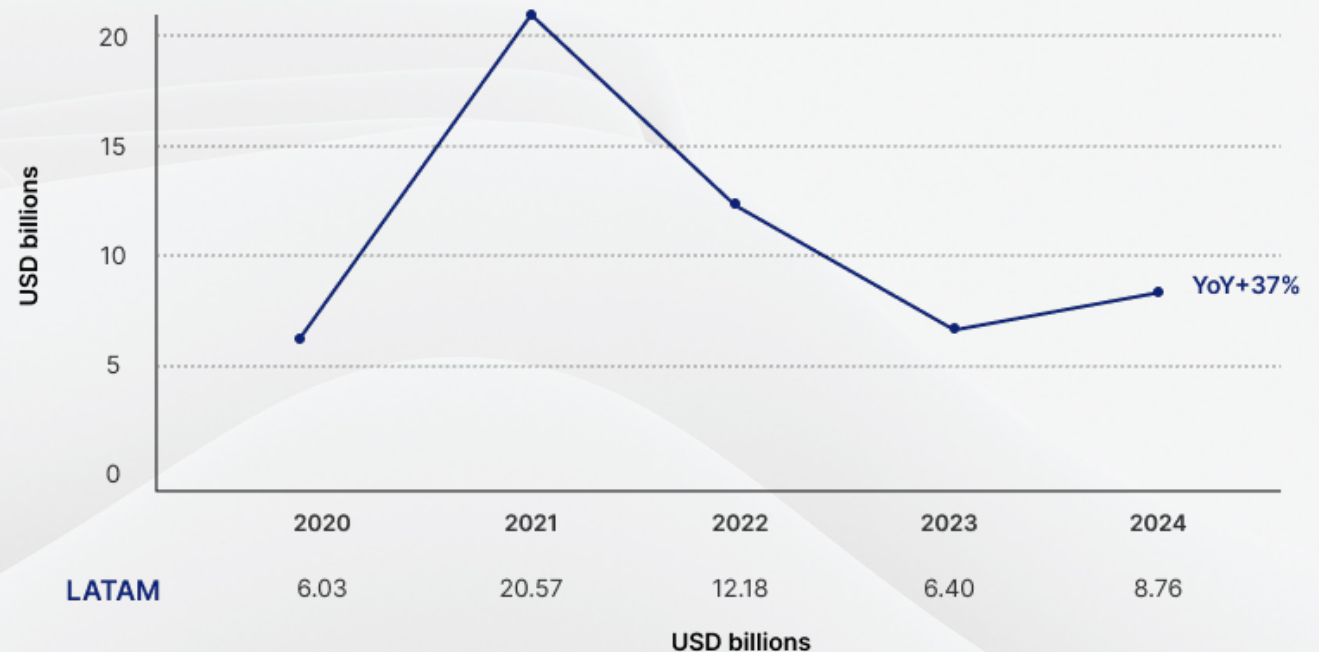
In 2024, after 3 years of decline—primarily due to the pandemic and the “big tech crisis”—the funding landscape for LATAM tech startups appears to be showing positive signs once again.

According to the LATAM Startup Market 2024 in Review report by SlingHub & Itaú, which tracks investment across sectors including fintech, Deep Tech, energy, and health tech, 2024 marked the first year since 2021 that LATAM's tech industries experienced year-over-year growth, reaching 37%. In total, market funding across all tech sectors increased from USD 6.4 billion to USD 8.8 billion in the tech industry³¹.

For the authors of the report, this trend indicates that the regional innovation ecosystem is becoming more firmly established, spurred by rapid digital transformation and a rising demand for locally tailored technological solutions. While a steady recovery is on the horizon, it is likely to be accompanied by considerable volatility due to ongoing macroeconomic challenges.

LATAM's tech investment rebounded 37% YoY in 2024, marking the first year of recovery since 2021, signaling renewed investor confidence across sectors.

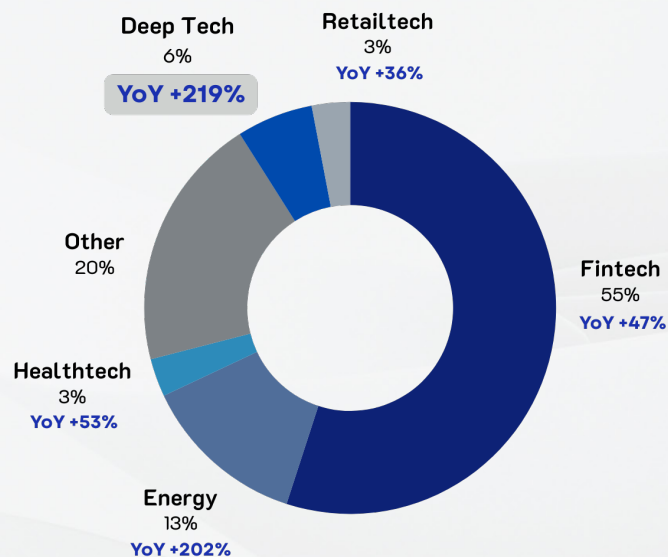
Volume raised in all VC funding rounds in last 5 years



Source: SlingHub, LATAM startup market 2024 in review

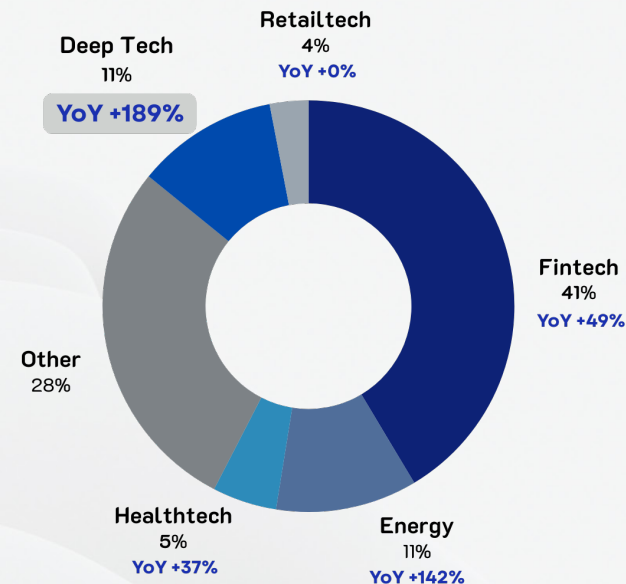
31. LATAM startup market 2024 in review, SlingHub (2024).

Leading tech markets by total funding volume raised in 2024



Source: SlingHub, LATAM startup market 2024 in review

Leading tech markets by equity funding volume raised in 2024



Source: SlingHub, LATAM startup market 2024 in review

However, a closer examination of the data reveals that the Deep Tech segment is the most steadily growing area in LATAM. Overall, **Deep Tech emerged as the third largest category within all tech industries, securing USD 536 million of funding**, which represents 6% of the overall funding. This figure places Deep Tech just behind the energy sector, which accounted for

13%, and fintech, which dominated with 55% of the market funding.

Nonetheless, although it's a small percentage overall, the underlying figure is most significant, as **Deep Tech is the sector that grew more year over year, accounting for a 219% overall growth increase.**

When looking at the total equity funding insights, the trend is similar: while Deep Tech lags significantly behind Fintech in terms of volume, amounting for 41%, and equals Energy at 11% respectively, **Deep Tech was the highest year-over-year grower in terms of equity funding volume in 2024, with a 189% overall growth increase.**

Gaps to Become International Unicorns

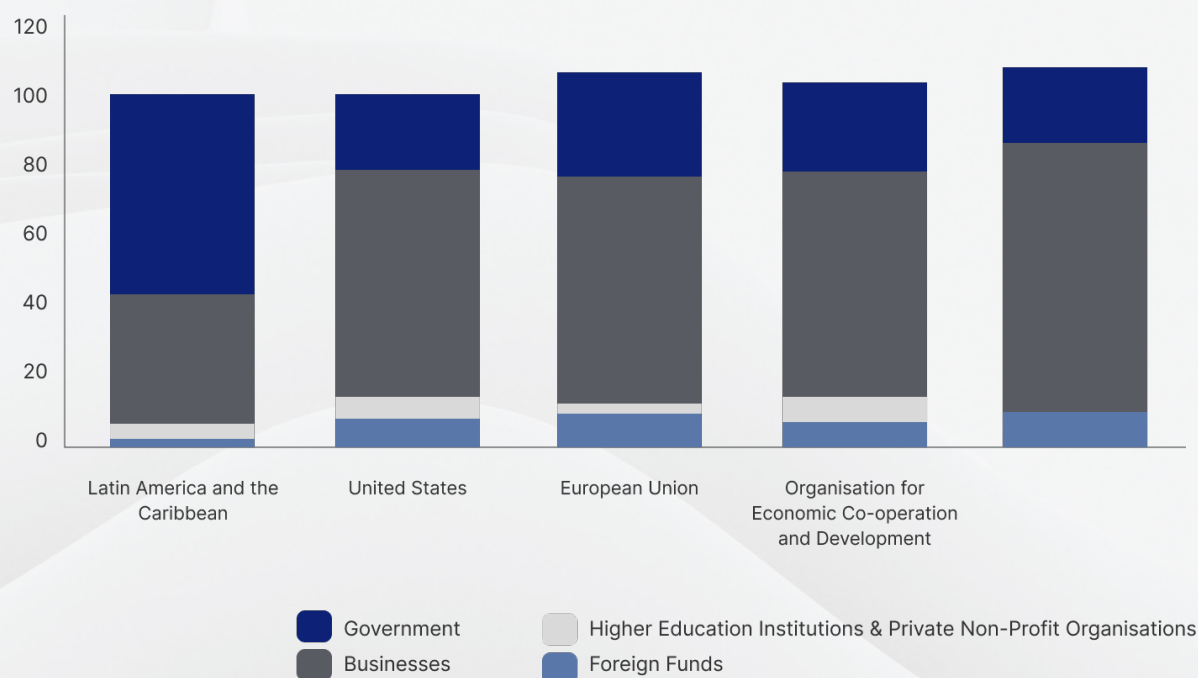
While Deep Tech in LATAM boasts exciting pockets, the region remains dramatically undercapitalized. **R&D funding is roughly 13× lower than in China and 70× lower than in the U.S.**, throttling growth and leaving many breakthroughs stranded on the launchpad³².

This shortfall seems to be structural. In advanced economies like the US and the EU, companies fund over 60% of R&D (nearly 80% in China). In LATAM, businesses cover only about 35%, while governments provide roughly 60%.

The hurdles run deep. Among investors, they include skepticism toward regional R&D to uneven clinical phases and fragmented regulatory frameworks; and on the company side, issues like a local-only mindset, lack of standardized metrics, weak narratives, and no regional coalition to forge ties with global backers.

In the sections that follow, we'll unpack each of these funding gaps and chart practical steps to help LATAM's Deep Tech champions become tomorrow's global unicorns.

Research and Development Expenditure, by Funding Sector, 2019 (in %)



Source: ECLAC

32. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

From the LATAM Discount to Fair Value

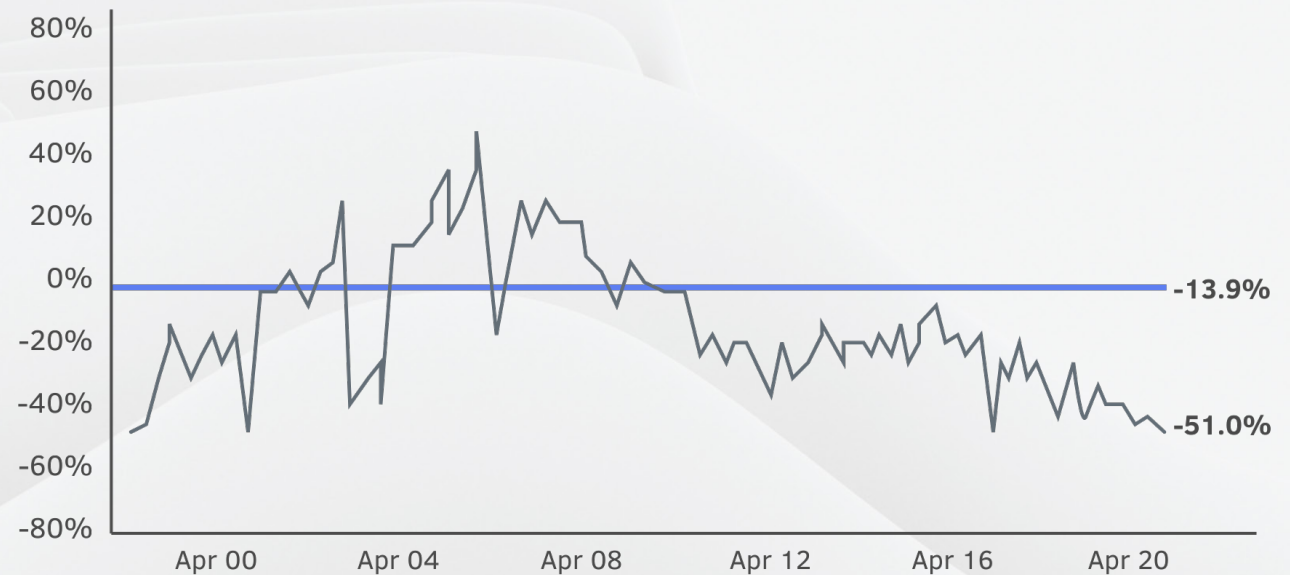
The “LATAM Discount” refers to the phenomenon where **startups and companies in Latin America are often valued lower than their counterparts in other regions**, such as the United States, Europe or other emerging markets, despite having similar or even superior metrics. This discount is attributed to perceived risks, including political instability, economic volatility, and regulatory challenges, which can deter international investors.

Even in traditional equities markets, Latin American equities have traded at a significant discount to global averages and Emerging Markets (EM) in the last years. The MSCI Latam Index, which captures large and mid cap representation in Brazil, Chile, Colombia, Mexico, and Peru, suggests **LATAM is trading at -51% Discount compared to the world, above the historical average of -13.9%.**

According to Itaú BBVA analysis, “this can be partially explained by the rising relevance of tech companies in global indexes, at a higher pace than EMs, while LATAM has virtually little exposure to this sector”.

When comparing the region to the Emerging Markets, LATAM countries are trading at a higher discount as well, a -27.7% Discount as of 2024³³.

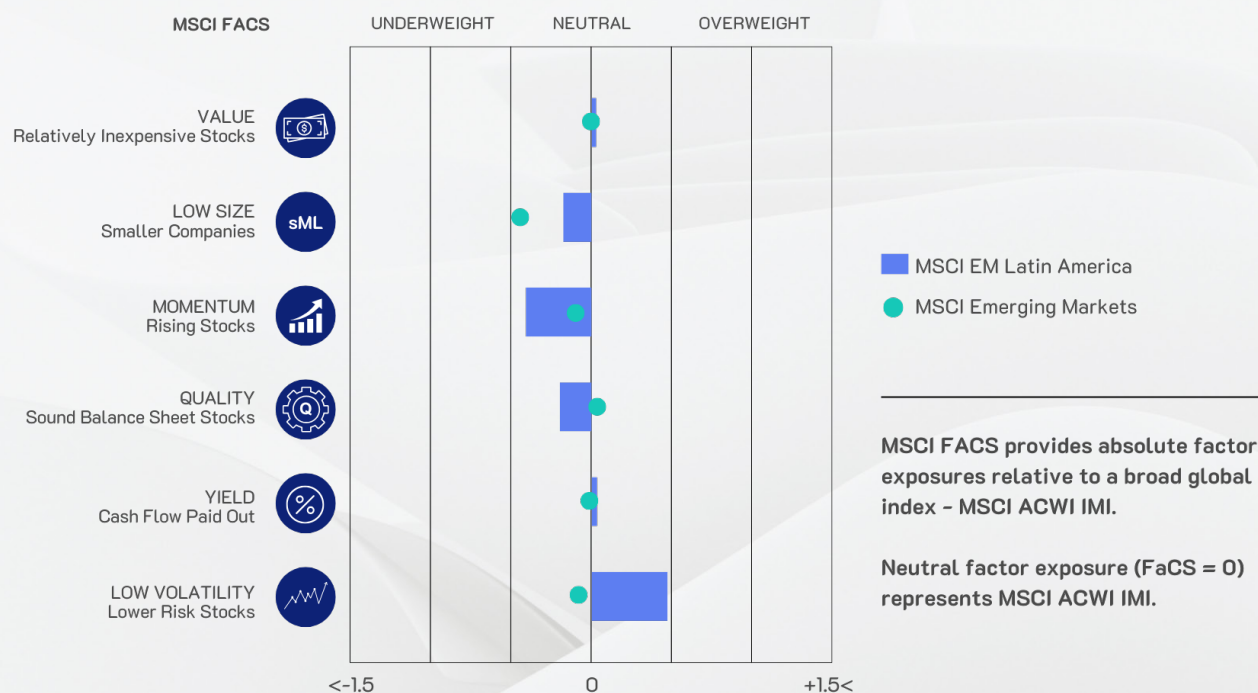
Historical Price to Book Premium (Discount) / LATAM vs World



Source: Itaú BBA, Latam & Brazil Equity Strategy: Thematic Book

33.. Itaú BBA Equity Strategy Team, Latam & Brazil Equity Strategy: Thematic Book, Itaú BBA Equity Strategy Team (2024)

LATAM Discount Factors - Key Exposures That Drive Risk and Return LATAM vs Emerging Markets



Source: MSCI Emerging Markets Latin America Index

When looking at the factors that drive the risks and returns, the 2025 MSCI Index compares the factor exposures of LATAM and other EMs like China or India against a global benchmark (MSCI ACWI IMI)³⁴. **The 6 main factors are Value, Low Size, Momentum, Quality, Yield and Low Volatility of investments.** A positive value means the index is overexposed to that factor compared to the global average, while a negative value indicates underexposure.

From the 6 main factors identified, **LATAM is especially overexposed to Volatility, represented by commodity exposure, macroeconomic swings and political risks, amongst others.** This is typically negative, and can deter global equities investors in the short and long term.

In parallel, LATAM lags behind other emerging markets and the global benchmark, which indicates fewer high-quality balance sheets or fewer stocks with strong price momentum compared to the global average.

Finally, it's also worth noting the exposure to the Low Size factors. A negative Low Size tilt suggests the index is more concentrated in large-cap stocks. Being negative means both LatAm and other EM indexes lean towards bigger companies compared to the global benchmark.

34. MSCI Emerging Markets Latin America Index (USD), MSCI (2025).

In general, this phenomenon brings us to the pivotal question: why bother investing in emerging markets (EMs)? After all, investors might comfortably remain in the U.S., where returns are stable and fixed income rates currently exceed 5%. As one market observer put it, **“the big issue seems to be whether emerging returns are enough to drag U.S. and Western funds away from an increasingly comfortable ‘home bias’—pampered as they now are by high domestic fixed-income yields and deterred by seismic geopolitical risks in a year marked by crucial elections and military tensions”**³⁵.

Nevertheless, while this skepticism is understandable, this report and broader data indicates compelling reasons to invest precisely at this juncture. Factors such as intrinsic regional growth, evolving regulatory frameworks, the increasingly critical role of technology, and LATAM's competitive advantages present an opportunity for valuation re-rating toward fair value as these structural improvements materialize.

The key insight for investors is recognizing that LATAM's discount represents a temporary mispricing driven by solvable structural factors—regulatory uncertainty, limited market liquidity, and information asymmetries—

The LATAM's discount represents a temporary mispricing driven by solvable structural factors—regulatory uncertainty, limited market liquidity, and information asymmetries—rather than permanently inferior fundamentals.

rather than permanently inferior fundamentals. As these factors improve through institutional development, enhanced transparency, and deeper capital markets, the region's valuations should converge toward their intrinsic value, creating attractive risk-adjusted returns without requiring speculative premium valuations.

As succinctly articulated by Cristian Hernández, manager at Zentynel, a VC fund active in LATAM, **the question is shifting from “Why Latin America?” to “Why haven't we invested more?”**³⁶.

35. Mike Dolan, Emerging markets face 'why bother?' problem, Reuters (2024).

36. Cristián Hernández Cuevas, Catalysts of Change: The Future of Biotechnology in Latin America (2025).



Recommendations: Closing the LATAM Discount in Deep Tech

Recommendations: Market Readiness

01.

Venture Building—Train, Fund, Validate

Scientific founders often lack core entrepreneurial skills—embed them as mainstream in universities and research institutes. Launch structured matchmaking to build balanced science–business founding teams, and plug those teams into sequenced pipelines of non-dilutive grants and CVC pilot lanes so they can validate products in real-world settings.

02.

Metrics & Success Stories—Deep Tech KPI framework

Investor skepticism often arises from a lack of performance data and tangible success narratives about LATAM's Deep Tech ventures. Collect, validate, and publicize key metrics (e.g., IRR, exit multiples, time-to-market) alongside high-impact regional case studies to illustrate Deep Tech ROI potential and enable like-for-like comparisons across markets.

03.

Showcase & Visibility— Educate Privately, Convene Publicly

Robust data is the beginning. Limited understanding of Deep Tech investment constrains funding availability and delays strategic capital deployment. Launch targeted educational initiatives for VCs, family offices, and CVCs to demystify Deep Tech fundamentals, showcase regional ROI data, and build confidence for larger, strategic funding commitments.

04.

Impact-Driven Narratives—Deep Tech for SDGs

Lab-driven founders often default to dense technical explanations. Embed structured storytelling programs (inspired by Zentynel's narrative-coaching playbook) to translate complex science into clear, emotionally resonant stories of global impact, turning bench-top breakthroughs into funding catalysts. Embedding institutional frameworks like the Sustainable Development Goals is a plus.

05.

Global Mindset—Language First, Structure Next

Small markets, fragmented rules, FX volatility, and language barriers nudge founders toward local-first. From day one, require English upskilling for founders and technical leads and adopt English-first artifacts (pitch, website, data room, others) to signal world-class readiness. In parallel, implement international structures—Delaware/UK holding with local subsidiaries, early USPTO/EPO filings—to reduce diligence friction and speed cross-border commercialization.

Recommendations: Investors Readiness

06.

R&D Skepticism— Regional International Scientific Advisory Boards

Persistent doubts about LATAM's early-stage science slow diligence and capital. Establish vertical-specific Regional International Scientific Advisory Boards that pair global experts with top LATAM scientists to run TRL-3–5 peer reviews (experimental design, reproducibility, IP robustness), issue endorsement seals, and provide targeted support (protocol refinement, regulatory strategy), plus an annual “State of Deep Tech Science” brief to broadcast validated breakthroughs and de-risked tech.

07.

Uneven Clinical Trials—Alignment Through Interoperability

Early-stage Deep Tech ventures often struggle to attract international capital due to country-specific regulations. Adopt a “global-first” compliance strategy—aligning products and processes with rigorous frameworks like the FDA / EMA. In parallel, explore parallel jurisdictions like Special Economic Zones to compress permit cycles. Furthermore, advocate for mutual-recognition mechanisms between LATAM states for selected scientific approvals.

08.

Regulatory Portability—The 34th Regime

LATAM's policy landscape is a patchwork. Champion a voluntary, pan-LATAM “34th Regime” single-startup status—modeled on Europe's 28th—for mutual recognition, regional sandboxes, standardized digital filings, and portable approvals; constitute via a plurilateral (CELAC/Pacific Alliance); pilot on existing rails (digital ID/e-signatures, Mercosur–Pacific Alliance MRAs); and design Deep-Tech-specific procurement to reduce diligence friction and speed scale-up.

09.

Corporate Venture Capital—Matchmaking Bridges & Observatory

CVC backup is no longer optional. Stand up a neutral, region-wide CVC Bridge to professionalize matchmaking through sector pitch days and roadshows, diligence-ready data-room templates, and pilots on corporate testbeds. Partner with a multilateral to co-finance targeted SME 8-12week pilot programs. Anchor it with a CVCxDeep Tech Observatory tracking participation/depth, time-to-deal, survival and time-to-next-round, and procurement-conversion—turning ad-hoc encounters into a predictable pipeline of strategic capital and first customers.

10.

Social Clusters—Guilds & Ecosystem-as-a- Service

R&D must be paired with social infrastructure. Beyond shared labs, build curated, mixed domestic–international founder cohorts and consolidate Ecosystem-as-a-Service operators that convene academia, founders, corporates, policymakers, and governments; run recurring peer forums and clinics (technical, regulatory, BD/fundraising) and maintain warm-intro circuits. This networked layer accelerates learning and collaboration—and seeds tomorrow's deep-tech investors from today's founders.

Recommendations: Regional Coalition

LATAM's Deep Tech future won't be unlocked by isolated wins. We need a neutral, mission-driven coalition that spans countries and verticals. It must seat public institutions, academia, founders, capital, and corporations at one table with shared cadence and metrics. Think of the European Union, minus the bureaucracy, to act as one market for talent, capital, and scale—so breakthroughs travel region-wide, fast. This is the coalition the LADP proposes to build, and the lens through which our recommendations should be read.

11.

Anchor Public R&D to a Sovereign-Tech Agenda

Fragmented and short-term public-funding limits LATAM's strategic impact. Work with public institutions to place strategic Deep Tech fields on the same footing as critical infrastructure, rolling out upgrades to Special Economic Zones, 1:1 matching-funds, and sovereign co-investment vehicles that channel long-term R&D budgets.

12.

Pensions—A Fund-of-Funds for Domestic Deep Tech

On top of public funding, establish an independently managed fund-of-funds that mobilizes a slice of pension assets into domestic Deep Tech via vetted specialist GPs. Modeled after France's Tibi initiative and the UK's Mansion House reforms, advocate for local co-investment and procurement links—turning public budgets into catalytic patient capital and giving trustees a de-risked, rules-based path to back science-based scale-ups at home.

13.

Geopolitical Lens—Strategical Autonomy

The tech order is being reordered—China's scale-up, U.S.–EU realignments, and the rise of middle powers create parallel tracks for capital, supply chains, and standards. To ensure LATAM gains autonomy rather than dependency in the emerging Deep Tech order, establish a dedicated working group to map flows, stress-test partnerships, and broker corridors (SEZs, joint labs, procurement pilots, standards MOUs) with superpowers and Middle Powers alike. Publish quarterly heatmaps and deal playbooks so LATAM can pick de-risked pathways to preserve technological autonomy.

14.

Research & Visibility—Open Data Commons & Grants Portal

LATAM lacks a shared evidence base and a clear window into non-dilutive capital. Build an open-access data commons—standardized stats, deal/IP registries, dashboards, and white papers/case studies—to cut diligence friction and enable evidence-based narratives; in parallel, launch a unified grants portal that normalizes funding types, ticket sizes, eligibility, and deadlines, paired with workshops and AI application assistants, so founders and policymakers can find, compare, and win capital faster.

15.

Forge a Pan-LATAM Deep-Tech Forum

LATAM's event surge is fragmented; launch a single, rotating flagship co-branded by leading funds, accelerators, and alliances to pool sponsors, attract international LPs/CVCs, and project one regional narrative. Anchor the forum with annual KPI releases (deals, pilots, grants, cross-border expansions) so it becomes the region's measurable, go-to platform for deep-tech scale.

Further Research Initiatives

16.

Extended Funders Mapping

Build a living registry of VC/CVC/family offices/sovereign funds active in LATAM Deep Tech. Deliver a directory with tags (sector, stage, ticket, geo), an investor-roadshow calendar, and a submission form. Update quarterly via web-scrapes, press tracking, and partner validations.

17.

Deep Tech LATAM Discount Index

Across all sectors, LATAM assets trade at ~50% vs. global peers (MSCI Index). Deep Tech likely mirrors this gap, yet no standardized, Deep-Tech-specific index exists. Build an MS-CI-style, repeatable framework to quantify valuation gaps and frictions, publish an open methodology fed by regulator stats, deal-level data, and founder/investor surveys, and release a baseline plus quarterly updates to steer targeted policy and investment theses.

18.

CVC Survival Effect

In Europe, CVC-backed startups show roughly half the bankruptcy rate of non-CVC peers (Hello Tomorrow). LATAM lacks an equivalent measure. Measure survival, time-to-next-round, and bankruptcy rates for CVC-backed vs. non-CVC startups for the region. Produce a matched dataset with hazard ratios, and publish sector breakdowns.

19.

Internal Rate of Return

In Europe and the U.S., Deep Tech funds outperform traditional tech by 7% in average net IRR (McKinsey). LATAM lacks comparable, region-specific data, making apples-to-apples comparisons difficult. Establish a LATAM benchmark to contextualize performance and strengthen the case for channeling patient capital into deep tech.

20.

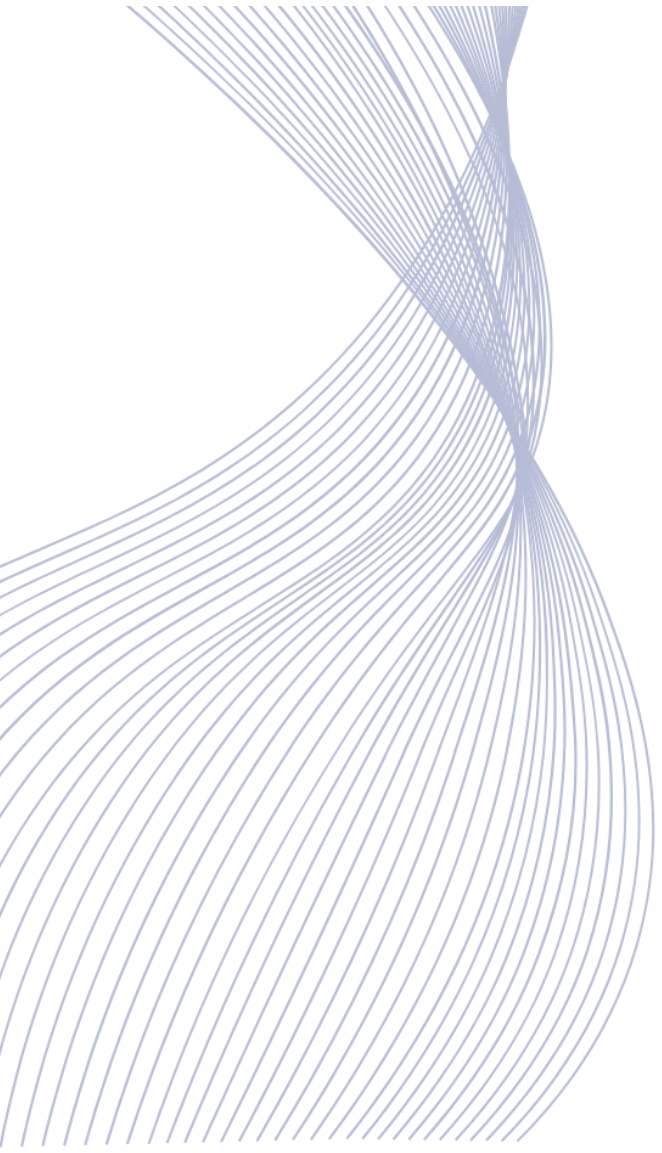
\$1 Test—LATAM vs. Global Gross Average Return

SOSV, a global biotech fund, has reported a 72% gross average return on investments within their LATAM Deep Tech portfolio between 2015-2023 (IDB). But it's a single-manager statistic and not directly comparable to global benchmarks. To make a credible regional case, build an \$1 ROI Test comparing LATAM to matched US/EU/Asia baskets, and report MOIC/ROI with confidence bands.



Market Readiness for Deep Tech Companies

Market Readiness for Deep Tech Companies



Whatever the source of funding—whether public, venture capital, angel investors, or corporate venture capital—another challenge consistently identified in our research to bridge the funding gaps for Deep Tech in LATAM is the perceived market readiness of individual projects.

This issue runs deep and flows in both directions. On one hand, **startups often lack the crucial market and business readiness needed to effectively secure investment.** On the other hand, **investors frequently lack a sufficient understanding of Deep Tech**, resulting in a significant knowledge gap that deters them to commit the necessary capital.

This scenario sets up a classic chicken-and-egg paradox: does substantial groundwork from Deep Tech startups to attract funding come first, or does adequate funding precede the ability to conduct meaningful Deep Tech development?

Throughout our investigation, we've mapped out qualitative pain points that shed light on the complexities of market readiness from the startup perspective and investor readiness from the funding side. Strategies proposed to bridge these gaps range from shifting the narrative startups use during pitches—emphasizing broader impact rather than just technology—to comprehensive educational programs aimed at demystifying Deep Tech investments and dispelling persistent misconceptions.

LATAM's Deep Tech faces a classic chicken-and-egg paradox: does substantial groundwork from Deep tech startups to attract funding come first, or does adequate funding precede the ability to conduct meaningful Deep Tech development?

Several projects in the region have successfully incorporated these strategies for years, generating valuable learnings and experiences. Yet, stakeholders unanimously highlight a critical missing element: **the absence of a unified coalition capable of aligning and amplifying these individual efforts at a regional level.** Establishing such a coalition is not just beneficial—it's essential.

01.

Venture Building: The Science-to-Startup Pipeline

One of the most critical challenges for Deep Tech startups lies in bridging the gap between scientific innovation and business execution. **Many ventures are founded by brilliant scientists who, while exceptionally skilled in research and technology development, often face a steep learning curve when shifting into entrepreneurial leadership roles.** Making the transition from academia to business is rarely quick—and even when successfully navigated, founders encounter broader structural barriers in the region.

In Latin America, it is common that scientific founders are left to juggle multiple high-stakes roles at once: raising capital, taking their products to international markets, and continuing to push technological frontiers. The weight of these demands makes it nearly impossible for one person to manage alone, highlighting the urgent need for Deep Tech startups to build multidisciplinary teams that integrate world-class science with strategic business leadership from the outset.

This disconnect is further rooted in the academic culture of many universities across the region, where **entrepreneurship is still seen as a niche path rather than a viable or encouraged career option for scientific talent.** Most researchers are trained to pursue academic excellence or institutional careers, not to build companies. As a result, the entrepreneurial potential of highly skilled scientists remains largely untapped.

Venture Building, also called a venture studio, is a model tailored to fit this gap. Nominally, it's an institutional co-founder model that originates startups from scratch, not just accelerates existing ones. **A venture builder scouts frontier science/IP, forms founding teams by pairing scientists with seasoned operators, structures the company (IP, governance, regulatory), provides shared product/BD resources, and co-invests to reach the first meaningful technical and commercial milestones.** Unlike incubators/accelerators (which offer time-bound

A venture builder scouts frontier science/IP, forms founding teams by pairing scientists with seasoned operators, structures the company, provides shared product/BD resources, and co-invests to reach the first meaningful milestones.

programming), venture builders are hands-on company creators with longer engagement, deeper ownership, and operational responsibility.

Regional Examples

→ GRIDX's MatchMaking Model

GRIDX is a pioneering venture capital firm and company builder that is reshaping the Deep Tech and biotech landscape in Latin America. With a bold thesis rooted in science-first innovation, GRIDX has raised US\$41.5 million across two funds and built a portfolio of 81 companies, 75% co-founded by women³⁷. These ventures span multiple countries in the region—including Argentina, Uruguay, Mexico, Colombia, Brazil, and Chile—and collectively employ 1,000 people, including 700 scientists.

At the heart of GRIDX's model is its matchmaking process—a deliberate, rigorous approach to pair scientific founders with experienced business leaders. **First, GRIDX identifies scientists not only with credible research, but with the drive to become entrepreneurs. In parallel, it recruits business professionals capable of executing in unfamiliar industries and supporting a long-term scientific vision.** These pairs then undergo a three-month trial phase, testing compatibility and mutual understanding. If the match proves strong, GRIDX invests and helps build the company from the ground up.

This approach began as an experiment. After mapping hundreds of projects and co-founding six initial ventures, GRIDX raised a US\$1 million prototype fund in 2016. With the early backing of influential investors like Hugo Sigman and others from Grupo Insud, Bago, and Gador, GRIDX formally launched its model. By 2018, the success of its early companies allowed the team

to raise a US\$10 million Fund I. Then in 2022, with increased traction and the Inter-American Development Bank's Lab (IDB Lab) joining as a limited partner, GRIDX launched Fund II, securing an additional US\$30 million.

To date, GRIDX's companies have raised over US\$100 million from international investors and achieved their first exit, validating the long-term potential of the model.

→ Vesper: Co-Founding with Scientists

Vesper Ventures is a Brazilian venture builder focused on transforming high-impact scientific research into globally scalable startups. Unlike traditional venture capital firms that invest in existing companies, **Vesper takes a hands-on approach by partnering with scientists at the earliest stages—often before a company even exists.**

At the heart of Vesper's strategy is its co-founding model, which involves directly engaging with universities and academic institutions to identify promising scientific talent and breakthrough ideas. Then, Vesper proactively seeks out researchers with strong entrepreneurial drive and works alongside them to form founding teams, shape business models, and guide product development.

Their numbers are eloquent: after evaluating approximately 4,500 scientific projects, Vesper chose to co-found 8 companies. Yet the impact of these ventures is significant—they collectively hold 16 patents, have

raised over US\$30 million, and bring together a team of more than 50 PhDs.

→ Odisea: From Education to Investment

Odisea Labs is a LATAM-based innovation lab focused on advancing AI and Cryptography that integrates education, company building, and capital deployment under one roof. Founded in 2021, Odisea's thesis starts one step earlier than typical venture builders: Through NÚCLEO, its flagship technical academy, **Odisea trains talent in applied AI and cryptography, including non-experts and candidates from nontraditional academic paths.**

In parallel, Odisea Labs runs incubation and accelerator programs for regional and global startups, giving Núcleo graduates a fast track into entrepreneurship—from education to venture formation, product validation, and investor readiness. To date, Odisea has worked with 100 teams at the AI-cryptography intersection through its programs. Collectively, these teams have gone on to raise over USD 100 millions, from some of the leading cryptography and AI investors globally.

Closing the loop, Odisea is finalizing its first venture fund to invest in the companies it helps build and the founders it trains—creating a continuous “learn-build-invest” flywheel designed to retain talent in the region and compress the time from frontier research to market deployment.

37. Scenius LATAM, GridX: The Matchmaker for Scientists & Business profiles in Latin America, LinkedIn (2024).

Recommendations: Train, Fund, Validate

Stakeholders recommend starting with the basics: **normalize entrepreneurship inside universities and top labs**. Make it routine—run short, hands-on founder bootcamps and add recurring entrepreneurship modules to graduate programs, with mentors who can pair scientists with operators. The aim is straightforward: more scientist-led spinouts with the right co-founders from day one.

We must provide universities and their stakeholders with the right incentives for them to engage with company building aimed at advancing Deep Tech in the region; this involves circulating economic value back to the institutions, fostering an environment where entrepreneurship is celebrated in academia, and encouraging students to participate in new venture creation in their institutions.

A parallel demand emerged for **increased non-dilutive capital in the initial stages**. Stakeholders consistently requested small grants and rapid bridge funding to support proof-of-concepts and early validations before Series A. While it's true that later funding rounds are the scarcest in LATAM, as previously discussed, **without this early Proof of Concept funding, there will be no credible projects for subsequent financing**. Although it might seem counterintuitive, venture builders insisted

“One key element missing is a concrete track record that shows Latin American companies have global reach and impact. Track records are super important for investors. While there are isolated examples, the overall image and history of successful exits in the region remain limited.”

that the earliest stages are crucial for discovering exceptional talent.

Finally, to facilitate early-stage Deep Tech venture building, stakeholders called to connect venture builders with VCs and corporates. This collaboration can secure funding for critical stages such as clinical trials, pilots, and initial market entry. **Establishing dedicated corporate pilot lanes (at least one per hub) would enable product validation in real-world environments**. Furthermore, implementing shared diligence and data-room templates, alongside a quarterly selection process, would accelerate the advancement of the most promising projects.



02.

Metrics & Success Stories: Deep Tech KPI frameworks

In the process of fundraising and building investor confidence, clear, tailored metrics and compelling success stories are essential tools for Deep Tech startups. Unlike software or other “soft tech” ventures, where traction is often measured by user growth, churn rates, or recurring revenue, Deep Tech operates on fundamentally different timelines and value drivers.

One of the key hurdles startups face when engaging with investors is the lack of standardized, relevant metrics for evaluating Deep Tech performance. **Applying the same indicators used in traditional tech sectors often leads to misunderstandings and undervaluation.** Instead, metrics must be contextualized according to each specific vertical—for example, a biotech startup will need different benchmarks than a startup focused on quantum computing or advanced materials. Even within biotech, performance indicators should vary across sub-segments: a company working on alternative proteins in the food sector will follow a very different trajectory than one developing therapeutic molecules.

As discussed during LADP’s investors roundtable, many global investors remain unconvinced by Latin America’s deep-tech track record. As one participant emphasized, “one key element missing is a concrete track record that shows Latin American companies have global reach and impact. Track records are super important for investors. While there are isolated examples, the overall image and history of successful exits in the region remain limited”.

Recommendations: Deep Tech KPI framework

The main pillar for this endeavor is robust data. We recommend establishing a LATAM Deep-Tech KPI framework to close the gap left by U.S. and EU-centric benchmarks and to improve the transparency and comparability of investment opportunities across the region.

This report offers a first pass of data; moving from map to machinery will require follow-on convenings—working groups of investors, founders, and technical experts—to validate gaps, agree on relevant sources, and

set clear data-collection cadences.

The framework should combine a standardized, cross-vertical core with sector-specific annexes. The standardized core would track items such as graduation rates from one funding round to the next, internal rate of return over defined time horizons, and the share and depth of active corporate venture capital participation, to mention a few—metrics that enable like-for-like comparison across markets. **Sector annexes would then capture what general KPIs miss: clinical and regulatory milestones in biotech, certification and qualification cycles in hardware, or approvals and interconnection timelines in climate and energy.**

This two-tier approach preserves comparability while capturing each vertical’s operational realities. For startups, it creates a credible, investor-ready narrative grounded in standardized metrics. For the broader ecosystem, it will generate a stronger evidence base—producing the robust numbers and decision-grade insights needed to elevate the region’s standing in the global **deep-tech landscape.**

03.

Showcase & Visibility: Educate Privately, Convene Publicly

Robust data is the first step. Second and maybe most important is communicating them to the appropriate stakeholders in the appropriate time, publicly and privately.

Privately, it is equally essential to educate investors on the viability and strategic significance of Deep Tech an area traditionally absent from their investment considerations—and more so around LATAM's. Although **education requires significant effort, patience, and a strategic vision**, stakeholders highlighted that it holds **great potential for guiding future LPs, family offices, and other investors toward more informed and confident decisions**.

Our research underscored another missing link: **this information gap also includes local, off-the-radar investors**. As noted by one participant, regions like southern Argentina harbor considerable, long-accumulated wealth—often tied to oil, agriculture, and mining—yet many local capital stewards lack exposure to alterna-

tive asset classes such as startups and Deep Tech.

To overcome this critical gap, the LATAM Deep Tech ecosystem needs a more concerted effort of holding meetings with investors across the region to provide them with the necessary context to allocate capital into new technology verticals.

Publicly, a mosaic of initiatives—from podcasts and newsletters to demo days and national summits—works in parallel to publicly spotlight deep-tech talent. Notable examples include EMERGE's Deep Tech Summit in São Paulo (launched in 2024)³⁸; Impacto Deep Tech LATAM, co-hosted on Uruguay's coast by CITES, Draper Cygnus, GRIDX, Air Capital VC, and The Ganesha Lab with IDB Lab support³⁹; Draper Cygnus Tech Week 2025 across the Southern Cone; GRIDX's 2025 U.S. Biotech Roadshow (Tulsa, New York, San Francisco)⁴⁰; Alianza Deep Tech Colombia's Genera Summit in Bogotá (inaugurated in 2024, returning in 2025)⁴¹; and The Ganesha Lab's BIGinBIO (Chile,

now in its 10th cohort) alongside CORFO's Go Europe Connect (Chile–EU, 2025 edition)⁴².

These initiatives are genuine wins—each actor is doing the necessary work of pushing local founders onto global stages. Yet as the ecosystem expands, efforts that run program-by-program and country-by-country can drift into duplication, thin signaling, and missed network effects for lack of a unifying architecture.

Recommendations: Educate Privately, Convene Publicly

Participants converged on a central challenge: moving from isolated efforts to a unified push that both educates local and international investors in private settings and convenes stakeholders around a single flagship forum.

On the private side, governments, corporations, and regional stakeholders can institute dedicated Deep Tech

38. Deep Tech Summit, Emerge (2025).

39. Deep Tech, Venture Capital and Innovation, Draper Cygnus, LinkedIn (2025).

40. The Venture Capital Panel, The Venture Capital Panel (2025).

41. The Venture Capital Summit, MenteX (2025).

42. Brochure BIGinBIO Program, The Ganesha Lab (2025).

This education should not rely on theory alone. Real-world examples are essential: startups that have secured follow-on rounds, entered regulated markets, or translated scientific breakthroughs into commercial products serve as proof points that demystify the deep-tech journey and build credibility in a space where uncertainty is high and timelines are long.

investor-education initiatives—formal and informal—that address capital requirements, R&D timelines, exit strategies, and sector-specific success metrics. In parallel, by designing targeted education and engagement programs for high-net-worth individuals—both in traditional financial hubs and beyond—the region can cultivate a new class of angel investors and channel fresh capital into Latin America's most disruptive innovations.

This education should not rely on theory alone. Real-world examples are essential: startups that have secured follow-on rounds, provided substantial returns for funds, entered regulated markets, or translated scientific breakthroughs into commercial products serve as proof points that demystify the deep-tech journey and build credibility in a space where uncertainty is high and timelines are long.

Publicly, the goal is to convene a single flagship Deep-Tech forum—not a routine conference, but a marquee gathering that places Latin America squarely on the global investment map. Beyond product launches, the event should articulate what Deep Tech is and why the

region's science matters: returning diaspora founders who pair world-class R&D with local insight; breakthroughs in biotech, climate tech, and space tech that can scale into developed markets; and a talent base priced for global competitiveness.

A curated mix of exhibitions, keynote sessions, and investor roadshows would showcase these strengths, while an intentional invitation strategy ensures the room includes international LPs and strategic corporations—not only regional insiders. Crucially, this forum should anchor a broader coalition agenda, spawning regular meet-ups, cross-border newsletters, and targeted investor-education tracks to sustain momentum.

Finally, a coalition is needed to align calendars, share data and deal-flow standards, and speak with one credible demand signal to investors and corporations. Coordinated under a shared strategy, today's scattered sparks would cohere into a region-wide beacon—making the true scale and investability of Latin America's frontier science unmistakable to the world.



04.

Impact-Driven Narratives—Deep Tech for SDGs

Once Deep Tech startups have successfully aligned scientific innovation with business structure and begin fundraising beyond initial grants, a critical next step is to strategically reframe how they present their value proposition. Participants in our research repeatedly emphasized the importance of moving beyond a purely technical narrative—often focused on scientific complexity or engineering novelty—toward a more impactful and globally relevant story.

This narrative shift involves positioning Deep Tech as a vehicle for addressing some of the most pressing global challenges of our time, including climate change, energy transition, and public health.

As Cristian Hernández —general manager at Zentynel and author of the book *Catalysts of Change*⁴³—argues, the savviest biotech investors don't merely analyse spreadsheets—they buy into stories. **“Facts alone don't move hearts — or wallets. Investors, regulators, and partners must not only understand the science but also feel the urgency and potential impact of what a company is building.”** The stumbling block, Hernández notes, is that many lab-driven founders struggle to translate bench-top breakthroughs into a narrative that resonates beyond technical circles.

“Facts alone don't move hearts — or wallets. Investors, regulators, and partners must not only understand the science but also feel the urgency and potential impact of what a company is

The ventures that secure marquee partnerships and oversubscribed rounds are those that recast complex research as a clear, compelling answer to big-picture challenges in health, agriculture, or industry.

That said, Deep Tech investment isn't merely about traditional philanthropy or mission-driven initiatives. Participants emphasized that Deep Tech can deliver substantial ROI, with its long-term value stemming from its capacity to resolve significant challenges while simultaneously generating returns.

Many investors today are drawn to this hybrid appeal—they want more than just financial gain, but they are

not willing to compromise on performance. Deep Tech, when framed correctly, offers both.

Recommendations: Deep Tech for SDGs

From the outset, think beyond technology and pure investment. **Deep Tech can directly address climate change, inequality, and multiple SDGs through its scientific and commercial breakthroughs.** Yes, engineering excellence and go-to-market strategy matter to investors; however, we recommend situating those strengths within clear societal outcomes—without slipping into greenwashing.

In fact, institutionally, the 2025 United Nations Development Programme's report *Global Deep Tech Ecosystems* opens with “Why Deep Tech Matters for the Sustainable Development Goals,”⁴⁴ including case studies on solid-state battery technologies and global challenges. We recommend using these frameworks when pitching and when designing relevant institutional approaches.

As the Deep Tech agenda gains visibility and legitimacy, startups will be able to leverage their mission as a strategic asset, differentiating themselves in a crowded fundraising landscape and attracting long-term partners who are aligned with their global ambitions.

43. Cristián Hernández Cuevas, *Catalysts of Change: The Future of Biotechnology in Latin America* (2025).

44. UNDP *Global Deep Tech Ecosystems*, United Nations Development Programme (2025).

05.

Global Mindset—Language First, Structure Next

For Deep Tech startups in Latin America, adopting a global mindset from day one is not just an advantage—it's a necessity. While the region holds immense scientific talent and raw potential, local markets are simply not large or stable enough to support the scale that breakthrough ventures require.

Whether due to limited ambition or barriers such as language—particularly difficulties with English—many founders still build with a local frame of reference. However, as participants in our research emphasized, there needs to be a fundamental shift in perspective: **startups must be designed with global relevance from the outset, positioning their technologies and business models to compete on the international stage.**

Yet mindset alone is not sufficient. Operational readiness must go hand in hand with global thinking. This means aligning company structures with international standards to attract foreign capital and strategic partners.

Recommendations: Language First, Structure Next

Start with the basics. We suggest making English the working language for internal and external materials—pitch decks, data rooms, technical docs, and contracts.

Operational readiness must go hand in hand with global thinking. This means aligning company structures with international standards to attract foreign capital and strategic partners.

Pair this with **targeted English for Speakers of Other Languages (ESOL) upskilling for founders and research teams**, focusing on the vocabulary and formats they'll actually use: IP and licensing terms, term sheets, regulatory and clinical/device documentation, and investor pitching. **Provide operational support such as English-ready data-room templates, bilingual model contracts, and translation/interpretation stipends for diligence and roadshows.**

Once those fundamentals are in place, layer in the structural elements that signal global readiness. Best practices include **setting up holding companies in jurisdictions like Delaware, United States**, which is widely favored by international investors for its robust

legal framework, business-friendly regulations, and transparent corporate governance.

In parallel, stakeholders also suggest **registering their intellectual property early with the United States Patent and Trademark Office (USPTO)**—the federal agency responsible for granting U.S. patents and registering trademarks—as it provides strong legal protection in one of the world's largest markets but also enhances credibility with investors and partners. In fact, it's often recommended to patent in the U.S. before filing in home countries, as it establishes a stronger foundation for future international patent extensions.

Another recommended route is leveraging the **Patent Cooperation Treaty (PCT)** for broader, cost-effective IP protection. By submitting a single PCT application—recognized by 158 member states—founders can secure “time-buys” to nationalize their patent filings across multiple jurisdictions, preserving rights while postponing major translation and filing fees. Unfortunately, only 14 out of 33 LATAM countries are registered, Uruguay being the latest signatory⁴⁵.

Together, these practices demonstrate that a startup is not only building cutting-edge technology but also structuring itself to operate and thrive on a global stage.

45. Patent Cooperation Treaty (PCT) Progress in Latin America: Uruguay Becomes the Newest Contracting Member, Mayer Brown (2024).

The background is a deep blue with a series of flowing, wavy lines that create a sense of movement and depth. A faint, stylized globe is visible in the center, partially obscured by the waves. The overall aesthetic is modern and professional.

Investors Readiness

LATAM Discount in Deep Tech

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Let's flip the script on the chicken-and-egg problem. Instead of fixating on the market-readiness boxes startups must tick to attract capital, in the following sections we assess the pre-existing regional conditions that deter financing to emerge—and, crucially, investor readiness: why VCs, corporates, family offices, and even sovereign funds may hesitate to commit the necessary, patient capital in the first place.

During our roundtable with investors, the **LATAM Discount** emerged as the single most cited factor explaining the persistent funding gaps in the region's Deep Tech ecosystem. The core argument was consistently clear: despite the regional ecosystem demonstrating comparable conditions to global standards in terms of talent, innovation, and growth potential, valuations for LATAM Deep Tech ventures often remain significantly lower, a matter of considerable frustration as they believe their portfolios demonstrate sufficient strength for competition on a global scale.

Within the discussion, participants specifically explored the underlying reasons driving this valuation gap in the Deep Tech sector, identifying key issues such as **skepticism toward LATAM's R&D capabilities, a disjointed regulatory landscape, and extended, uneven clinical trial phases across different countries.**

While we list specific factors that perpetuate the Discount in Deep Tech, there is currently **no standard-**

Despite the regional ecosystem demonstrating comparable conditions to global standards in terms of talent, innovation, and growth potential, valuations for LATAM Deep Tech ventures often remain significantly lower

ized, MSCI-style index to prioritize remedies or track progress across these items. Future research should develop a **repeatable measurement framework** for the LATAM Discount in Deep Tech—disaggregated by sector and time horizon, amongst others—to quantify valuation gaps and related frictions (e.g., cost of capital, time-to-approval/exit, regulatory burden). Such a metric would provide the empirical basis for sharper investment theses and targeted policy interventions.

06.

R&D Skepticism: Regional International Scientific Advisory Boards

Among the chief pain points identified were skepticism toward LATAM's R&D capabilities and a fragmented regulatory landscape; meanwhile, the main recommendations to advance included promoting cross-border regulatory innovation, and building a stronger regional coalition with global reach

Deep Tech companies rely extensively on R&D at top-tier academic institutions. In fact, their defining characteristic is that they emerge after years of rigorous research and experimentation carried out by individual scientists or teams of PhDs, in many cases.

This process involves the development of robust intellectual property and a lengthy, strategic technology transfer from academia to the commercial sector, setting the foundation for groundbreaking, commercial innovation.

This process is long, though. **The entire journey—from research and prototyping, through development, validation, and finally commercialization—takes 25-40% longer to translate into returns for investors** if compared to the time-horizon of a conventional software company, according to estimates by the Boston Consulting Group⁴⁶.

However, before even thinking about commercialization, the primary risk at these early stages is the robustness of the underlying science of ventures. It is at this very early stage that some regional investors raised a flag:

Many times, Latin American ventures often face skepticism from international investors regarding the robustness and credibility of their early-stage scientific research, doubting whether the underlying science is sound enough to support scalable, global

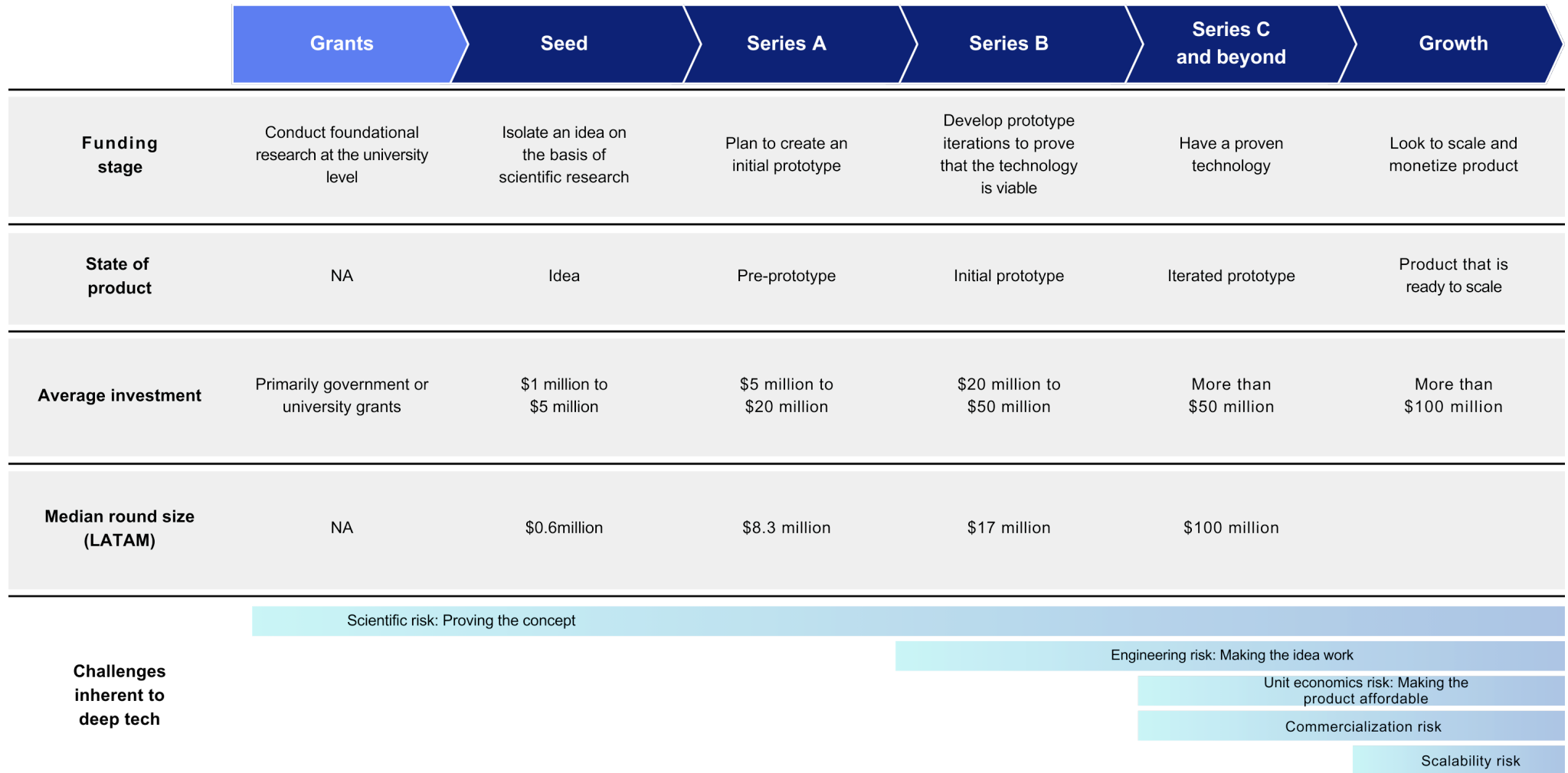
business models.

While this issue is difficult to quantify, it is far from new. In 2024, Garret Dempsey—a global investor active in across both the U.S. and LATAM—highlighted the challenge: “U.S. investors, accustomed to evaluating founders and technologies emerging from prestigious institutions like Stanford, MIT, and Harvard, might doubt the credibility of innovations presented by founders from lesser-known universities in LatAm. This skepticism forces founders to undertake the additional challenge of proving the reliability of their technology and data.”

Consequently, this skepticism often results in an extended deliberation process for international investors—sometimes even perceived as biased—at a crucial stage in the development of companies.

46. An investors guide to Deep Tech, Boston Consulting Group (2023).

Deep Tech Ventures Face Technological and Other Challenges Throughout the Investment Life Cycle



Source: Traxcn; Boston Consulting Group, "An Investors Guide to Deep Tech"

Recommendation: Regional International Scientific Advisory Boards

To enhance credibility and accelerate investment decisions, we recommend establishing a Regional International Scientific Advisory Boards within each major vertical. These boards will serve as impartial, high-caliber validation panels, combining global expertise—from senior scientists and technology-transfer officers at institutions such as MIT, Stanford, ETH Zurich and Cambridge—with the local insight of distinguished LATAM researchers who have proven commercialization track records.

To ground the boards in excellence, they should include leaders from Latin America's top patent-producing academic institutions, such as Universidade de São Paulo (USP), Universidade Estadual de Campinas (Unicamp), Universidade Federal de Minas Gerais (UFMG) (Brazil); Universidad Nacional Autónoma de México (UNAM) and Instituto Politécnico Nacional (IPN) (Mexico); Pontificia Universidad Católica de Chile and Universidad de Concepción (Chile); Universidad de los Andes (Colombia); and CONICET (Argentina). These institutions are among the top 20 LATAM patent filers over the past two decades in LATAM⁴⁷.

These boards could conduct rigorous peer reviews of early-stage ventures at Technology Readiness Levels (TRL) 3–5, evaluating experimental design, reproducibility and intellectual-property robustness. Ventures that meet these benchmarks could receive a formal endorsement seal for use in investor materials, alongside tailored expert support—ranging from refining experimental protocols to crafting regulatory strategies for clinical or field trials—and policy support, if needed.

Finally, the advisory boards could publish an annual “State of Deep Tech Science” briefing that highlights validated breakthroughs and de-risked technologies, distributing this report to key investor networks and governmental institutions.

Depending on needs, the Boards can be housed (1) within a multilateral institution (e.g., the Inter-American Development Bank) for convening power and credibility; (2) in an intergovernmental academic body amplify scientific legitimacy and dissemination (e.g., the Inter-American Institute for Global Change Research, which comprises 19 regional member states, with an established annual forum and Deep Tech-relevant associates like Brazilian FAPESP⁴⁸); (3) under a

consortium of leading LATAM academic institutions; or (4) within a newly established, neutral committee run by an ecosystem enabler such as the Latin American Dynamism Project or the proposed Regional Deep Tech Coalition.

The hosting model naturally informs the financing architecture. Viable options include public-private partnerships, multilateral and philanthropic grants, and program-tied corporate sponsorships (especially for vertical-specific calls and reviews). To attract and retain top-tier advisors, the package should mix financial honoraria with non-financial incentives—formal recognition, authorship/attribution in the annual brief or data-access agreements, amongst others, plus opportunities to mentor funded cohorts. This alignment ensures sustainability while preserving independence and scientific standards.

By institutionalizing this advisory board, Latin America's Deep Tech ecosystem can empower founders to demonstrate scientific rigor and give international investors the confidence to shorten due-diligence cycles and deploy capital earlier into the region's most promising ventures.

47. EMERGE, Deep Tech Radar LATAM 2025 (2025)

48. Inter-American Institute for Global Change Research (IAI), IAI (last accessed 2025).

07.

Uneven Clinical Trials: Alignment Through Interoperability

LATAM does not have a centralized regulatory agency that oversees the trial phases and market readiness of, say, emerging biotech or AgTech innovations looking to come to market. Each country operates under its own set of rules and timelines, making the navigation process both challenging and essential for success.

As detailed by Cristian Hernández, Zentynel's General Partner, a drug approval in Chile can take between 6 to 8 months for its review by public agencies, in contrast to the 1.5 to 2 years that it may take the Brazilian, Mexican or Colombian equivalent public agencies. Below is an overview of the regulatory framework different countries have in the region specifically for Biotech⁴⁹:

Brazil — ANVISA. Historically 18–24 months post-submission; reforms aim for 120–365 days for innovative therapies, but separate GMP certification can add months.

Mexico — COFEPRIS. The equivalence route is officially 5–60 days, yet backlogs often extend approvals to 1–2

For international investors, this augments the risk of investing, as it may not be strategic to back an early-stage startup that only complies with regulations of a single country, thus impeding their regional and global expansion.

years, prompting some firms to seek legal remedies.

Colombia — INVIMA. Typically 12–18 months; flexible use of foreign data and SME incentives ease entry for companies with US/EU dossiers.

Chile — ISP. Predictable 6–8 month reviews; smaller market but a transparent, strategic first stop for biologics, diagnostics, and precision medicine.

Argentina — ANMAT. Since 2017, clinical-trial evaluations have been cut from ~160 to ≤70 business days, though incomplete documentation can still cause delays.

For international investors, this augments the risk of investing, as it may not be strategic to back an early-stage startup that only complies with regulations of a single country, thus impeding their regional and global expansion.

Recommendations: Global-First Alignment Through Interoperability

To bypass this hurdle, regional investors interviewed for this report stated that they have been encouraging the startups in their portfolio to work with a global-first approach from the beginning, like the FDA or EMA, to immediately meet international standards for trial phases.

49. Cristián Hernández Cuevas, Catalysts of Change: The Future of Biotechnology in Latin America (2025).

By aligning their products and processes with FDA regulatory frameworks, companies can signal adherence to rigorous, internationally recognized standards. This could make Deep Tech ventures considerably more attractive to global investors by reducing perceived risks and facilitating smoother market entry.

However, stakeholders also cautioned that an **FDA-only** posture can backfire—slowing iteration velocity, entrenching incumbent advantages through de facto regulatory capture, and imposing compliance costs that are prohibitive for early-stage or higher-risk ventures. While the FDA remains a respected gold standard, treating it as the default gate can signal optimization for bureau-

cratic processes rather than agile innovation. This can ultimately stagnate early-stage or high-risk ventures.

Another model worth exploring is Próspera in Honduras, a Special Economic Zone that offers bespoke regulatory pathways for health and biotech. Próspera self-reports “15× faster commercialization of drugs,” “research timelines accelerated by 70%,” and “operating costs under 1% of other jurisdictions,” and markets its health regime as enabling companies to go “10–100× faster” than traditional venues⁵⁰. Under this framework, the gene-therapy startup Minicircle has conducted Phase I human trials in Próspera (e.g., a follistatin program), illustrating how the zone’s rules can be used to

advance frontier therapies⁵¹.

That said, the model is contested—by bioethicists and biotech operators concerned about oversight⁵², by Honduran authorities challenging Próspera’s legality, and by local communities⁵³. Reporting has highlighted unapproved gene-therapy activity and permissive ethics structures; meanwhile, the zone is embroiled in legal disputes with the state amid efforts to unwind the SEZ framework⁵⁴. These tensions underscore both the potential speed advantages and the governance risks of using special-jurisdiction routes for biomedical development.

Taken together, these models suggest three non-exclusive paths for LATAM :

1. Global-first alignment. Where relevant, align early with FDA/EMA-grade standards to de-risk future export and capital access.

2. Parallel jurisdictions. Explore SEZs or similar special-purpose regimes to compress permit cycles and enable supervised testing—under clear guardrails and transparency

3. Regional interoperability. Advocate for mutual-recognition mechanisms between LATAM states for selected scientific approvals

The objective is clear—reduce due-diligence friction for regional international capital and accelerate safe market entry for the region’s most promising Deep Tech ventures.



50. Próspera, Próspera (last accessed 2025).

51. Minicircle Gene Therapy Case Study, Próspera (2024).

52. Antonio Regalado, Inside the private country where a biohacker says he gave people gene therapy, MIT Technology Review (2023).

53. Jack D. Farchy, Honduras's Free-Zone Experiment Is Failing, Foreign Policy (2024).

54. Próspera and others v. Honduras, UNCTAD (2022).

08.

Regulatory Portability: The 34th Regime

Latin America's Deep-Tech policy landscape is a patchwork: several countries have strategies and tech-transfer programs, yet startups still face duplicative approvals, uneven incentives, and slow, case-by-case rulemaking across borders.

Throughout our interviews, investors and founders stressed that one missing layer is **coordination—portable rules and institutional capacity that let a company scale regionally under one predictable framework, enforced and adapted in concert across jurisdictions.**

Building on the prior chapter's case for regional interoperability for scientific breakthroughs, this section outlines how mutual recognition, regional sandboxes, and a voluntary LATAM "single-startup status" could translate policy intent into cross-border scale, inspired by Europe's emerging "28th Regime" model.

Admittedly, a region-wide framework can sound politically unrealistic and structurally implausible given sovereignty concerns, market fragmentation, and institutional asymmetries. Yet a **voluntary, modular design**

may reduce sovereignty costs, allows phased adoption, and creates incentives for convergence. Crucially, there is international precedent to devise LATAM's "34th Regime": a Pan-LATAM initiative to unite its 33 countries under a single regulatory framework for Deep Tech advancement.

In December 2024 the grassroots coalition EU-Inc submitted more than 13,000 signatures urging the next European Commission to create a "28th Regime": an optional, pan-European company form that would let a startup incorporated in one member state operate everywhere else through one fully digital registry, a harmonised dashboard and standard investment documents such as the proposed EU-FAST (Europe's answer to U.S. SAFEs)⁵⁵. The idea has won backing from founders of Stripe, Wise and Bolt, heavyweight VCs like Index and Sequoia, and even Commission President Ursula von der Leyen, who pledged to table a legislative proposal by 2025.

France Digitale's accompanying non-paper fleshes out the concept: a regulation (not a directive) would establish an online-first, mobile-first, API-first corporate sta-

tus with minimal share-capital requirements, a single employee-stock-option regime, and due-diligence processes that can be completed 100 % online. **By stripping away the "27 different hurdles" that currently slow cross-border expansion, the 28th Regime is intended to give European scale-ups a clear path to become global champions and a label that inspires investor confidence across jurisdictions**⁵⁶.

Particularly for Deep Tech, this project proposes to adapt its subsidy rules to the realities of Deep Tech's growth cycles. Under current EU state-aid regulations, any firm whose equity falls below 50 % of capital is deemed an "undertaking in difficulty" and barred from receiving public subsidies. That threshold collides head-on with the business model of Deep Tech start-ups, which routinely run multi-year deficits while pouring cash into R&D long before revenue materialises. The 28th Regime blueprint therefore calls for an explicit exemption from state-aid restrictions for companies registered under the new, pan-European status—recognising that university spin-outs, biotech ventures and other science-heavy scale-ups may need five, ten or even fifteen years to break even.

55. David Cendon Garcia, EU-Inc calls on new Commission to turn the idea of a single pan-European startup entity into reality, EU-Startups.com (2024).

56. Non-paper: How can a 28th regime company status help young and innovative companies to scale in Europe?, France Digitale (2024).

Adopting a comparable carve-out in Latin America would remove a critical brake on early public support for Deep Tech ventures, align incentives with long-horizon innovation, and further reinforce the region's capacity to turn research excellence into globally competitive businesses.

This could be a rich area for further research or follow-up policy design work. While a region-wide “single startup status” is still some way off, there is already a promising basic recognition stack taking shape.

At the base, cross-border digital identity and electronic signatures are moving from pilots to practice—most visibly with Mercosur's Digital Citizen, which lets people and investors use their national digital IDs to access services across borders⁵⁷. In trade, the new mutual recognition between Mercosur and Pacific Alliance “Authorized Economic Operator” programs, signed in 2025, streamline supply chains without creating a supranational authority⁵⁸. In health, the Pan American drug-regulatory network and the single-audit program for medical devices (accepted by multiple regulators, including Brazil's) offer workable reliance models that could extend to deep-tech verticals like AI hardware, advanced materials, and robotics.

The key question is implementation, of course:

- 1 How could a LATAM model take shape in a region without an EU-style supranational authority or a shared legal backbone?
- 2 Through what vehicle would it be constituted: a multilateral treaty, a model law with opt-in adoption by national legislatures, or a plurilateral compact housed within CELAC or the Pacific Alliance, for instance?
- 3 Which institution would steward standards, updates, and dispute resolution? And what precedents in LATAM—mutual-recognition accords, model laws, or regulatory cooperation forums—can be adapted to Deep Tech?

Taken together, this is recognition without harmonization—the scaffolding for a voluntary pilot of a regional Deep Tech startup label and shared sandboxes that prioritize portable credentials, portable evidence, and portable approvals while fully respecting national sovereignty.

Down the line, the 34th Regime should also have the ability to propose policies that tackle the lack of policy incentives for Deep Tech ventures. Identified in the region, from specific policies and programs to create Deep Tech Companies and incentives to meet the demands of technological innovations (i.e., public purchases), to mechanisms to implement regulations tailored to these ventures, as identified by the Economic Commission for Latin America and the Caribbean (ECLAC) in 2020⁵⁹.

Looking ahead, we highlight some of the innovative regulatory strategies that several governments in the region are implementing to accelerate the development and scaling of Deep Tech innovations in LATAM. Rather than an exhaustive list, it aims at painting a diverse perspective of initiatives across the region that could serve as primers for the 34th Regime:

57. Uruguay facilita trámites de energía y agua para inversores brasileños con un proceso 100% digital y seguro, Uruguay VUI (2023).

58. MERCOSUR y Alianza del Pacífico dan un paso clave para agilizar la logística regional, Infobae (2025).

59. Panorama of Productive Development Policies in Latin America and the Caribbean, ECLAC (2024).



Chile



- **Directory of Deep-Tech Startups** (2022; update 2024). Education Ministry mapped 300 startups (44% biology, 43% digital) with high R&D intensity: strong post-grad talent, formal R&D units, in-house labs, patenting, and academic publishing⁶⁰. In 2024, a follow-on report further characterized Chile's Deep-Tech base⁶¹.
- **Technology Transfer Bill** (2024). Draft law to boost university-to-industry transfer via stronger IP rules and tighter academia-business links through hubs, shared labs, incubators, and accelerators⁶².



Colombia

- **Spin-off Law** (2017). Enables researchers at public universities to found companies from their science, clarifying dual-remuneration rules and easing commercialization.
- **Patent Push** (2021–2022). Science Ministry programs doubled patent applications and narrowed the resident/non-resident gap, placing Colombia 3rd in LATAM for filings in 2022⁶³.



Argentina



- **CONICET Rules** (2019). Reforms allow researchers up to a two-year leave to create technology-based enterprises, reversing earlier restrictions on company formation.
- **Entrepreneurship Law & FONDCE** (2017). Streamlined startup formation and launched a matching-funds program supporting accelerators/VCs—instrumental for backing ~79% of local deep-tech startups⁶⁴.

The objective is clear—reduce due-diligence friction for regional international capital and accelerate safe market entry for the region's most promising Deep Tech ventures.

60. Directorio EBCT, MinCiencia (last accessed 2025).

61. Tercer Estudio de caracterización de Empresas de base científico-tecnológica en Chile, MinCiencia (2024).

62. Corfo presenta nueva política pública para crear red nacional de hubs de emprendimientos de base científico tecnológica, Corfo (2024).

63. Sciencepreneurs - Deep Tech Colombia Report 2024, Olarte Moure (2024).

64. Jenny Lin, Reviving Argentina's Small Business, Perspectives on Business and Economics (2021).

The background is a solid dark blue color. Overlaid on this are several layers of wavy, ribbon-like shapes that create a sense of depth and movement. These shapes are lighter shades of blue and are arranged in a way that suggests a tunnel or a series of waves receding into the distance. The overall effect is modern and dynamic.

Public Investment

Public funding plays an essential role in the development of Deep Tech ecosystems, particularly during the early stages of research and development. Over the past decade, countries such as Chile, Brazil, Uruguay, Argentina, and Colombia have introduced a variety of public programs to foster technology-based entrepreneurship. These initiatives range from government programs aimed at increasing the number of patents to those offering millions of dollars in matching funds each year.

Such support mechanisms—public grant and incentive programs alongside angel investors—have proven vital in bridging the financing gap for deep-tech startups, allowing them to advance from early R&D phases to market entry without heavy equity dilution. In fact, public funding programs accounted for 70 % of all deep-tech financing in Brazil, as noted by EMERGE in 2024⁶⁵.

Governments have increasingly recognized that Deep Tech startups are not just about fostering innovation—they are also a vital component of national competitiveness. Namely, Costa Rica's semiconductor roadmap to attract FDI (2024)⁶⁶ and Chile's roadmap to advance its quantum technology sector with applications in mining, renewable energy, and cybersecurity⁶⁷, to name a few.

However, this heavy reliance on public programs signals an imbalance that could hinder long-term ecosystem ma-

Governments have increasingly recognized that Deep Tech startups are not just about fostering innovation—they are also a vital component of national competitiveness. Namely, Costa Rica's semiconductor roadmap to attract FDI (2024)⁶⁶ and Chile's roadmap to advance its quantum technology sector with applications in mining, renewable energy, and cybersecurity⁶⁷, to name a few.

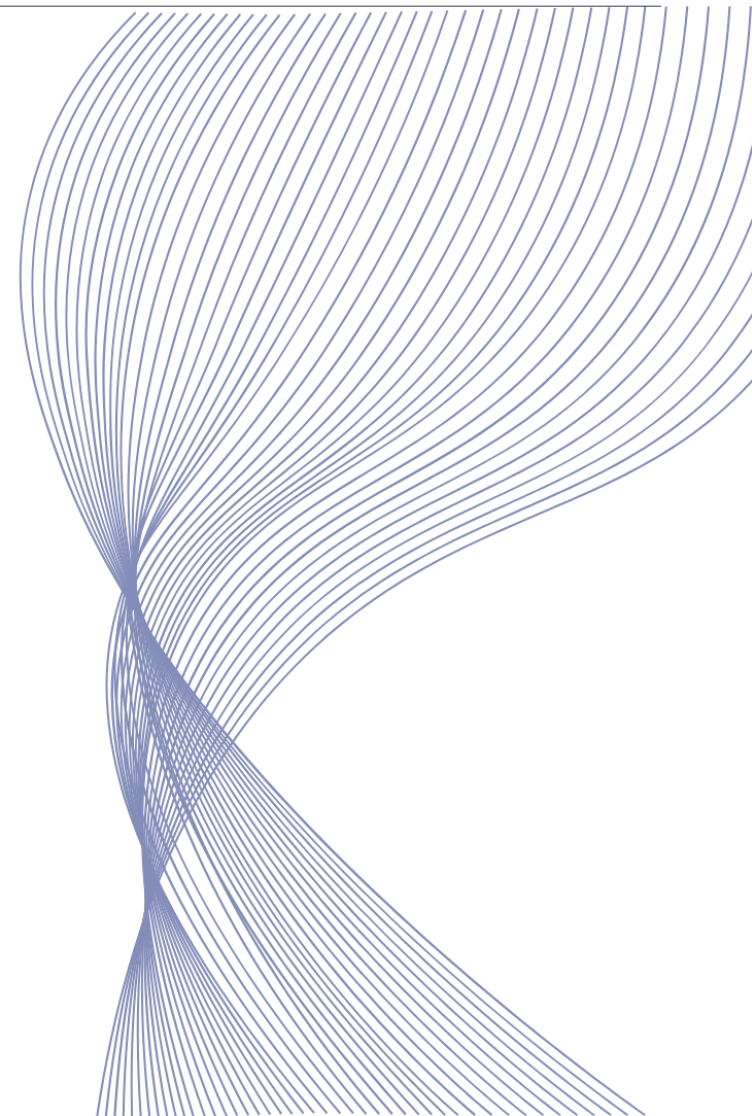
turity. In benchmark markets like the United States, the European Union and the OECD, businesses supply over 60 % of R&D funding (and in China nearly 80 %) while government shares hover around just 20–30 %. In LATAM, by contrast, the state underwrites roughly 60 % of R&D (see Graph I.3), far above its international peers, **whereas in Latin America private investors contribute only about 35 % and governments cover the remaining 60%**⁶⁸.

65. Relatório Deep Techs Brasil 2024, EMERGE (2024)

66. Costa Rica - Launched a semiconductor roadmap to attract FDI, UNCTAD Investment Policy Monitor (2024).

67. Comisión Asesora Tecnologías Cuánticas, MinCiencia (last accessed 2025).

68. Ciencia, tecnología e innovación: cooperación, integración y desafíos regionales, ECLAC (2022).



Public financing for Deep Tech typically manifests in two main forms. First, **non-dilutive grants**, which help preserve equity for founders and early investors while enhancing capital efficiency, allowing startups to advance without the burden of significant dilution. This type of funding is especially important because Deep Tech projects often require prolonged periods of research before a viable product can be developed.

In addition to grants, **matching funds** programs have emerged as another successful public financing model. Inspired by the Israeli model, governments in Argentina and Uruguay have implemented matching funds initiatives that co-invest with private venture capital and angel investors. These programs reduce the risk for private investors and also ensure that Deep Tech startups have access to the necessary capital to scale up. By matching private investment, these initiatives create a multiplier effect that accelerates innovation and supports the growth of Deep Tech ecosystems.

Yet, an intriguing question emerged: **is the challenge one of increasing the amount of funding, or is it about improving the quality and efficiency of the available resources?**

The public sector's core role should be to complement

Is the challenge one of increasing the amount of funding, or is it about improving the quality and efficiency of the available resources?

and de-risk private deep-tech investment through targeted innovation programs—such as matching-fund schemes, special economic zones, shared labs and applied R&D grants—while simultaneously advancing the regulatory and institutional framework via robust technology-transfer laws, empowered local economic-development corporations, STEM education initiatives and streamlined permitting processes. Although Latin America already hosts promising examples in Chile, Argentina, Brazil and beyond, these instruments remain too fragmented and limited in scale. **Scaling them up and weaving them into a coherent, region-wide playbook will be essential to convert today's promising pilots into a truly mature Deep-Tech ecosystem.**



The Case of Biotech in Brazil: Broad but Shallow Public Funding

The biotech sector in Brazil is particularly noteworthy, standing out as one of the most mature Deep Tech ecosystems in the region. Remarkably, this sector represents almost 60% of biotech startups across Latin America. Various public funding programs, such as PIPE FAPESP and FINEP have been instrumental in this growth⁶⁹.

However, despite these significant investments, participants of this research pointed out that the grants provided through public programs still tend to be “low-ticket funding”, as these amounts are insufficient to fully meet the substantial R&D and laboratory setup needs essential for scaling Deep Tech innovations in biotechnology.

The report’s authors clearly recommend strengthening and continuing established public programs such as MCTI, Centelha (FINEP), Catalisa (SEBRAE), PIPE (FAPESP), and EMBRAPII to support Deep Tech innovation.

Similarly, Brazilian investors interviewed for this report suggested that **rather than increasing the number of public funding rounds, the focus should be on increasing the funding amounts per round**. This approach would enable startups to secure the larger capital injections needed to fully support their R&D and scaling efforts, ultimately boosting the sector’s growth and competitiveness.

Although replicating this analysis in other countries across the continent is challenging due to the overall lack of maturity in their Deep Tech ecosystems outside of Brazil, it can serve as a valuable roadmap for developing nations. Adopting strategies that not only strengthen existing public programs but also increase the funding amounts per round could be key to driving growth and enhancing technological competitiveness in regions still in their early developmental stages.

Institutions & Programs for R&D in Brazil

- **FAPESP:** A leading state-level funding agency in Brazil, FAPESP plays a central role in supporting both fundamental research and innovation, particularly through academia-company collaborations.
- **PIPE Program:** Inspired by the U.S. SBIR model, this program funds innovative R&D in small companies based in São Paulo.
- **Cooperative Research for Innovation:** This initiative fosters structured partnerships between universities and companies. They have established programs on AI, advanced mobility and biotech, amongst others, with corporations like Shell, IBM and GlaxoSmithKline (GSK), to name a few.

- **International Research Centers:** In March 2025, FAPESP launched a \$5 million reais initiative to boost São Paulo’s Deep Tech global competitiveness by developing scientific research institutions, focusing initially on a biology center for immune and inflammatory responses.
- **FINEP (Brazilian Innovation Agency):** Linked to the Ministry of Science, Technology, and Innovation (MCTI), FINEP is Brazil’s main federal-level public financier of business R&D and innovation.
- **Fundo Nacional de Desenvolvimento Científico e Tecnológico:** Launched in 1969, and reestablished in 2016, it promotes legislation for Deep Tech and non-refundable grants.
- **Mais Inovação Program:** Launched in 2024, this is a flagship federal program offering non-reimbursable grants and credit for R&D-intensive companies in areas such as health, energy, ICTs, and sustainability.
- **Private R&D Center Attraction Incentives:** In partnership with Brazil Development’s Bank (BNDES) FINEP is offering 500 million dollars in funding to incentivize multinational and national firms to set up R&D hubs in Brazil, reinforcing local innovation ecosystems.

69. Brazil Biotech Report, Endeavour (2024).

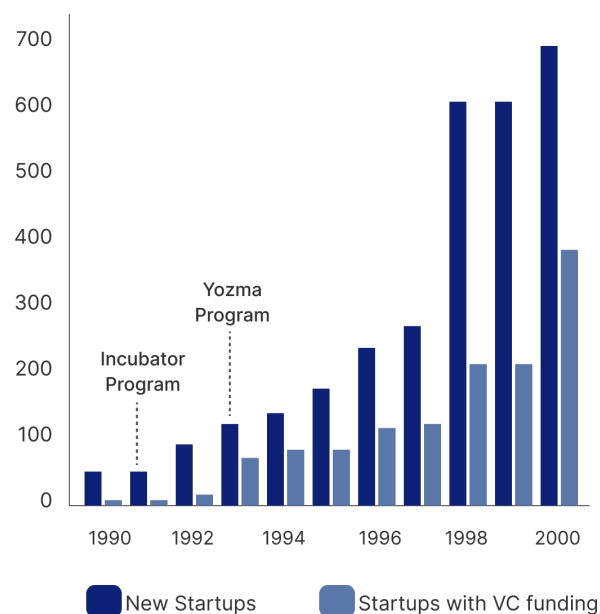
Matching Funds in Argentina, Chile & Uruguay

Matching-fund schemes address the well-known market failure of private underinvestment in innovation by co-investing public capital alongside private sector resources. Under these programs, **a government body provides reimbursable grants or low-interest loans to R&D projects, accelerators, or VC funds—typically covering 40–60% of eligible costs—on the condition that private partners supply the remainder.** This structure aligns incentives, enforces rigorous project validation (since private capital is at stake), and creates a self-sustaining cycle: successful projects repay the public coffers, while failures equally burden both sides, minimizing bureaucracy and maximizing agility.

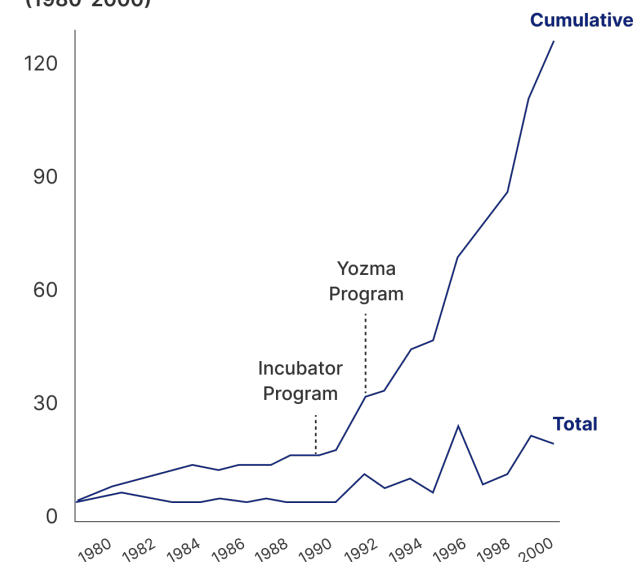
Israel's resurgence from the economic crisis in the mid-1980s owes much to three flagship matching funds. **The 1985 R&D Law reimbursed up to 50% of corporate R&D, catalyzing over 1,000 projects annually and lifting private R&D spending to 4% of GDP.** The 1991 Incubator Program leveraged US\$600 million to underwrite 24 private incubators, fueling 1,700 startups with a 40% survival rate and US\$3.5 billion in follow-on investment. Finally, the 1993 Yozma Program injected US\$100 million into ten VC funds (40% public, 60% private), sparking a domestic venture industry that now manages over US\$10 billion and has generated more than US\$80 billion in value creation⁷⁰.

Impact of Israel matching funds programs on startup creation

Startups created in Israel each year (1990-2008)



Israeli startup IPOs in NASDAQ (1980-2000)



Source: IDB, Deep Tech: The New Wave

70. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

It's important to note that Israel's matching-fund playbook is an extension of its security doctrine: **the state has long viewed scientific R&D as a strategic buffer against regional threats, integrating the Israel Defense Forces (IDF) with the civilian tech sector to maintain a qualitative edge.** In fact, mandatory service in elite IDF tech units—especially 8200 and 81—funnels thousands of engineers who have already tackled real-world defense challenges into the civilian economy; Unit 8200 alumni alone have launched 1,000-plus start-ups, many in cybersecurity and other dual-use Deep Tech fields⁷¹.

This perpetual talent flywheel has created what analysts describe as a singular “military-technology complex”—one in which prototypes are stress-tested by the IDF and then spun out into global markets at speed. In that context, the state's flagship matching-fund schemes (R&D Law, Incubator Program, Yozma) function not only as market-failure correctors but as deliberate extensions of a security-driven industrial policy: public capital de-risks the earliest stages, private investors pile in once battlefield-validated, and the proceeds feed back into both defence and commercial innovation⁷².

In the Latin American context, a comparable large-scale public-private mobilization would require different rationales aligned with domestic strengths and priorities,

like natural-resource-based innovation, climate adaptation, biodiversity protection, public health, biosecurity or logistics and trade facilitation.

Inspired by Israel, **Argentina's 2017 Entrepreneurs Law established FONDCE (“Fund of Funds”)** to underwrite both science-based accelerators and early-stage VCs with reimbursable, interest-bearing loans and partial operating grants. It also simplified company formation—allowing startups to incorporate in under 24 hours—and reduced red tape. Within two years, five Deep Tech accelerators backed by FONDCE had invested in 79% of Argentina's investor-funded Deep Tech ventures, demonstrating outsized startup creation relative to regional peers.

Chile's Economic Development Agency (CORFO) has deployed matching-fund programs since the early 1990s to correct private underinvestment in innovation⁷³. Through its flagship **FONTEC (now under the Innova umbrella), CORFO provides reimbursable grants covering 40–65 % of private R&D costs**, backing thousands of business-innovation projects and fostering university-industry collaboration.

Complementing this, the FONDEF fund co-finances pre-competitive joint R&D between academia and firms, further strengthening Chile's Deep Tech research

base. Alumni include ventures like **NotCo**—which leverages AI for plant-based food innovation, one of the biggest Deep Tech —and **Autofact**, a data-driven automotive analytics platform, illustrating the program's reach and impact.

In 2022 Uruguay enacted Law 20.075—formally approved in 2023—to kick-start Deep Tech ventures by prioritizing advanced digital platforms, biotechnology, and green-tech innovations. Building on this mandate, in May 2024 the government inaugurated the Uruguay Innovation Hub (UIH) as a public-private collaboration nexus, with laboratory space, pilot programs, mentorship tracks, and grant-based resources designed to help early-stage startups scale cutting-edge technologies.

Concurrent with the UIH launch, the government allocated US \$10 million for a 1:1 matching-funds program under UIH's management⁷⁴. Under this scheme, vetted venture-capital firms and angel investors co-invest alongside UIH via convertible notes, with disbursements tied to clear technical and commercial milestones. Early participants—including biotech pioneer **Horizonte Biotech**, AI analytics startup **EcoSense Technologies**, and cleantech innovator **GreenWave Analytics**—have already leveraged these co-investments to accelerate R&D, validate prototypes, and expand into regional markets⁷⁵.

71. Nir Reuven, Is Israel the “Start-Up Nation” Because of Its Unique Security Situation?, BESA Center (2023).

72. Anchal Vohra, Israel's Military-Technology Complex Is One of a Kind, Foreign Policy (2023).

73. Early Stage Tech Fund, Corfo (last accessed 2025).

74. Programa de matching funds: el nuevo instrumento del UIH, UIH (last accessed 2025).

75. Microsoft and Harvard Recognize Uruguay as an Innovation HUB, Uruguay XXI (2024).

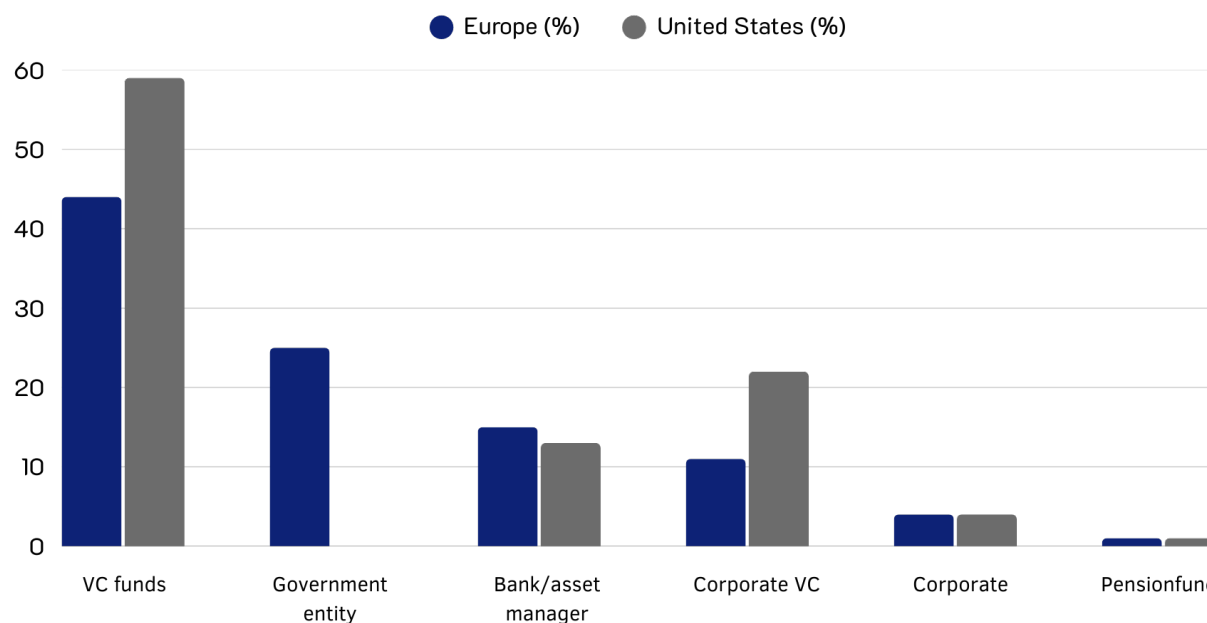
Pensions: A Fund-of-Funds for Domestic Deep Tech

Pension funds should be part of the conversation on Deep Tech financing in Latin America. They are among the region's largest pools of patient capital, yet much of that capital is deployed abroad rather than into domestic innovation. Unfortunately, beyond isolated remarks in private interviews for this report, we found no co-ordinated effort to bring pension trustees, supervisors, and Deep Tech managers around a shared investment architecture.

Global benchmarks clarify both the feasibility and the urgency. Across Europe and the United States, pension funds account for under 5% of the top-50 Deep Tech investors by deal count by 2024—well behind VC funds, government entities, and corporate VCs⁷⁶. Even so, **their presence—however small—demonstrates an investable foothold and a clear policy lever.**

For the authors of the 2024 State of European Tech Report, the strategy is clear: redirecting even a small share of pension assets currently invested outside the EU could unlock the patient capital needed to seed and scale Deep Tech. While this step-change is challenging, it would narrow the funding gap, strengthen Europe's competitiveness, and create a more reliable, end-to-end capital pipeline across stages⁷⁷.

Distribution (%) of top 50 Deep Tech investors by deal count and investor type, 2015 to 2024YTD



Source: State of European Tech Report, Atomico

76. State of European Tech Report, Atomico (2024).

77. State of European Tech Report, Atomico (2024).

The 2025 “CERN for AI” white paper, authored by the European Union, which lays out a roadmap for a pan-European organization to accelerate the AI ecosystem, also points to European pension to unlock key, patient capital to seed and scale the initiative⁷⁸. And In the United Kingdom, the idea is also entering the mainstream media⁷⁹.

Most importantly, the UK’s **Mansion House** policy reforms are already putting this approach into practice—and France’s **Tibi** initiative goes even further by setting clear commitments for institutional investors, including pension funds, to channel capital into French tech. Under Tibi’s first phase (2020–2022), institutional investors committed **€6.4 billion** to approved funds. In its second phase, the French financial marketplace projects **€40–50 billion** in technology funds under management by **2026**, with the potential to support **~15 late-stage funds** each managing **over €1 billion**⁸⁰.

While precise figures are hard to aggregate across LATAM, a useful order-of-magnitude comes from the OECD: in Chile, Mexico, Brazil, Peru, and Uruguay, pension AUM total roughly US\$1 trillion. Redirecting even 1% of that would mobilize USD 10 billion for domestic Deep Tech⁸². Even a smaller slice would be catalytic for the region’s Series A–C financing gap.

This 1% would represent about four times the USD2.5 billion deployed into LATAM Deep Tech since 2018—enough to turn today’s funding bottleneck into an investable pipeline and signal that the region is ready to scale on its own terms.

Recommendation: A Fund-of-Funds Path for Patient Capital

A coalition-led strategy can change the frame: **instead of treating pensions as distant spectators, invite them—prudently and voluntarily—into vehicles that channel a small share of assets toward local R&D and Deep Tech**, without compromising fiduciary duty. As demonstrated by Europe, even a modest reallocation would be catalytic.

To turn this flag into a program, targeted advocacy and policy-design work are needed. Immediate priorities are to specify investable vehicles that fit fiduciary mandates, map the regulatory tweaks that would enable pilot allocations, and define safeguards that protect senior pension tranches.

Governments should take the lead in mobilizing long-horizon capital for Deep Tech. A practical approach is establishing a public-anchored Fund-of-Funds (FoF). **By pooling public-sector balance sheets, including**

mutual insurance and pension funds, into such an FoF, governments can set an example. This FoF would then commit to independent managers through clear, competitive mandates, drawing inspiration from the 2018 Tibi report where this policy was initially outlined in France⁸³.

The UK’s Mansion House Accord (May 2025) has already taken this French policy as first step. Proposed in May 2025, they have pledged to allocate 10% of pension provided portfolios to private markets by 2030, with at least 5% ring-fenced for UK assets—framed as voluntary, fiduciary-aligned, and monitored.

Complementing this, the BVCA’s 2025 expert panel proposes a UK “NOVA” program, modeled on Tibi, to accredit eligible venture/growth funds and stand up an FoF—steps LATAM can mirror with development banks and multilaterals⁸⁴.

Adaptation to the LATAM context is essential—whether executed nationally or via a regional platform. And while this is a long-term play, the near-term gap is clear: institutional investors often lack Deep Tech expertise. The immediate recommendation is to start there—educate privately and convene publicly—so that signal and structure reinforce each other.

78. Building CERN for AI, Centre Future Generations (2025).

79. Ian Lane, ‘Deeptech sector primed to benefit from pensions investment proposals’, FTAdviser (2025).

80. The Tibi Initiative : Phase-2 and Perspectives, DG Trésor (2024).

81. Phillip Tibi, Financing the Fourth Industrial Revolution: Solving the financing grid-lock for technology companies, French Ministry of Economy and Finance (2018).

82. Pension Markets In Focus: Preliminary 2024 data - June 2025, OECD (2025)

83. Phillip Tibi, Financing the Fourth Industrial Revolution: Solving the financing grid-lock for technology companies, French Ministry of Economy and Finance (2018).

84. Pensions & Private Capital Expert Panel, BVCA, 2025.

Shared R&D Infrastructure

From quantum rigs and petabyte-scale AI clusters to secure blockchain nodes and biotech wet-labs, Latin American innovators converge on one persistent bottleneck: the region's limited supply of specialised, capital-intensive R&D infrastructure.

Governments have begun to chip away at the gap and the results are visible. Brazil now boasts **11 active biotech hubs**⁸⁵, Chile at least **three**, Uruguay at least **seven**⁸⁶, and Argentina at least **one**. Yet the region is still scratching the surface of what is needed; a concerted push to expand shared facilities and pilot plants could unlock far more research spin-outs and shorten the time from lab bench to market-ready product.

Recommendation: Expand and Replicate

Build on the early successes of national programs by doubling down on open-access labs and pilot plants—expanding their capacity, replicating proven models in new countries, and coordinating investments region-wide—so that every Deep Tech venture in Latin America can tap world-class facilities without prohibitive upfront costs.

- **Parque de Innovación de Buenos Aires (Argentina):** Urban innovation district under development that spans 12 city blocks and 340,000 m², uniting universities, research centers, co-working spaces, and startups in a vibrant ecosystem designed to boost research, entrepreneurship, and collaboration.
- **Startuplab.01 (Chile):** CORFO and Fundación Chile launched Staruplab.01, a shared lab and cowork space for Deep Tech startups focused on climate tech, specifically. It is supported by the International Development Bank, and has partnered up with key players in the region, like GridX, for its programs⁸⁷.
- **Patagonia Biotech Hub (Chile):** In September 2024, another shared lab and cowork space was launched, specifically for biotech startups. It was backed by the Ministry of Science, in collaboration with local authorities and academia⁸⁸.
- **CBT SOFOFA HUB (Chile):** The Translational Biotechnology Center (CBT) is a Chilean initiative aimed at accelerating the adoption and scaling of biotechnology solutions across various industries, including biomedicine, mining, aquaculture, forest-

Brazil now boasts 11 active biotech hubs⁷⁷, Chile at least three, Uruguay at least seven⁷⁸, and Argentina at least one

ry, and agriculture. It offers networking opportunities, and academic and entrepreneurial training, in partnership with top academic, public and private institutions in Chile.

- **New Lab (Uruguay):** Newlab's first LATAM hub—a partnership with Uruguay's innovation agency (ANII), Globant, UPM and other corporates—offers state-of-the-art prototyping labs, pilot testbeds and venture programs inside Montevideo's new Innovation Campus, serving climate-tech, advanced materials, bio- and digital-tech startups and connecting them with capital, industry partners and international markets⁸⁹.

85. Brazil Biotech Report, Endeavour (2024).

86. Open Labs, Uruguay Innovation Hub (last accessed 2025).

87. StartupLab 01, Fundación Chile (last accessed 2025).

88. En Puerto Varas se inauguró "Patagonia Biotech Hub": el Primer Centro de Innovación Biotecnológica, El Heraldo Austral (2024).

89. Newlab, Newlab (last accessed 2025).

09.

Social Clusters: International Cohorts & Ecosystem-as-a-Service

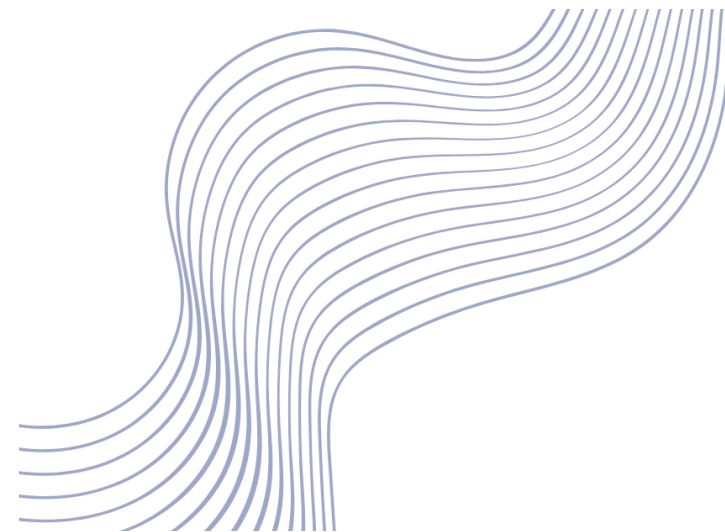
Beyond capital availability, infrastructure and regulatory frameworks, Latin America's Deep Tech transformation depends on systematically building social clusters, dense networks connecting researchers, entrepreneurs, investors, and institutions that enable knowledge transfer and risk mitigation at commercial scales. **These networks form the invisible "relationship architecture" that converts research breakthroughs into scalable ventures, without them, even breakthrough innovations can remain trapped in laboratories.**

The Network Infrastructure Gap

Scientific talent abundance means little without connection infrastructure. A study of Chilean biotech firms revealed that **almost half of the business links(47%) originated from personal connections** and that professional and academic environments are highly important for creating these links⁹⁰. Similarly, analysis of global tech hubs shows that **serial entrepreneurs and investors serve as crucial "ecosystem connectors,"**

with individual network brokers linked to up to 15 different ventures simultaneously.

Silicon Valley's success stems partly from its 60+ annual tech conferences creating "temporary townships" of concentrated interaction, while Cambridge UK's cluster generates £18 billion annually through systematic face-to-face networking events⁹¹⁻⁹². Israel's innovation ecosystem produces one startup for every 1,400 citizens largely because military alumni networks create pre-established trust relationships that accelerate deal flow and knowledge sharing⁹³. Berlin adds yet another model: its rise as Europe's fastest-growing startup hub was driven less by capital abundance than by grassroots density. With 40,000 business registrations annually and nearly half of its founders from abroad, Berlin leveraged affordability, cultural openness, and hundreds of informal meetups to build critical mass. Only after this community infrastructure matured did capital follow by 2021 Berlin startups raised over €10 billion in funding, surpassing London⁹⁴.



Latin America has systematically underinvested in this relationship infrastructure. **Past programs provided capital and services but failed to establish enduring networks, causing knowledge leakage and preventing ecosystem self-reinforcement.** Strategic interventions in Chile and Colombia demonstrate how targeted network-building transforms isolated talent into synergistic innovation clusters.

90. Carmen Contreras Romero, Personal and business networks within Chilean biotech, Industry and Innovation (2018).

91. Bastian Lange & Suntje Schmidt, Entrepreneurial ecosystems as a bridging concept, Growth and Change (2021).

92. The Cambridge Cluster, Cambridge Network (last accessed 2025).

93. Israeli Innovation Ecosystem, Startup Nation Central (last accessed 2025).

94. Startup Capital Berlin, Business Location Center (last accessed 2025).

Contrasting Network Formation Models

Chile's External Integration Strategy

Start-Up Chile (SUC), the country's flagship accelerator program launched in 2010, is widely recognised as Latin America's most successful public innovation initiative. It pioneered an "import and mingle" model, offering equity-free \$40K grants plus one-year visas to foreign entrepreneurs who relocated to Santiago. **Crucially, it enforced mixed cohorts, a socio-psychological mechanism that encouraged interaction between Chilean and foreign teams**⁹⁵.

By design, this model was meant to transfer global start-up know-how—how to search for customers, test hypotheses, negotiate with investors—while instantly widening Chilean founders' networks. A 2014 study found the \$40K grant was useful but non-differentiating for foreign and domestic founders. The real divergence was peer learning: only 16% of foreign founders named it their primary source of value versus 45% of domestic founders. In plain terms, **local founders extracted more actionable knowledge from cohort interactions**.

The mechanism can be intuitive, the authors of the report state. Lower-confidence entrepreneurs are more likely to observe, imitate, and internalize the concrete

behaviors modeled by credible peers (role-model effects), especially when those behaviors are repeatedly reinforced in shared workspaces and milestones.

It's important to frame this psychology carefully. This is not "copying foreigners" because Chileans lack confidence; it is structured exposure to role models who operationalize global norms and tactics that are harder to learn from manuals—timeboxing experiments, instrumenting funnels, converting warm intros, or navigating term sheets. SUC's bet was that imported know-how could become shared know-how if you engineered the right social collisions—and the data suggest it worked.

Results exceeded expectations: 3,000+ startups from 85 countries entered SUC, and collectively generated over \$1 billion in collective sales and raised \$1.2 billion in follow-on funding⁹⁶. The influx of talent put "Chilecon Valley" on the global innovation map, while 68% of Chilean founders reported changing their financing strategies after engaging with international peers.

Alianza DeepTech Colombia

Colombia pursued systematic domestic network strengthening through the Alianza DeepTech Colombia, designed as a private Ecosystem-as-a-Service (EaaS) model. The Alianza DeepTech Colombia has united 31

stakeholders, universities, corporations, government agencies, under coordinated action commitments: joint research projects, cross-institutional mentorship, sector-specific working groups, and unified policy advocacy. So far, it has mapped and strengthened the existing social web among science-based entrepreneurs⁹⁷.

Among a wider mix of public and private efforts, **early signals are encouraging for this ecosystem-as-a-service (EaaS) player**. The 2024 DeepTech Colombia report—without attributing causality to any single program—documents 56% year-over-year growth in Deep Tech startups (now 56 active companies), 500+ new jobs, \$60 million in fresh investment, and \$800+ million in total ecosystem value. It also notes near gender parity (49% female founders) and a geographic concentration in Bogotá (47%) and Medellín (33%), where research institutions and face-to-face networks are densest⁹⁸.

Colombia's alliance shows that intentional domestic network-building can rapidly scale a deep-tech community. These deep-tech firms now have visible success stories and the rising jobs base is attracting more engineers and scientists⁹⁹. Rather than relying on one program or funding round, Colombia's multi-stakeholder structure has aligned universities, small and medium-sized enterprises, and government agencies in a single value chain.

95. Michael Leatherbee, Boulevard of Broken Behaviors: Socio-Psychological Mechanisms of Entrepreneurship Policies, Social Science Research Network (2014).

96. Startup Chile, Startup Chile, (last accessed 2025).

97. Sciencepreneurs - Deep Tech Colombia Report 2024, Olarte Moure (2024).

98. Sciencepreneurs - Deep Tech Colombia Report 2024, Olarte Moure (2024).

99. Sciencepreneurs - Deep Tech Colombia Report 2024, Olarte Moure (2024).

Value Generation Through Networks

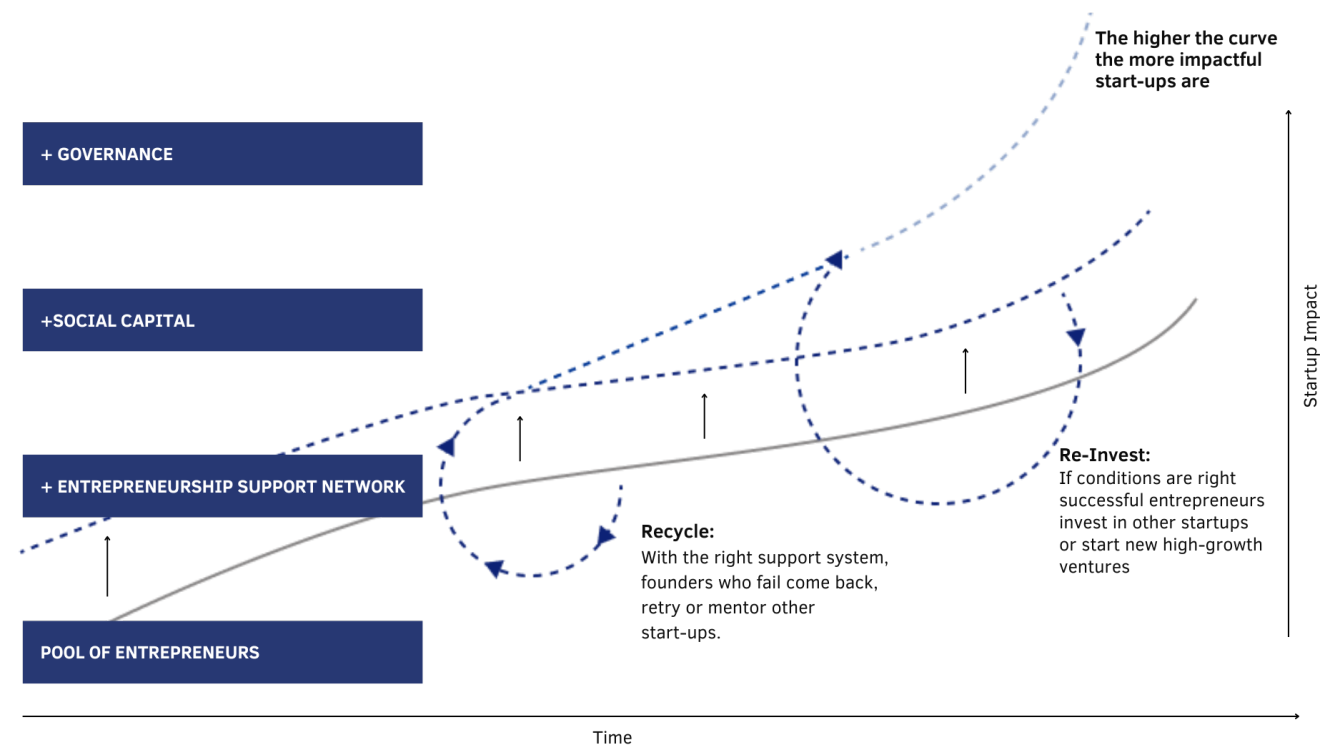
Across both models, and in global analogues, the advantages of social clustering are clear and measurable. Dense networks accelerate knowledge spillovers. Ideas and technical insights flow far faster through personal ties than through journals or conferences alone¹⁰⁰.

More specifically, dense networks create measurable economic advantages through four primary mechanisms:

- **Accelerated Knowledge Spillovers:** Technical insights flow faster through personal relationships than formal publications. For instance, face-to-face interactions transfer tacit knowledge, equipment operation tricks, failure pattern recognition, market timing intuition, that never appears in academic papers but determines startup success¹⁰¹.
- **Risk Mitigation:** Trusted network referrals reduce investor due diligence costs while improving deal quality¹⁰². When an investor learns about a startup through a trusted contact or local mentor network, they gain informal information that supplements formal due diligence.
- **Resource Bundling Efficiency:** A startup needing specialized equipment, legal advice, and a pilot customer can often find all three through cluster connections. In engineering hubs (e.g. aerospace or AI),

The ecosystem nutrition cycle

How the ecosystem helps entrepreneurs to outgrow their limits



Source: A self-assessment tool for ecosystem builders, Swisscontact

100. Bastian Lange & Suntje Schmidt, Entrepreneurial ecosystems as a bridging concept, Growth and Change (2021).

101. Christina Guenther et al., Referrals among VCs and the length of due diligence: The effect of relational embeddedness, Journal of Business Venturing (2022).

102. C.P. Eveleens et al., How network-based incubation helps start-up performance: a systematic review against the background of management theories, The Journal of Technology Transfer (2016).

this means assembling domain experts, grant money, and manufacturing partners much faster than if each entrepreneur had to start cold. Empirical studies of incubators confirm that network-based support tends to improve venture performance by granting access to learning and social capital¹⁰³. In practice, Colombia's DeepTech alliance reports exactly this: **targeted channels for funding (venture capital roadshows), talent (university placements), and markets (industry partnerships) have made each cent of public support more productive.**

- **Self-Enforcing Ecosystem Loops:** Each entrepreneurial success, whether through startups, exits, or spin-offs, feeds back into the ecosystem, strengthening its foundations. These achievements generate new social capital, attract investment, and nurture talent. Over time, as experienced founders mentor others or reinvest in new ventures, a culture of "giving back" takes root¹⁰⁴. This dynamic resembles an Ecosystem Nutrition Cycle, where resources and experiences circulate, compounding benefits and steadily raising the ecosystem's maturity and resilience.

Lessons for Latin America's Deep Tech Ecosystems

Latin America's Deep Tech trajectory demonstrates that capital and regulation, while necessary, are insufficient without the social architecture that allows ecosystems to compound. Experiences from Chile, Colombia, and global innovation hubs underscore a common theme: ecosystems thrive where networks are deliberately built, continuously reinforced, and institutionally anchored. The following lessons highlight the structural elements **Latin America must prioritize, continuity, domestic alliances, and density, followed by an implementation framework tailored to regional realities.**

Continuity and Follow-Through

Isolated interventions create sparks but rarely sustain momentum. Programs that bring in foreign talent or inject capital can generate visibility, yet without follow-through they risk becoming transient episodes. Chile's Start-Up Chile illustrates this: while it successfully imported global know-how, the absence of retention and institutional anchoring meant that most of the value dissipated once participants left. **Ecosystem growth requires continuity—follow-up mechanisms that extend beyond the program cycle to**

Durable ecosystems emerge when local actors coalesce around shared goals. The lesson is that ecosystems cannot rely on episodic initiatives or external actors alone. Domestic alliances institutionalize trust, concentrate resources, and create the connective tissue that enables Deep Tech ventures to scale.

embed knowledge and relationships into the local innovation fabric.

Domestic Alliances

Durable ecosystems emerge when local actors coalesce around shared goals. Colombia's Alianza DeepTech demonstrates the power of structured collaboration: universities, firms, and government agencies aligning under joint commitments and measurable KPIs transformed a fragmented landscape into a nationally visible cluster. The lesson is that ecosystems cannot rely on episodic initiatives or external actors alone. **Domestic alliances institutionalize trust, concentrate resources, and create the connective tissue that enables Deep Tech ventures to scale.**

103. C.P. Eveleens et al., How network-based incubation helps start-up performance: a systematic review against the background of management theories, The Journal of Technology Transfer (2016).

104. Benjamin Meier et al., A self-assessment tool for ecosystem builders, Swisscontact (2021).

The Density Dividend

Global examples confirm that density (the frequency and intensity of interactions) drives innovation outcomes as decisively as funding. Silicon Valley's constant churn of conferences, Cambridge's deliberate face-to-face networking, and Israel's trust-based alumni networks show how repeated interaction lowers transaction costs, accelerates tacit knowledge transfer, and amplifies deal flow. For Latin America, the insight is clear: **capital must be complemented by recurring spaces of interaction that allow ideas, talent, and capital to circulate with speed and trust.**

Implementation for Latin America

These lessons converge on a hybrid framework. First, prioritize continuity by embedding retention incentives, tracking mechanisms, and institutional anchors that prevent knowledge leakage. Second, formalize domestic alliances that unite universities, corporations, investors, and government agencies under coordinated structures with shared objectives. Third, cultivate density through recurring interaction platforms –monthly meetups, flagship summits, and sector-specific convenings—that replicate the “density dividend” of global hubs. By embedding continuity, alliances, and density into policy design, Latin America can transform isolated scientific talent into enduring, self-reinforcing Deep Tech ecosystems.

Corporate Venture Capital

10.

CVC: Matchmaking Bridges & Observatory

Corporate venture capital (CVC) has emerged as a linchpin for accelerating private-sector R&D, helping nations close the gap between fledgling ideas and market-ready technologies. Corporate venture capital refers specifically to corporate-backed VC arms—venture capital funds directly operated by established corporations using their own balance-sheet capital. This differs fundamentally from traditional venture capital, which manages external limited partners' (LPs) funds with a primary focus on financial returns.

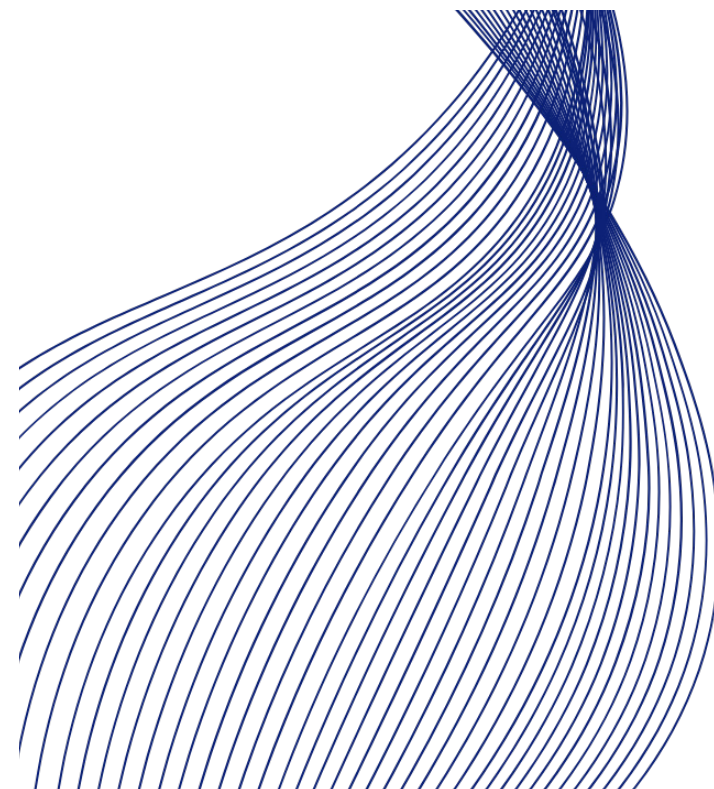
While both models carry the “venture capital” designation, they operate with distinct logics and objectives. Traditional VCs are primarily accountable to their limited partners (LPs) for financial performance, while **CVCs pursue dual objectives: financial returns alongside strategic benefits such as access to emerging technologies, new markets, talent acquisition, and organizational learning.** This makes CVC units the corporation's “eyes and ears” in the external innovation ecosystem, providing strategic intelligence that purely financial investors cannot match¹⁰⁵.

CVC sits within a wider corporate-venturing toolbox

CVC sits within a wider corporate-venturing toolbox that includes incubators, accelerators, venture clienting, strategic partnerships, tech scouting and challenge prizes.

that includes incubators, accelerators, venture clienting, strategic partnerships, tech scouting and challenge prizes. The most effective programs pair investment with privileged assets—distribution, data, domain experts, regulatory know-how, and facilities for pilots. CVC typically takes three main shapes:

- **Equity investments** via dedicated corporate funds
- **R&D partnerships**, where startups receive financing in exchange for co-developing new products
- **Licensing agreements** that provide non-dilutive revenue streams while preserving startups' core IP.



105. Unlocking Innovation through Corporate-Startup Collaboration, Hello Tomorrow (2025).

Global Benchmark

Globally, the trend is unmistakable. High-net-worth individuals—among them Bill Gates—are channeling sizable capital into frontier startups, while SPAC listings have opened NASDAQ to new science-driven ventures. Major incumbents such as Pfizer, Ford, Tyson Foods, Lockheed Martin Ventures and GM are not only acquiring Deep Tech startups but also spinning up their own venture arms to scout disruptive innovation¹⁰⁶.

In fact, momentum has been building for years: globally, from 2017 to 2021, overall corporate venturing

expanded **2.8x**, corporate–Deep Tech collaborations surged **4.2x**, and the weight of Deep Tech startups in corporate venturing portfolios was expected to grow in the next five years in 71% of cases—a clear alignment between incumbents and frontier science¹⁰⁷.

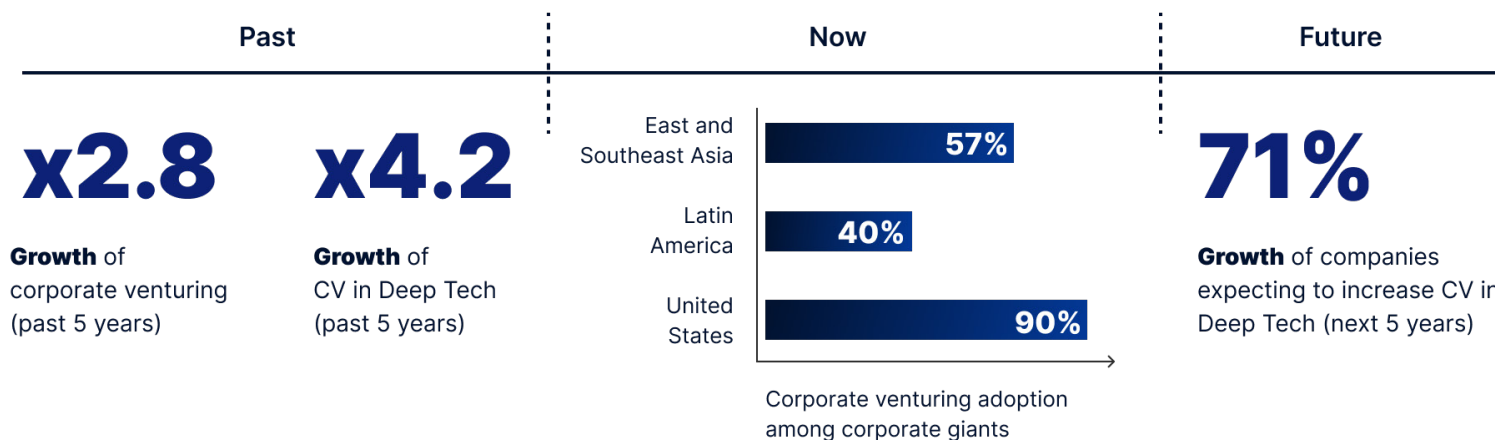
Still, momentum is uneven across regions. By 2021, about **90%** of U.S. corporates operated venture arms; **57%** of firms in East and Southeast Asia had launched CVC programs; and in Latin America, only **~40%** of companies were engaged in CVC—underscoring both the gap and the upside for the region¹⁰⁸.

In Sweden, roughly 70 percent of local startups have

secured investment from local corporate venture arms. That influence grows as companies mature—CVCs participate in about 30 percent of Series A rounds and 60 percent of Series B rounds—because the startups' platform technologies often dovetail with the strategic objectives of their corporate backers¹⁰⁹.

European evidence points the same way: Hello Tomorrow finds **lower bankruptcy rates for CVC-backed startups (~1.24%) vs. those without (~2.58%)**, suggesting corporate investors contribute more than capital—**distribution, technical validation, and procurement pathways** that improve survival odds¹¹⁰.

Corporate Venturing In Deep Tech Is Growing at Speed



IESE, How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups

106. Inter-American Development Bank, Deep Tech: The New Wave, IDB Lab (2023).

107. Josemaria Siota & M^a Julia Prats, Open Innovation How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups. The Case of East and Southeast Asia, IESE Business School (2021).

108. Josemaria Siota & M^a Julia Prats, Open Innovation How Corporate Giants Can Better Collaborate with Deep-Tech Start-ups. The Case of East and Southeast Asia, IESE Business School (2021).

109. Sara Frykstrand, Patrik Sobocki & Mattias Bertolino, Deep Tech funding landscape in Sweden, Industrifonden (2024).

110. Unlocking Innovation through Corporate-Startup Collaboration, Hello Tomorrow (2025).

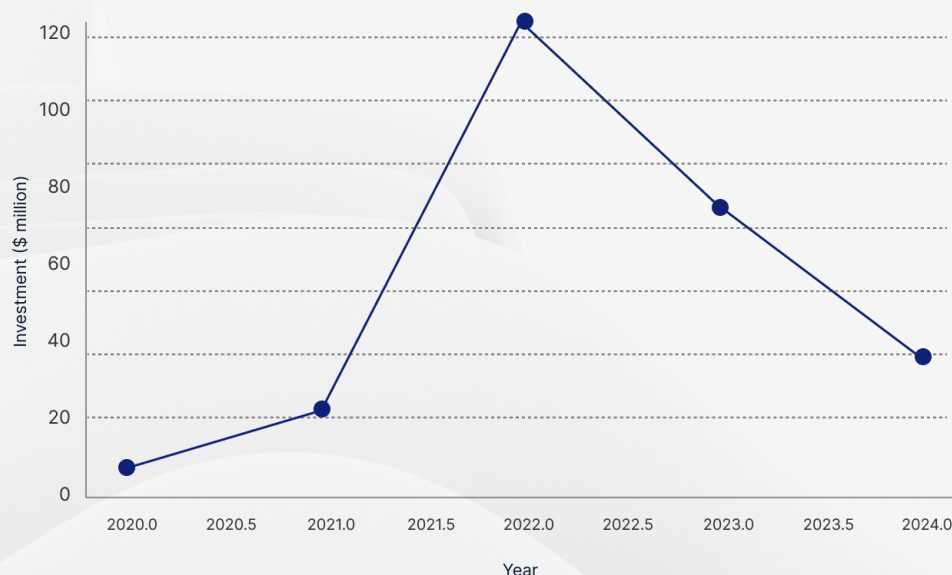
LATAM's CVC Reality Check

Latin America reveals both immense potential and limitations in CVC deployment. The region combines the weight of major local multinationals such as Cemex, Marcopolo, Grupo Bimbo, and JBS with the presence of global incumbents including Siemens, IBM, Nestlé, Pfizer, and Novartis, all of which maintain significant R&D and business operations. Together, these actors could provide a powerful foundation for scaling Deep Tech: local firms contribute market knowledge and insight into regional challenges, while international players bring advanced technologies, structured innovation programs, and global networks.

Zooming out first: the broader CVC market across all sectors reached **\$3B in 2024**, up from **\$1.5B in 2023**¹¹¹. Against that backdrop, Deep Tech remains too small to appear as a stand-alone category in most regional tallies—evidence of how early the corporate adoption curve still is in the specific niche.

Dealroom does provide statistics specific for Deep Tech in the region funding rose from \$9M in 2020 to \$119M in 2022, then retracted to \$73.9M in 2023 and \$36.5M in 2024—about 70% below the peak, yet still roughly 4× the 2020 baseline, suggesting a market recalibration

CVC Investment Trend in LATAM's Deep Tech (2020-2024)



Source: Deal Room Global Tech Ecosystem Index

after an overheated period¹¹².

The region appears to have no shortage of interested corporations, but rather a deficit of dependable avenues. **To convert laboratory findings into corporate validation, it**

is essential to establish repeatable pilot programs, foster collaborations between studios and venture capital/corporate venture capital firms, and standardize data-room documentation. This will provide clear, high-conviction opportunities for capital deployment when it returns at scale.

111. LATAM startup market 2024 in review, SlingHub (2024).

112. Global Tech Ecosystem Index 2025, Dealroom (2025).

CVC-Startup matchmaking

Amid this evolving market, a new generation of accelerators, venture studios, and consultancies are professionalizing the matchmaking process between startups and corporations. These intermediaries help founders across the region to proactively tap into international CVC networks—showcasing their breakthroughs at leading conferences and roadshows—while aligning their IP strategies, regulatory plans, and development timelines with the priorities of potential corporate partners.

Plus, regional firms like 414 Capital, Pragmatec, Bluebox, New Venture Groups and New Genesis, for instance, have incorporated corporate investment into their value propositions, offering viable alternatives for startup founders who face challenges scaling their services.

These programs help out with a problem heavily reported by our stakeholders: research participants point to an over-reliance on personal connections to secure investments. While personal ties are not considered best practice for obtaining funding, they frequently become the default mechanism in an environment where many investors lack a thorough understanding of R&D and innovation. Consequently, these personal connections often end up serving as the critical lever for unlocking larger funding rounds.

A neutral matchmaking program with transparent

intake, common NDAs, and shared data-room templates—plus quarterly demo days with pre-declared themes and clear milestone criteria—can shift the model from relationship-only to evidence-driven.

Where SMEs fit (and why they matter)

For corporates entering Deep Tech CVC, pairing with Small and Medium enterprises (SMEs) can turn abstract science into operational proof quickly, while reducing reliance on personal networks.

SMEs are the backbone of Latin America's economy, making up 99% of its firms and employing about two-thirds of the workforce¹¹³. Their agility, faster decision-making, and direct feedback loops make them a natural testbed for Deep Tech pilots in agriculture, Industry 4.0, and mobility. This makes them ideal early adopters, particularly where new technology can show quick and visible results.

This dynamic creates a compelling environment for innovation, as evidenced by pilot data. Industry 4.0 pilots have been shown to improve productivity by 10–30% and reduce waste or downtime¹¹⁴. In agriculture, pilots can raise yields and cut input use¹¹⁵.

In practical terms: **SMEs provide the short-cycle proof points corporates and CVCs want before committing larger checks.**

Illustrative Intermediaries

The Ganesha Lab: LATAM biotech accelerator bridging the funding gap via education, mentorship, and market access. It also organizes international events and “small missions” to connect startups with global networks, including early CVC access¹¹⁶.

Startuplab.01: public-private initiative based in Chile that catalyzes Deep Tech startups by providing cutting-edge laboratory infrastructure for entrepreneurs in biology and related fields. It offers hands-on technical and commercial guidance through an acceleration process, plus corporate connections¹¹⁷.

Wayra Hispam: Operated by Telefónica's innovation hub, Wayra Hispam co-invests in startups alongside TheVentureCity. It leverages Telefónica's corporate resources and networks to integrate startups into its ecosystem. Offers up to \$250K per startup in co-investments and facilitates corporate partnerships for scaling businesses regionally and globally¹¹⁸.

CMPC Venture Capital: CVC arm of a Chilean multinational, invests in sustainable innovation and next-gen materials. They led a €4.8 million seed round for Strong by Form, a Chilean startup creating wood-based bio-composites as an eco-friendly alternative to concrete and steel, to scale their growth¹¹⁹.

113. MSME Financing Instruments in Latin America and the Caribbean During COVID-19, Inter-American Development Bank (2020).

114. Industry 4.0 Opportunities Behind the Challenge, Unido (2017).

115. Eva Galvez & Giacomo Casari, Promoting the digitalization of small and medium-sized agrifood enterprises in Asia and the Pacific, Food and Agriculture Organization of the United Nations (2024).

116. The Ganesha Lab, The Ganesha Lab (last accessed 2025).

117. Startup Campus, primer hub de emprendimiento de base científico-tecnológica de Chile, Fundación Chile (2025).

118. Wayra and TheVentureCity to co-invest in Latin American Deep Tech startups, LatAm List (2019).

119. Madrid-based Strong by Form secures €4.8 million to bring a sustainable alternative to concrete, CMPC Ventures (2023).

Recommendations: A Deep-Tech CVC Bridge for LATAM

Latin America needs a neutral Deep-Tech CVC Bridge to close the gap between its most promising science-based startups and the global corporate funds that can propel them beyond Series A. With fewer regional companies operating venture arms than in other innovation hubs, founders still rely heavily on personal introductions.

A dedicated bridge—co-run by organisations like the LADP, leading accelerators and supported by a multi-lateral institution—would **organise recurring virtual pitch days and cross-border roadshows, offer a standardised CVC-ready data-room template, and maintain an open database of corporate investors and their thematic priorities.** By professionalising match-making and shortening diligence cycles, the bridge would turn sporadic encounters into a predictable pipeline of strategic capital.

The Bridge can anchor a regional CVC × Deep Tech Observatory, filling key data gaps: CVC participation, survival/attrition, time-to-next-round, procurement conversion, plus a LATAM benchmark of bankruptcy rates with vs. without CVC support in the region, as measured

This dynamic creates a compelling environment for innovation, as evidenced by pilot data. Industry 4.0 pilots have been shown to improve productivity by 10–30% and reduce waste or downtime.

in Europe by Hello Tomorrow. By releasing open, anonymized dashboards through standardized reporting, the Observatory can shift the market from relationship-driven to evidence-driven decisions.

For corporates entering the market, **CVC programs should target SME clusters in relevant sectors, keep pilots small-scope and short (8–12 weeks), and focus on one clear KPI.** Public co-funding from national or IDB/CAF programs can lower costs and speed adoption. Not every technology will fit SME testing, but where needs match — such as precision agriculture, predictive maintenance, or fleet optimization — SMEs can offer a faster, lower-risk route to market.

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How SEZs 4.0 Convert the LATAM Discount into a Defensible Edge

Written by Said Saillant, PhD. Founder of Societas Sapiens, Inc., a Santo Domingo nonprofit that drafted the Dominican Republic's national AI bill (now before the Senate) and develops SEZ and regulatory-sandbox proposals for Latin America and the UK. Collaborates with the United Nations Industrial Development Organization (UNIDO) Innovation Lab on an organization-wide AI framework. Focus: AI-SEZs, Calibrated Regulatory Autonomy, AI for industrial transformation, and middle-power diplomacy.

Contact: ssaillant@societassapiens.org

How SEZs 4.0 Convert the LATAM Discount into a Defensible Edge

Special Economic Zones (SEZs) in Latin America have proven they can attract global tech leaders. But traditional SEZs rely on tax incentives, a race to the bottom that competitors can match. The breakthrough lies in **Calibrated Regulatory Autonomy (CRA): giving SEZ authorities the power to adapt regulations in real-time while maintaining democratic oversight.**

UNCTAD defines SEZs as geographically delimited areas where governments offer a tailored regime—streamlined regulation, targeted fiscal incentives, and dedicated infrastructure—to de-risk investment and attract foreign industries. They are not fringe experiments: UNCTAD counts 5,383 SEZs across 147 economies, with China alone hosting more than half¹²¹. Its flagship zone, Shenzhen, transformed from a fishing village into a US\$510 billion tech hub generating over 11 million jobs and contributing roughly 3% of Chi-

na's GDP¹²². Latin America's top performers already demonstrate the potential.

From Tax Perks to Time Advantage: Calibrated Autonomy

Calibrated Regulatory Autonomy (CRA) means a statutory delegation that lets a zone steward modify, waive, or pilot regulatory requirements within strict guardrails. The law sets scope, non-retroactivity, transparency, service-level deadlines, appeals, and sunset or renewal. The steward issues time-boxed permissions, gathers evidence, and graduates proven conditions into standing rules mapped to external standards. The table contrasts typical LATAM SEZ practice with a CRA upgrade across governance, approvals, rule change, stability, compliance, transparency, standards alignment, talent, capital access, and disputes.

Proven Track Record

Costa Rica attracted Intel's \$1.2B+ expansion, creating 3,400+ high-skill jobs and drawing Databricks to establish operations. The Free Trade Zone regime now contributes ~15% of GDP through 265,000 jobs, returning nearly \$3 for every \$1 in tax expenditure¹²³.

The Dominican Republic operates 87 Free Zones hosting 25+ electronics leaders including Eaton and Rockwell Automation, generating \$8.1B in exports and 197,600 direct jobs. Eaton recently added an R&D Design Center in Santo Domingo¹²⁴.

Uruguay leveraged its stable democracy to attract Satellogic's manufacturing operations and Newlab's innovation hub. Twelve Free Zones support 64,000 direct jobs and achieved near-record exports in 2024¹²⁵.

These successes share a pattern: they moved beyond simple tax incentives to create predictable, adaptive regulatory and administrative environments.

121. UNCTAD, World Investment Report 2019: Special Economic Zones (2019). Chapter IV, Tables IV.2–IV.3 and p. 138: UNCTAD's inventory lists 5,383 SEZs across 147 economies; Table IV.2 reports China = 2,543 zones, i.e., just over half of the global total.

122. Shenzhen's economy reached 3.68 trillion yuan (≈US\$510 billion) in 2024, per the city's government work report; the city also reported over 11.7 million employed people as of June 2020. On that GDP base, Shenzhen contributes on the order of ~3% of China's total output (inference from the cited Shenzhen GDP figure against national nominal GDP in the same period). Shenzhen hits national firsts in 2024, targets 5.5% GDP growth in 2025, ECNS (2025); City has over 11 million employed people, Shenzhen Government Online (2020).

123. CINDE and PROCOMER FTZ Impact studies; Intel and Databricks company releases.

124. Stephen Ezel, Assessing the Dominican Republic's Readiness to Play a Greater Role in Global Semiconductor and PCB Value Chains, Information Technology & Innovation Foundation (2024);

125. Uruguay XXI reports; Satellogic and Newlab announcements; Ministry of Economy trade data.

Table 1. SEZs in Practice, CRA in Contrast¹²⁶

Dimension	Typical LATAM SEZ	CRA-SEZ (upgrade)
Governance	National Free Zone law grants fixed tax/customs incentives; many ministries handle permits; no single front door	One steward runs intake, triage, and a single appeals path under statute
Approvals	Paper shuttling; ad hoc committees; timelines swing with elections	Clocked service targets per step; inquiry→pilot ≤30 days for low/medium risk
Rule change	Decrees or laws update rules infrequently; firms wait quarters/years	Time-boxed, conditional permissions; scheduled “graduation” into SOPs
Stability	Clauses cover taxes/customs only; little on data, AI, pilots	Non-retroactivity, stability agreements, published memos cover novel uses
Compliance	General regulators apply one-size rules; no risk tiers; no pilots	Tiered evidence (test plans, monitoring, power limits); renewals depend on outcomes
Transparency	Sparse metrics; few written precedents; broker folklore guides applicants	Live dashboards, decision memos, searchable precedent library
Standards mapping	Patchy FDA/EMA/ISO alignment; exporters redo tests abroad	In-zone conformity assessment mapped to US/EU/ISO for portability
Talent	Institutes sit outside; curricula lag vacancies; weak apprenticeships	Institutes co-locate; curriculum co-design; SLAs for apprenticeships; payroll-levy co-funding
Capital access	Slow procurement; episodic CVC; nonstandard datarooms/onboarding	Standard datarooms, vendor whitelists, recurring roadshows; faster vendor onboarding
Disputes	Local courts/generic arbitration; long resolution times	Model contracts, named venues; target ≤90-day resolution

Baseline SEZs trade taxes for factories. CRA trades predictable speed and precedent for durable Deep Tech investment, which removes the priced-in LATAM discount.

126. Sources:

Gulf States. Decree-driven policymaking; PDPL carve-outs for government data and security authorities → sovereign/data-access risk. UAE Federal Decree-Law 45/2021 text; UAE gov explainer.

US/EU/UK. Multi-layer approvals and slower EU review times vs FDA; documented startup delays in multi-country trials. EMA vs FDA timelines; EU trial delay studies.

China. Longstanding pressure/requirements for tech transfer via JV, licensing, and approvals; Section 301 reports and 2024 update.

Hong Kong. New Hong Kong national-security legislation (NSL + Article 23) flagged by EU and others as affecting rights and business hub status. EU statement; AP coverage; Le Monde analysis.

The Democratic Regulatory Sweet Spot

This table benchmarks jurisdictional models against their core limits and business impacts, then shows how a LATAM SEZ with CRA counters each risk. Use it as a site-selection and policy-design guide: identify where democratic, contract-backed, fast-adapting rules deliver a competitive edge.

A LATAM SEZ with CRA pairs democratic legitimacy, contractual stability, and rapid adaptation, so it outperforms Gulf, US/EU/UK, China, and HK on innovation velocity at lower risk. Match your constraint to the left column, read the CRA response, extract the instrument. Use the table to justify a regional advantage, not just a zone choice.

Talent Infrastructure That Scales

Place training institutes inside the SEZ to lock strategic partnerships with anchor firms and the zone steward. That placement enables curriculum co-design for live vacancies, shared labs with duty-free gear, guaranteed apprenticeships, payroll-levy co-funding, fast instructor visas, skills-forecast data-sharing, standard IP/spinout terms, and direct placement pipelines into tenants. Outside the zone, institutes face fragmented gatekeepers, customs delays, weak feedback loops, and slower hiring:

Inside an SEZ, these models plug into anchor-firm MOUs with performance clauses and shared facilities, which shortens vacancy-to-hire cycles and lifts placement rates.

Jurisdiction	Core Limitation	Business Impact	LATAM SEZ + CRA Advantage
Gulf States	Policy by executive decree	Sovereign/data appropriation risk	Constitutional protections + rapid adaptation
US/EU/UK	Multi-layered compliance	Slow, expensive approvals	Streamlined processes + global portability
China	Technology transfer mandates	Closed innovation ecosystem	Open integration with global partners
Hong Kong	Geopolitical constraints	Shrinking policy autonomy	Fresh mandates + design flexibility

The unique combination: Democratic governance + contractual stability + regulatory agility.



INFOTEP. Dominican Republic. A 1% payroll levy finances custom tech courses co-designed with Free Zone tenants and delivered on-site; programs retool quickly for new lines¹²⁷.



INA. Costa Rica. Free, skills-based training in high-demand sectors; dual vocational tracks modeled on Germany's system expand firm-aligned talent¹²⁸.



INEFOP. Uruguay. With Uruguay XXI, "Finishing Schools" co-finance up to 70% of bespoke company training plans to ramp workforces for new investments¹²⁹.

127. Stephen Ezel, Assessing the Dominican Republic's Readiness to Play a Greater Role in Global Semiconductor and PCB Value Chains, Information Technology & Innovation Foundation (2024); UNESCO-UNEVOC, Funding of Training: Dominican Republic (2020).

128. Costa Rica's Law No. 9728 (2019) establishes dual technical education; GOVET, "Almost five years of dual vocational education and training in Costa Rica" (2024), and INA, "Formación Dual" (last accessed September 2025). See also OECD working paper on TVET reform.

129. INEFOP's page likewise describes the joint program and the non-reimbursable support for firm-demand training. Sources: Uruguay XXI, "Finishing Schools" and FAQ; INEFOP, "Finishing Schools."

Geopolitical Positioning—SEZ-first, ADD/CHIPS as levers

SEZs anchor nearshoring. They deliver predictable rules, fast permits, and bonded logistics. The Alliance for Development in Democracy (ADD)¹³⁰ and the CHIPS Act's International Technology Security and Innovation (ITSI) Fund play supporting roles that amplify the zone's pull¹³¹.

- **Role of ADD.** Provides a diplomatic umbrella for joint statements, supply-chain cooperation, and a private-sector channel. Use it to convene buyers, secure priority customs lanes, and publish joint procurement calls that route demand into the SEZ.
- **Role of CHIPS/ITSI.** Provides grants and technical assistance for trusted semiconductor supply chains. Use it to co-finance Assembly-Testing-Packaging (ATP) lines, metrology labs, and workforce programs inside the SEZ, and to validate compliance against US/EU standards.
- **Design moves for the SEZ.**
 1. Write the CRA statute to meet ITSI eligibility and US/EU conformity mapping.
 2. Create an ADD deal room inside the zone for

anchor tenants and financiers.

3. Pre-permit ATP and secure data facilities to shorten time-to-operate.
4. Tie institute training MOUs to CHIPS-aligned curricula and tooling.

The SEZ does the work. ADD and CHIPS reduce coordination and capital costs so the zone scales faster.

Building the Innovation Ecosystem

Having set the legal-ops engine (CRA) and the geopolitical levers (ADD/CHIPS), the SEZ now needs a demand-and-talent flywheel. The zone provides the physical hub that executes the report's ecosystem moves:

- **Investor Education.** Short, sector-specific teach-ins for LPs, CVCs, and family offices; standard data-rooms; quarterly roadshows tied to live pilots.
- **Science-Business Matchmaking.** Mapped researcher inventories, founder/operator pools, and templated IP/consulting terms; standing "clinic days" with anchor firms.
- **Annual Flagship Summit.** Demo proven pilots, pub-

lish precedent updates, and run deal rooms with ADD/CHIPS partners and export-credit agencies.

These ecosystem moves create repeat deal flow and faster learning inside the zone. With pilots, partners, and training running on clocks, CRA converts each approval into precedent and each wins into lower friction for the next. That flywheel sets up the compounding advantage that follows.

The Compounding Advantage

Traditional SEZs handle place and logistics. CRA attacks time. In Deep Tech, time gains snowball: early regulatory clarity shortens build cycles, pulls stronger talent, and converts each pilot into reusable playbooks.

The result: Latin America transforms from a discount destination into a premium platform for global innovation, one that competitors cannot easily copy because the advantage lies not in any single policy, but in the compounding returns of adaptive, democratic governance.

SEZs lay the platform. CRA supplies pace and credibility. Together they turn chronic disadvantages into a durable moat.

130. The Alliance for Development in Democracy (ADD) is a sub-regional forum created in September 2021 by Costa Rica, the Dominican Republic, and Panama (Ecuador joined in June 2022). It's an informal space for political coordination and economic cooperation among like-minded democracies, focusing on growth, human rights, rule of law, and sustainable development.

131. The International Technology Security and Innovation (ITSI) Fund is a \$500 million, five-year pot created by the 2022 CHIPS and Science Act and led by the U.S. Department of State. It finances diplomatic and programmatic efforts with allies to secure and diversify semiconductor supply chains and to advance trusted telecom/ICT infrastructure (policy, capacity-building, and targeted projects).

The background is a deep blue with a series of flowing, wavy lines that create a sense of movement and depth. A faint, stylized globe is visible in the center, partially obscured by the waves. The overall aesthetic is modern and technological.

The New Battlefronts of Tech

Why Latin America is a Lab for the New World Order

World politics is tending towards a paradox. Geopolitics is restoring Cold War dynamics, with states seeking technological autonomy that guarantees superiority over adversaries. However, national governments have scarcer means and more dependencies, on each other and on new actors such as technological multinationals. The geography of innovation has significantly changed and “No country alone can make an iPhone today,” as economist Eirc Beinhocker aptly puts it¹³².

The return of spheres of influence is taking place in a world of hardwired networks, where old alliances have become less certain, with the United States taking distance from NATO¹³³. This combination is creating new battlefronts for critical technologies, where large and small countries play a new game of appropriation versus autonomy.

This trend is evident in regions like Latin America. Many Latin American countries hold an indispensable supply of resources for the development of Deep Tech, from raw materials to energy, and new markets. Yet, they have had, so far, wasteful institutions, disjointed eco-

systems, and fragile economies to affirm themselves as strong players in global tech. Hence, they have lent themselves mostly to appropriation, giving away precious resources in exchange for basic infrastructure.

Now that there is less West and more Rest in geopolitics, how will resource-rich places like Latam realign to the emerging world dis-order?

The Politics of Appropriation in a Networked World

In 1945, Vannevar Bush published *Science: The Endless Frontier*. His prescient pamphlet advocated that the United States had to invest in what today we would call Deep Tech, to engineer advantages in knowledge into economic and military competitiveness. The world had been divided into two spheres of influence: the American West and the Soviet East. While the US could trust the Soviet Union as long as they had common enemies, peace required assurances against a possible, formi-

dable adversary. Therefore, industrial autonomy was needed to sustain and defend one's sphere of influence. Bush wrote:

“A nation which depends upon others for its new basic scientific knowledge will be slow in its industrial progress and weak in its competitive position in world trade, regardless of its mechanical skill.”

Eighty years after the publication of *Science: The Endless Frontier*, Vannevar Bush's predictions have become the doctrines of states, from the US to China. **Today, geopolitical preparedness is technological preparedness, and vice versa. We are back to the '60s: competition between states plays out at the technological frontier.** The new Space Race is broader and more complex than the Sputnik era, ranging from Artificial Intelligence to Quantum Technologies to Biotechnologies. Now like then, breakthroughs in innovation are breakthroughs in preparedness and preemption. Every investment in inventions is a dual-use investment in a world where alliances are more fragile and conflicts are more fre-

132. Thomas L. Friedman, *Why Trump's Bullying Is Going to Backfire*, The New York Times (2025).

133. Monica Duffy Toft, *The Return of Spheres of Influence: Will Negotiations Over Ukraine Be a New Yalta Conference That Carves Up the World?*, Foreign Affairs (2025).

quent. Later on, in 1970, Bush produced another time-less work, Pieces of Action, where he stated:

"In order for great progress to be made on methods and weapons of war, there has to be a system of close joint effort of military and civilian men, especially engineers. The civilians must have independence and the opportunity to explore the bizarre; it is not enough that they be the engineers or contractors to the armed forces. Above all, there must be mutual respect and reliance. This must be present whenever we have to fight again."

Today, the United States, China, the European Union and others are trying to repatriate these capabilities, where possible, or appropriate them. This approach is evident in the latest changes in American policy, where the Trump Administration is using tariffs as a tool to coerce adversaries and allies alike into buying or becoming Made in the USA. It's a tit-for-tat – or eye for eye – that includes everything from the Ukraine mineral deal in exchange for protection, to the bullying of Canada into becoming American, to tariff and immigration wars with Latin American nations, to forcing the purchase of

US dollars to sustain the country's unsustainable deficit.

The Biden administration had already started, imposing export controls on technologies deemed critical for national security and offering chunky carrots to build American in America through the Inflation Reduction Act. In 2022, Taiwan Semiconductor Manufacturing Company (TSMC), for instance, received \$6.6 billion in direct funding and \$5 billion in low-cost loans through the CHIPS Act to build a foundry in Arizona, away from Chinese influence. As a result of the US Government's tariff touting, TSMC announced they would invest an additional \$100 billion to expand its advanced semiconductor manufacturing operations in Arizona¹³⁴.

As for China, they understood early that geography is destiny, again. In fact, part of China's National Development and Reform Commission 2024 directives include a strategic positioning of their Deep Tech industries in the global landscape, "as a result of a "shift on the international balance of power that is transforming the traditional division of global labor– the rise of the East and a relative decline of the West."¹³⁵

China has been building a network of Silk Roads worldwide, where silk is the natural resources and minerals that are quintessential to building new tech. As Ángel Melguizo and Margaret Myers put it, "as geopolitical

Today, the United States, China, the European Union and others are trying to repatriate these capabilities, where possible, or appropriate them. This approach is evident in the latest changes in American policy, where the Trump Administration is using tariffs as a tool to coerce adversaries and allies alike into buying or becoming Made in the USA.

conditions limit China's tech investment and trade prospects in developed country markets, many of China's ICT and high-end manufacturing companies have sought to engage more extensively with Latin America and the Caribbean and other parts of the Global South"¹³⁶. If the iPhone cannot come to China, then China goes to the iPhones – as the old saying goes.

Now, China is venturing to LATAM regarding Deep Tech. Why?

134. David Sacks & Adam Segal, Why Trump's Bullying Is Going to Backfire, The New York Times (2025).

135. The 14th Five-Year Plan for Economic and Social Development of the People's Republic of China and the Outline of the Vision for 2035, People's Republic of China (2021).

136. Margaret Myers, Ángel Melguizo, & Yifang Wang, Emerging Trends in Chinese Foreign Direct Investment in Latin America and the Caribbean, The Dialogue (2024).

China's Deep Tech Plans

China has woven Deep Technology into the fabric of its long-term development model, positioning it as a pillar of an innovation-driven, self-reliant economy for a while. While the release of DeepSeek — the Chinese foundation model that stunned the global AI community with its multimodal accuracy and parameter-efficiency — looked like an overnight sensation, it was anything but.

Deep Tech — aka “New Infrastructure, as it’s referred to in China— sits at the heart of China’s strategy for sustainable, innovation-led growth, a priority woven into top-level policy blueprints and regulations. The country’s 14th Five-Year Plan (2021-2025) spells out an extensive support system for Deep Tech progress¹³⁷, while the 2021 Science and Technology Progress Law reaffirms Beijing’s determination to keep pushing frontier research that can reshape industry¹³⁸. Translating these goals into action, the Ministry of Industry and Information Technology—together with six other ministries—has recently spotlighted a roster of “future industries” (quantum computing, 6G, space technologies, next-generation materials, among others) as pillars of China’s new “quality productive forces.”

The message is clear: Deep Tech fields will anchor the nation’s next phase of economic modernization. Countries seeking to boost their own Deep Tech capacity can look to this integrated, long-range approach as a template for sustaining innovation-driven growth.

A flagship element of China’s Deep Tech push is the “**20 + 8**” **cluster agenda**, which earmarks twenty strategic emerging industries and eight forward-looking fields—biotechnology, next-generation ICT, advanced manufacturing, and more—and bundles them into regional hubs where companies, research institutes and investors can collaborate at scale¹³⁹.

Complementing this, the Chinese Communist Party has rolled out a suite of ecosystem-building programmes. In **November 2022** the Ministries of Science & Technology and Education green-lit ten **pilot “future industry” parks** in eight provinces and municipalities (Beijing, Shanghai, Jiangsu, Hubei, Guangdong, Sichuan, Shaanxi and Heilongjiang)¹⁴⁰. Each site combines co-creation spaces, incubators, accelerators and full industrial parks, underpinned by a **30-point talent scheme** designed to lure top global researchers and founders¹⁴¹.

137. The 14th Five-Year Plan for Economic and Social Development of the People’s Republic of China and the Outline of the Vision for 2035, People’s Republic of China (2021).

138. Science and Technology Progress Law of the People’s Republic of China, People’s Republic of China (2021).

139. Shenzhen’s “20+8” industrial cluster launches version 2.0, Shenzhen Special Zone Daily (2024).

140. Future industry development trends, spatial and temporal layout, and policy recommendations, People’s Republic of China (2024).

141. Xu Weiwei, Shenzhen to grow as hub of innovation, China Daily (2023).

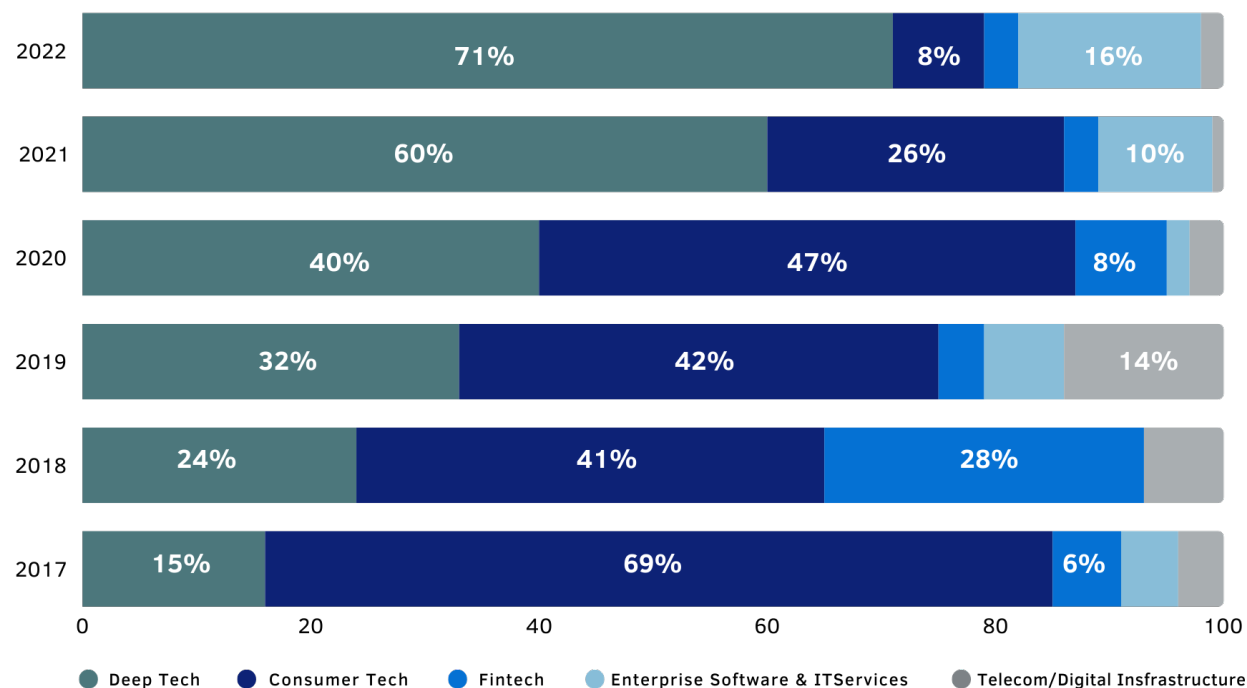
The biotech sector dominated Deep Tech investments until , attracting roughly \$22 billion in private capital—a figure that was double that of the next largest vertical, computer hardware.

The payoff is visible: between 2017 and 2022, Deep Tech's share of total domestic tech investment jumped from 15 % to 71 %, reflecting how quickly capital has followed this coordinated policy drive¹⁴².

Moreover, China's Deep Tech market is projected to grow at a compound annual growth rate (CAGR) of 19.2% through 2034—outpacing the 15.6 % CAGR projected for the United States and trailing only Australia & New Zealand's 22% trajectory¹⁴³.

When looking at the industries of investment, the biotech sector dominated Deep Tech investments until , attracting roughly \$22 billion in private capital—a figure that was double that of the next largest vertical, computer hardware.

China Tech Investment Composition, 2017-2022 (% of Capital Invested)



Source: Source: GPCA, 2023 Emerging Trends in Asia

142.. 2023 Emerging Trends in Asia, Global Private Capital Association (2023)

143. Deep Tech Market Report, Future Market Insights (2024).

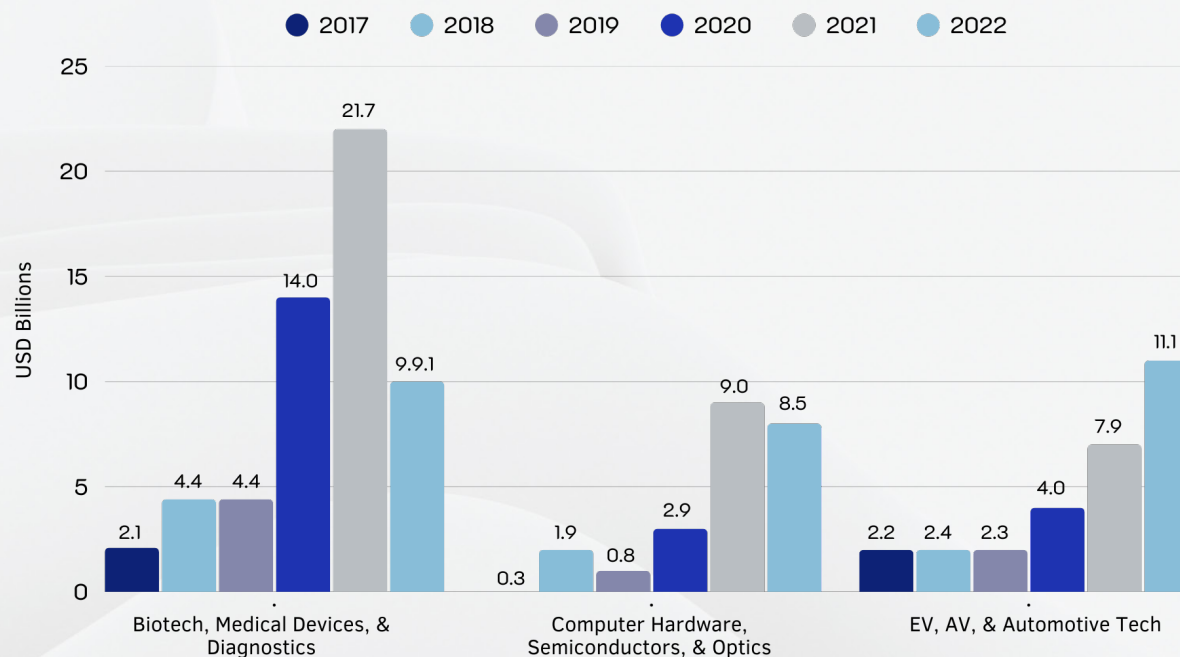
However, 2022 marked a significant pivot: biotech investments contracted sharply to \$10 billion, while the EV, AV, and Automotive Technology segment surged from \$7.9 billion to \$11.1 billion, thereby seizing the top position.

Tangible Outcomes of China's Deep-Tech Push

Since, China has begun to harvest visible technological dividends. In January 2025 Beijing-based DeepSeek released its DeepSeek-R1 model, matching the best U.S. foundation models while training on far leaner compute budgets; analysts now describe its open-weight successor (R1-0528) as one of the strongest code-generation systems outside Silicon Valley¹⁴⁴. The same “thrifty-at-scale” mindset underpins ManusAI, a Chinese agentic platform many observers rate above current state-of-the-art¹⁴⁵.

Quantum ambitions are also keeping pace. A recent paper unveiled Zuchongzhi 3.0, a 105-qubit superconducting processor whose architecture mirrors Google's Willow chip and executes sampling tasks that stump classical supercomputers¹⁴⁶.

Private Capital Investment in Top Deep Tech Verticals in China, 2017-2022



Source: GPCA, 2023 Emerging Trends in Asia

144. Eduardo Baptista, Chinese AI start-up DeepSeek pushes US rivals with R1 model upgrade, Reuters (2025).

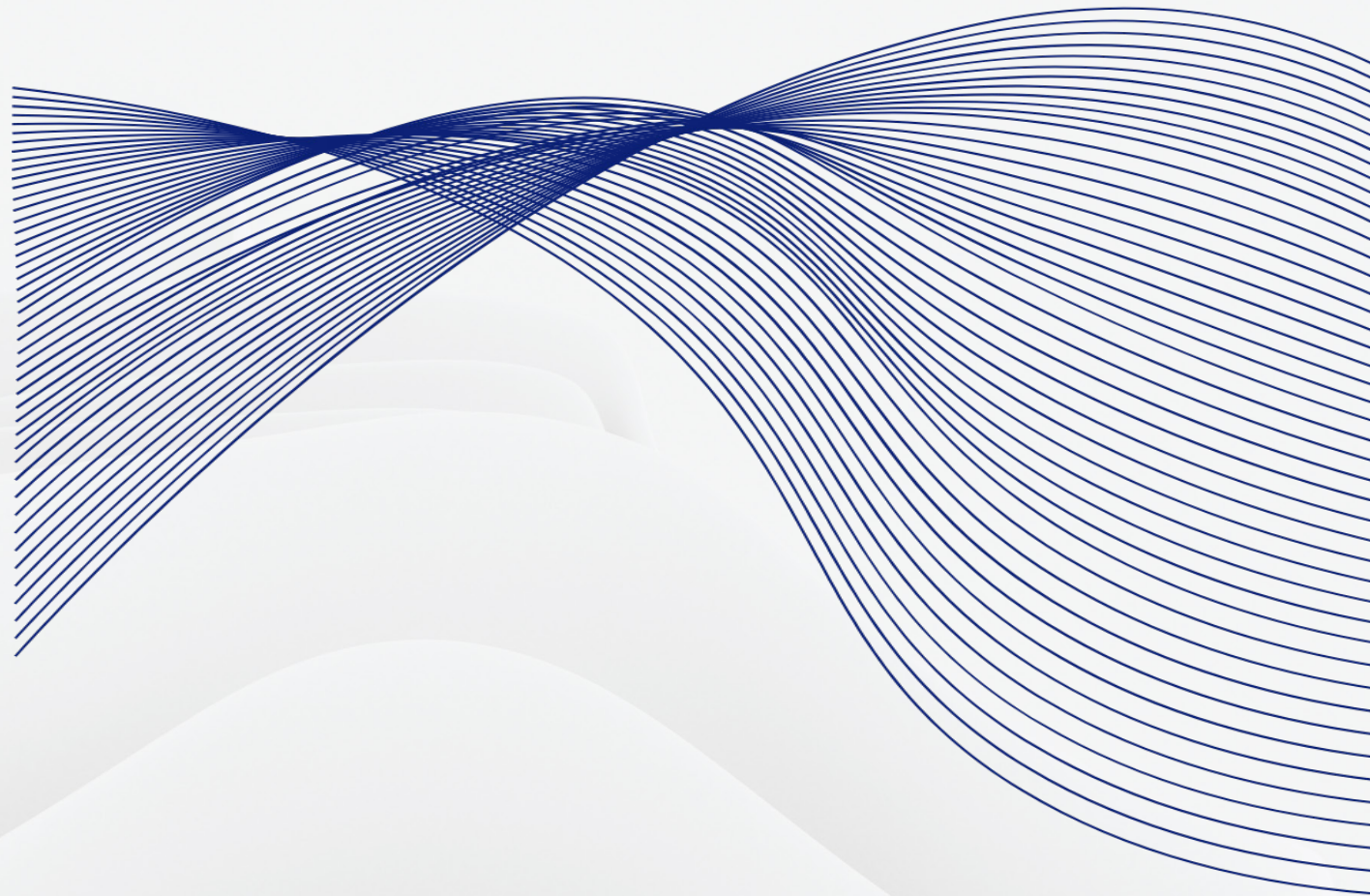
145. Is China's Manus a Game Changer for Agentic AI?, Booz Allen Hamilton (2025).

146. Dongxin Gao et al., Establishing a New Benchmark in Quantum Computational Advantage with 105-qubit Zuchongzhi 3.0 Processor, Physical Review Letters (2024).

Hardware supremacy is most obvious on the road: Chinese brands now account for about 60 % of global EV sales, and in 2024 BYD shipped 4.27 million vehicles and booked USD 107 billion in revenue—outstripping Tesla's 1.79 million deliveries and USD 97.7 billion top line¹⁴⁷.

Furthermore, in March 2025 the General-Secretary of the Chinese Communist Party unveiled a US \$138 billion public-private fund to bankroll “Deep Tech” ventures—quantum computing, advanced semiconductors, artificial intelligence, next-generation renewables—projects so high-risk and long-horizon that few states dare to underwrite them.

Scale matters: the quantum component alone is almost 30 times larger than the combined quantum programmes of the United States and European Union. Framed as a response to post-Trump trade wars and an increasingly fractious world order, Beijing pitched the initiative as a way for “AI to become a positive energy for cooperation and multilateralism,” but the subtext is unmistakable: China intends to redraw global value chains and secure technological self-reliance.



147. Global EV Outlook 2023: Electric car sales break new records with momentum expected to continue through 2023, International Energy Agency (2023).

Chinese Engagement in LATAM

The United States and Europe still dominate Latin America's investment landscape. In 2023, they supplied roughly 33% and 22% of the region's total incoming FDI, respectively, according to ECLAC. China, by contrast, registered a negligible 0.4%—a steep drop from the 3 % it posted the year before¹⁴⁸.

Even sources that cast Beijing's position in a brighter light, such as the China Overseas Foreign Direct Investment Monitor for Latin America and the Caribbean, put its 2023 outlay at just USD 8.8 billion, or about 10% of all FDI arriving in the region¹⁴⁹.

Yet momentum is clearly shifting: the European Union now projects that by 2035 China will have become Latin America's single largest trading partner¹⁵⁰, a turn that could reshape supply chains, technology partnerships and, ultimately, the competitive playing field for Deep Tech ventures in LATAM.

On top of their domestic "New Infrastructure" plans, part of **China's directives include a strategic positioning of their Deep Tech industries in the global landscape**. In a letter published on June 2024 by the National Development and Reform Commission, they elevate the role of emerging and developing countries in R&D and high-tech industries as a result of a "shift on the international balance of power that is transforming the traditional di-

vision of global labor— the rise of the East and a relative decline of the West".

Not coincidentally, research by Melguizo and Myers shows that:

"The number of Chinese projects in Latin America grew by 33 per cent from 2018-2023, compared with the previous five-year period of 2013-2017, even as the total value declined. In other words, **Chinese companies are making more investments in the region but are pursuing smaller-scale projects on average. These investments are also more focused on what China calls "new infrastructure"** In 2022, 60 per cent of China's investments were in these frontier sectors, a key economic priority for the country"¹⁵¹.

Do not be fooled by the decline in total investment by China. In reality, the Chinese government and companies recalibrated the sectors in which they invest – from brick-and-mortar to high-tech. Chinese investments shifted from canals, rails, and energy infrastructure, to Deep Tech, "consistent with Beijing's laser focus on its own economic upgrading and global competitiveness". In fact, in 2022, China's Ministry of Science and Technology had explicitly committed to enhancing scientific and technological cooperation with Latin American and Caribbean countries, with specific emphasis on technology transfer and innovation in sustainable development¹⁵².

When we polled regional stakeholders about China's footprint in Latin-American deal flow, most admitted they have **yet to see sizeable cheques hit the ground**. Interest is unmistakably rising—particularly in biotech and ag-tech—but, so far, **curiosity has not matured into transactions large enough to bend the market's arc**.

Still, those same stakeholders state that the real inflection point arrives when states unleash large-scale public capital—and Beijing is already teeing that up. In March 2025, China launched a **US \$138 billion sovereign vehicle** to bankroll "high-risk, long-horizon" plays in quantum computing, AI, cutting-edge chips and clean energy¹⁵³.

Beijing framed the move as a response to trade-war turbulence, promising that "AI will become a positive energy for cooperation and multilateralism," yet the subtext is plain: China aims to redraw global value chains and lock in technological self-reliance.

Only two months later, China rolled out a **US \$9 billion credit facility for Latin-American governments**¹⁵⁴.

The signal could not be clearer: China's Deep Tech surge is inseparable from its bid to broaden their economic—and therefore geopolitical—ties across the hemisphere.

148. Foreign Direct Investment in Latin America and the Caribbean, 2024, ECLAC (United Nations Economic Commission for Latin America and the Caribbean) (2024).

149. Enrique Dussel Peters, Monitor de la OFDI china en América Latina y el Caribe 2024, Red ALC-China (2024).

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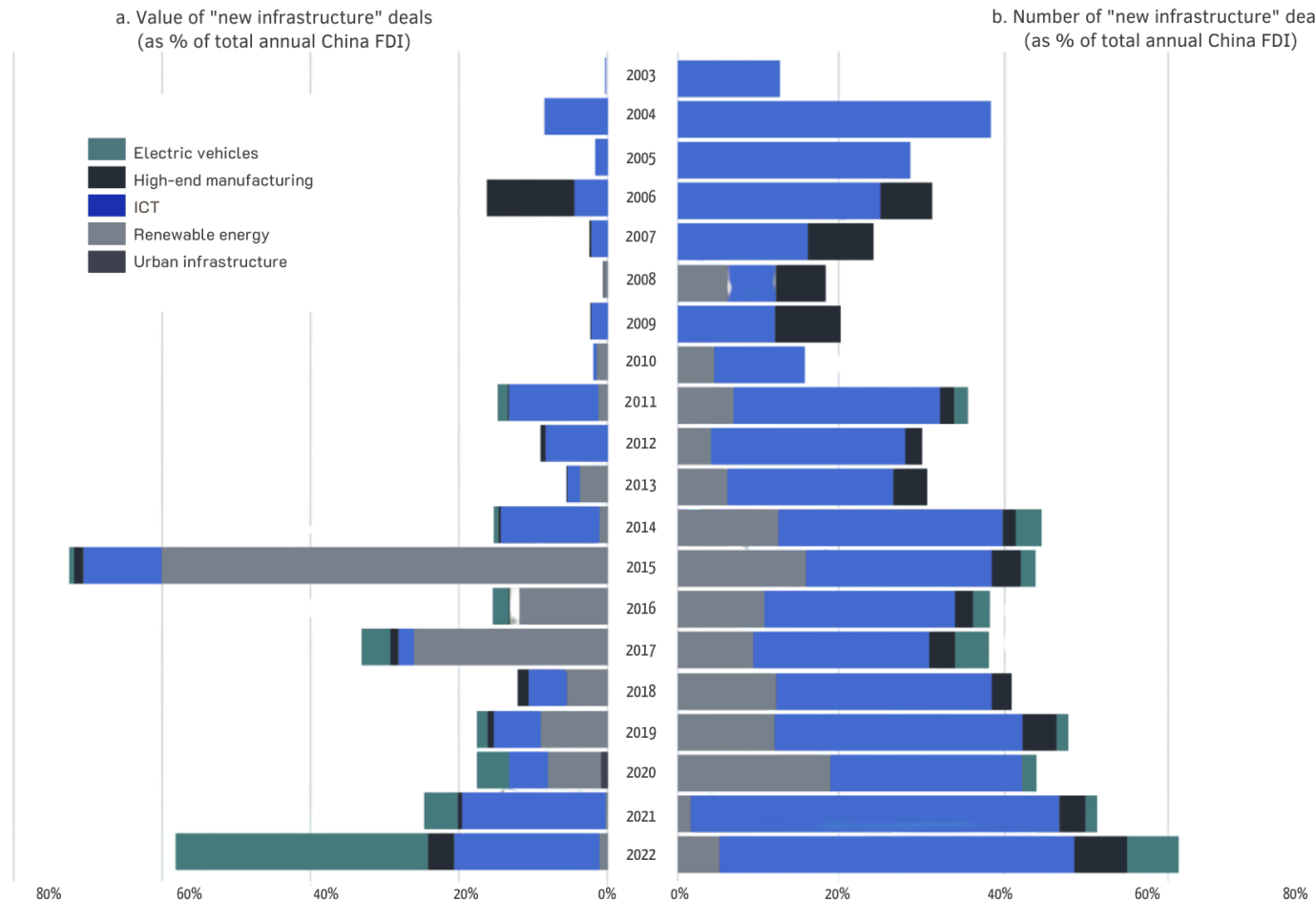
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China FDI in “New infrastructure” industries, 2003-2022



Source: Melguizo & Myers, Ahead of the curve: Why the EU and US risk falling behind China in Latin America

Middle Powers: A New Path for Deep Tech Advancement

While China's Deep Tech strategy illustrates the scale and ambition that a global superpower can bring, LATAM countries face a dilemma: reliance on a single dominant partner risks overdependence and limits strategic flexibility. At the same time, partnerships with the United States are increasingly constrained by trade tensions, export controls, and shifting geopolitical priorities.

In this context, LATAM cannot simply emulate the superpower model; instead, it can diversify its partnerships to access advanced technology, patient capital, and know-how without compromising autonomy. This is where partnering with “middle powers” –technologically advanced, non-superpower nations such as Israel, South Korea, Singapore, Canada, Japan, the Gulf states and Australia– offers a strategic path forward.

These countries occupy a sweet spot: they're technologically sophisticated and financially robust

without the baggage that comes with superpower status. They need partners, not dependants, and combine world-class innovation ecosystems with agile foreign policies, making them ideal collaborators for LATAM¹⁵⁵.

In fact, LATAM startups and policymakers are already adopting international best practices from leading ecosystems. Currently, however, private-sector R&D funding in Latin America accounts for only 43% of total R&D expenditure—a sharp contrast to the 80% contribution seen in a major innovation hub like Israel¹⁵⁶.

LATAM faces three fundamental challenges that middle power partnerships can address directly. The first is capital, specifically, the kind of **patient capital** that allows Deep Tech to mature. Sovereign wealth funds and state-backed investors from middle powers can provide this in ways that traditional venture capital often can't¹⁵⁷.

The second is **knowledge transfer**: LATAM has strong research talent but limited access to global innovation networks; middle powers can connect the region to these hubs without the strings often attached to superpower partnerships.

The third is **strategic autonomy**: overreliance on any single partner creates vulnerabilities, but a diversified alliance with multiple middle powers spreads risk and strengthens resilience.

These partnerships succeed because they are built on mutual need rather than charity. Middle powers themselves face constraints—limited domestic markets, aging populations, or resource dependencies—and they need what LATAM offers: young talent, expanding markets, and critical raw materials. By aligning complementary strengths, LATAM and middle powers can co-create new Deep Tech ecosystems that advance competitiveness, sustainability, and strategic autonomy.

155. ¹Tim Sweijs & Michael J. Mazarr, *Mind the Middle Powers, War on the Rocks* (2023).

156. Inter-American Development Bank, *Deep Tech: The New Wave*, IDB Lab (2023).

157. Christopher Freeman & Luc Soete, *Developing Science, Technology and Innovation Indicators: What We Can Learn from the Past*, Research Policy (2009).

COMPARATIVE CASE STUDIES OF MIDDLE-POWER STRATEGIES



United Arab Emirates (UAE)

Gulf states are rapidly diversifying their economies into tech and sustainability and, the UAE has taken the lead in LATAM¹⁵⁸. Over the past twelve months, the UAE has signed Comprehensive and Enhanced Partnership Agreement (CEPAs) with six LATAM countries—Colombia, Costa Rica, Chile, Mexico, Ecuador, and Brazil, committed more than US \$100 billion in targeted investments, and launched hyperscale data centers to meet the region's surging AI demand.

Colombia offers one of the clearest examples of this strategy. Following a CEPA in April 2024, a series of Memoranda of Understanding MoU quickly followed, including the opening of a Dubai Chambers office in Bogotá and the announcement of

three hyperscale data centers to be built by G42, one of the UAE's largest tech investment firms¹⁵⁹. These developments, framed as part of a broader strategy to deepen ties in frontier technologies, resulted in a 51% year-over-year increase in non-oil bilateral trade.

Costa Rica has seen similarly fast results. A CEPA that entered into force in February 2024 has already doubled non-oil trade between the two nations¹⁶⁰. Chile, after finalizing its own accord in July 2024, is now implementing tax and customs incentives designed to accelerate Emirati-backed technology ventures¹⁶¹. Mexico entered the framework in June 2025 with a pact elevating semiconductors and AI to top-priority status, swiftly echoed by Ecuador the following month¹⁶².

Beyond digital infrastructure, the UAE has also moved into resource security. In January 2025, Brazil signed a \$2.5 billion MoU with the UAE focused on strategic minerals including copper, and lithium and supporting technologies. The agreement, concluded between Brazil's Mines & Energy Ministry and the UAE's Ministry of Investment, includes explicit provisions for the transfer of cutting-edge technologies¹⁶³ from the UAE to Brazil for exploration and processing¹⁶⁴.

Taken together, these initiatives illustrate how the UAE leverages both digital and resource-based investments to become a strategic middle-power partner, providing capital, technology, and infrastructure while helping LATAM diversify its global partnerships beyond the traditional great powers.



Canada

In 2020 Brazil's innovation agency Embrapii and Canada's National Research Council (NRC) launched a co-funded R&D program under the Canadian International Innovation Program (CIIP). Starting April 2021, this scheme finances joint Brazil-Canada projects in sectors like AI, Internet of Things and advanced manufacturing¹⁶⁴. Eligible areas include agriculture, health and mining (with a sustainability bias). The initiative is one of the region's clearest examples of a bilateral R&D partnership structured to support Deep Tech commercialization through government-backed co-investment. While Brazil remains the primary partner, CIIP's broader geographic scope also covers other middle powers, suggesting a pathway for LATAM countries to push for inclusion in future calls or to adopt similar mechanisms for regional cooperation.

158. AI Competition Amid Expansion of U.S. AI Chip Export Controls Into the Gulf, Middle East Council on Global Affairs (2024).

159. Colombia to build 3 datacenters with UAE support, BNamericas (2025).

160. UAE, Costa Rica committed to developing resilient economies Emirates News Agency (WAM) (2024).

161. Comisión de Hacienda aprueba Acuerdo de Asociación Económica Integral entre Chile y EAU, Agenda Logística (2025).

162. Paloma Duran, Mexico, UAE Seek to Deepen Economic Ties, Mexico Business News (2025).

163. Alberto Cruz, Brazil and UAE Forge \$2.5 Billion Partnership to Drive Strategic Mineral Exploration, Net Zero Circle (2025).

164. Alberto Cruz, Brazil and UAE Forge \$2.5 Billion Partnership to Drive Strategic Mineral Exploration, Net Zero Circle (2025).

165. CCBC - Brazil-Canada Chamber of Commerce (last accessed 2025)

Japan

In 2024 Japan and Brazil upgraded their strategic partnership to address energy transition needs¹⁶⁶. Their Joint Action Plan pledges to strengthen mineral value chains – specifically, adding value to Brazil's mining output – and to share technical knowledge on recycling and processing (e.g. battery-grade lithium refinement).. The plan also calls for exchanging semiconductor policy experience (a nod to Brazil's nascent chip strategy).

Japan has already co-invested in LATAM lithium projects (Panasonic in Bolivia, Toyota in Argentina) and Japan International Cooperation Agency invested \$1 billion to a new private-sector fund, the JICA-TADAC Fund, managed by IDB Invest¹⁶⁷. More broadly, Japan's technology, from robotics to precision farming, can transfer to LATAM through MOUs and joint labs. These agreements exemplify how partnerships can evolve to hardware, software and human capital, rather than just raw imports.

Singapore and Asia-Pacific Free Trade Agreements hubs

Singapore acts as a gateway between East Asian technology and LATAMn markets. It has negotiated a Digital Economy Partnership Agreement (DEPA) with Chile, and signed the Pacific Alliance–Singapore FTA to streamline trade with Mexico, Colombia, Peru and Chile¹⁶⁸. Singaporean officials highlight LATAM's booming tech sector (fintech, AI, e-mobility, etc.) and seek to co-innovate with LATAM firms¹⁶⁹. For instance, Singapore's innovation agencies sponsor trade missions to Mexico and Brazil, linking local startups with Asian ecosystem partners.

Beyond trade diplomacy, Singapore has built one of the world's most structured Deep Tech venture ecosystems. Programs like NUS GRIP, A*StartCentral, and NTUitive turn research into startups, while hubs such as BLOCK71 connect talent, investors, and corporates. Agencies like SGInnovate, Enterprise Singapore, and Temasek-backed Xora Innovation provide patient capital and commercialization pathways, complemented by private accelerators¹⁷⁰. For LATAM, Singapore's model shows how venture-building infrastructure can accelerate the path from lab to market and offers a template for joint funds, regional hubs, and exchange programs.

South Korea

South Korea is supporting Chile in addressing challenges in battery minerals and energy transition, including developing lithium processing capacity and modernizing mining operations. Chilean officials have pursued MoUs on battery minerals and hydrogen technology with Korean agencies. Although not exclusively with South Korea, Chile and Korean partners have been collaborating on lithium joint ventures with state firms Codelco and ENAMI, with Korean industry investing in projects that include local processing to add value.

In addition, South Korea and Chile signed a 2021 MoU to cooperate on green hydrogen, leveraging Chile's renewable energy resources. On the technology side, Chile is adopting Industry 4.0 in its mines: autonomous trucks, AI-based ore-sorting and integrated operations centers are now operational, mirroring best practices in Korea's own smart manufacturing¹⁷¹.

166. Ministry of Foreign Affairs of Japan, (last accessed 2025)

167. IDB Invest and Japan's JICA announce \$1 billion fund to boost private investment in Latin America, Inter-American Development Bank (2025).

168. Alvin Tan, Speech by MOS Alvin Tan at the Inaugural Latin America-Singapore Connect, Ministry of Trade and Industry Singapore, (2023).

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170. Weijing Ye & Jack So, Deep Tech Series Vol. 5: Science, Not Fiction – Insights from Singapore's Deep Tech Venture Building, UNDP Global Centre Singapore (2024).

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Implementation Frameworks

The case studies of the UAE, South Korea, Canada, Japan, and Singapore illustrate how LATAM can engage with middle powers to advance Deep Tech capabilities while avoiding overdependence on any single great power. Each partnership highlights a different strategic lever: the UAE brings patient capital and infrastructure investment; South Korea offers industrial innovation tied to energy transition; Canada demonstrates how co-funded R&D programs can build joint capacity; Japan aligns technology transfer with value-chain upgrading; and Singapore provides a bridge to rule-based digital and trade frameworks.

Taken together, these approaches underscore the central hypothesis of this chapter: LATAM does not need to choose between the United States and China to build its technological future. By working with a diversified portfolio of middle powers, the region can access world-class innovation ecosystems, patient capital, and targeted knowledge transfer while maintaining strategic independence.

Success will require new forms of technological diplomacy, coordinated regional action, and the political will to think beyond traditional alliance structures. The case of Airbus can serve as a useful historical precedent for a consortium created for industrial and technological sovereignty—what began as a European response to American dominance in commercial aviation became one of the world's most successful examples of multi-

The strategies that emerge across these examples are consistent.

1

Joint investment vehicles: Co-financing and blended-finance mechanisms are essential for scaling Deep Tech initiatives. Models like the Canada–Brazil CIIP (via Embrapii and NRC) illustrate successful bilateral co-investment in R&D and startups¹⁷³. Multilateral institutions such as the IDB Venture Lab or CAF could co-host innovation funds with Singaporean or UAE capital, while sovereign wealth funds (e.g., Temasek, Mubadala) could allocate resources to LATAMn tech consortia.

2

Technology transfer mechanisms need formal structure: Formal R&D partnerships, secondments, and co-located labs accelerate learning and capability building. Examples include Chile–Korea cooperation on hydrogen and smart mining, Canada–Brazil collaboration in nanotechnology and advanced manufacturing, and Japan–Brazil agreements on mineral processing and semiconductor policy. These cases show that technology transfer works best when tied to formal agreements and co-investment. Encouraging multinationals from these middle powers to establish regional R&D centers, supported by targeted tax incentives, can further embed know-how locally.

3

Talent Mobility and Ecosystem Integration: Exchange programs, fellowships, and targeted visas foster skill development and ecosystem integration. Bilateral programs such as the Korea–Chile technical committee on mining and energy, Canada–Brazil joint research fellowships, and Japan's JICA-backed training initiatives demonstrate scalable models

national industrial cooperation¹⁷². The convergence of global technological competition, shifting geopolitical alignments, and LATAM's growing capabilities creates a unique window of opportunity.

172. European Consortium Creates Airbus Industrie, EBSCO Research Starters (2025).

173. CCBC - Brazil-Canada Chamber of Commerce (last accessed 2025)

Appropriation vs Autonomy: The Latin American Dilemma

The new Chinese Digital Silk Road to LATAM could find greater space in the emptiness left by crumbling multilateralism and traditional alliances being weakened by trade wars. The wave of export controls issued by the Trump administration is aimed at slowing China down on its path to Artificial General Intelligence¹⁷⁴. But will that be enough contingency?

First, DeepSeek has stunned techies and markets by releasing competitive AI models at a fraction of the cost of American rivals, showing that the Chinese model for top-down execution can be equally effective and more resourceful. Second, the battle for chips is crucial yet only in front of the war for technological supremacy. China has started building its policies of coercion and appropriation well before its rivals, anticipating that value-based alliances would be replaced by interest-based ones.

As Martin Wolf wrote in the Financial Times¹⁷⁵: “It is possible that some allies will decide that, although they prefer the US, China is at least more predictable. That would be an insane position for these countries to be in. But it would be the almost inevitable result of Trump’s

gangsterish approach to international relations.” In fact, the new Cold War is much hotter on more fronts and with more players than the US and China wanting to take the stage. Take India, which now ranks in the top 5 in 45 of 64 technologies that are deemed critical by ASPI¹⁷⁶. Take Saudi Arabia and the UAE, which are spending hundreds of billions of petro-dollars to become technological and geopolitical hubs.

This might change now, with geopolitics being more populous and driven by more selfish interests. Today, as Monica Duffy Toft aptly puts it: “regime type no longer appears to hinder a sense of shared interests. It is hard power only—and a return to the ancient principle that “the strong do what they can and the weak suffer what they must.” In such a world, multilateral institutions such as NATO¹⁷⁷ and the EU would be sidelined and the autonomy of smaller nations threatened.”

With less West and more Rest contending for tech dominance, Latin America will surely be a new battleground for innovation. Who appropriates what remains to be seen.

Our objective with the LADP is to present a holistic perspective on the state of Deep Tech and provide critical insights into the scaling challenges for the region. More importantly, however, we aim to go above and beyond in order to present a practical series of recommendations on what we as a region must do in order to advance the investment landscape into the technologies that will shape our future.

This process involves the meticulous development of robust intellectual property and a lengthy, strategic technology transfer from academia to the commercial sector, setting the indispensable foundation for groundbreaking, commercial innovation.

Successfully bridging this critical gap necessitates sustained investment and tailored support mechanisms, facilitating the arduous yet rewarding journey from scientific discovery to market-ready solutions. By systematically nurturing this intricate ecosystem, the region can unlock its full potential, transforming cutting-edge research into tangible economic growth and global leadership in Deep Tech.

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