



PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE

# EPIC LAB

EVIDENCE-BASED POLICY & INNOVATION  
RESEARCH LAB

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How does entrepreneurship schooling  
impact start-up performance? Evidence from  
Start-Up Chile.

Project supported by



# About EPIC Lab



We are a **research laboratory** based in the **School of Engineering of Pontificia Universidad Católica de Chile**.



Our main goal is to **identify the cause and effect of entrepreneurship and innovation programs**, and generate **evidence-based knowledge** that helps to **socio-economic development**.



We aim at generating **timely and robust information** to **improve the design and effectiveness of entrepreneurship and innovation policies**.



EPIC Lab focuses its **efforts** on better **understanding** the phenomena **underlying entrepreneurship and innovation**.

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More information:

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Gonzalez-Uribe, Juanita and Leatherbee, Michael, The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile (August 11, 2016). Available at SSRN: <http://ssrn.com/abstract=2651158>

# How do business accelerators accelerate? Do entrepreneurship policies actually add economic value?

*(From the paper “The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile”, González-Uribe & Leatherbee, 2016).*

A major assumption that policy-makers often take for granted when designing and implementing policies to spur entrepreneurial ecosystems is that government-funded programs such as accelerators actually contribute to economic development.

ONLY IN CHILE, THE GOVERNMENT SPENDS AN EXCESS OF  
**\$330 MILLION DOLLARS A YEAR**  
ON ENTREPRENEURSHIP POLICIES (DIPRES, 2015).

However, it is unclear whether or not the economy would do just as well without the government’s intervention. This is a very important question, because it calls into question the effectiveness of public resources expenditure.

Dirección de Presupuestos Gobierno de Chile (2015). Proyecto Ley de Presupuestos 2015.  
<http://www.hacienda.cl/especiales/presupuesto/presupuesto-2015/informativo-presupuesto-2015.html>

Business accelerators are a fixed-term, cohort-based financial intermediary that provides start-ups a combination of cash, co-working space, and entrepreneurship schooling.

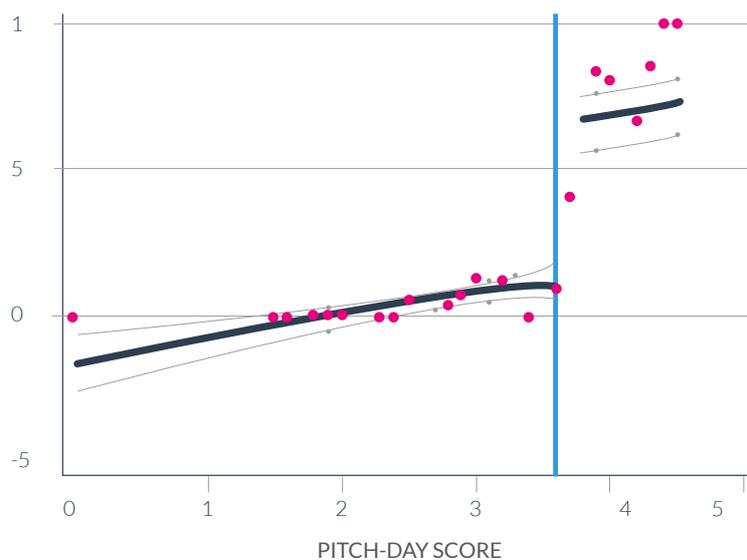
“The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile” provides the first quasi-experimental evidence of the effect of accelerator programs on start-up performance, and on the importance of “entrepreneurial capital” in new ventures.

The setting for the study is Start-Up Chile, a government-sponsored accelerator aimed at attracting and supporting early-stage entrepreneurs from across the globe. It offers participants equity-free cash and shared office space as basic services. Additionally, it offers an educational program to a competitively select

few. This program is much like a business school (more accurately an entrepreneurship school) in that it confers certification, provides access to distinguished international guests, increases exposure to the community, involves greater supervision, provides entrepreneurship training, and offers basic new-venture mentoring (in the form of meetings with industry experts).

Two months into Start-Up Chile participants can apply to the entrepreneurship school of the program. The selection process consists of a competition dubbed “pitch day”. Competing start-ups present or “pitch” their businesses to a panel of judges. Based on the pooled scores from the competition, the accelerator’s staff selects roughly 20% of the participants. An implicit selection criterion is evident in the data: start-ups scoring at least 3.6 (out of 5) during the pitch day are 54% more likely to be selected into the entrepreneurship school, as seen in Figure 1.

FIGURE 1 – FRACTION OF SCHOOLED PARTICIPANTS



The authors exploit the discontinuity in the assignment to the school to estimate the causal effect of entrepreneurship schooling on start-up performance. The intuition is that conditional on scoring within a sufficiently small interval around the discontinuity, assignment to the entrepreneurship school is as good as random. Hence, the difference in expected outcomes between start-ups on opposite sides of (but sufficiently near) the discontinuity provides the basis for an unbiased treatment-effect estimate. The authors implement this intuition using a fuzzy regression discontinuity design.

Results show that participation in the entrepreneur school (bundled with the basic services of cash and co-working space) causes a 21 to 45% increase in the likelihood of raising capital, increases capital raised by three to six times, and increases company valuation fivefold. It also causes a 24% increase in market traction (Facebook “likes”) and almost a 200% increase in jobs created.

Interestingly, the authors find no evidence that entrepreneurship schooling affects start-up survival. Thus, the overall effect of schooling seems to be the acceleration of participating ventures.

## In Brief

“The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile” shows that accelerators effectively improve new venture performance through entrepreneurship schooling.

Because entrepreneurship schooling has such a large effect on fundraising, market traction and job creation, but apparently not on survival, it seems that business accelerators actually have an effect on new venture acceleration. Thus, while venture survival depends on entrepreneurial

persistence, venture performance depends on entrepreneurial capital.

In the same way that managerial capital can be acquired from business schools, entrepreneurial capital can be acquired from entrepreneurship schools. By granting training, setting milestones, fostering peer learning, encouraging hands-on experience, and enabling access to valuable networks, business accelerators are effectively helping entrepreneurs build more productive companies.

# Implications for



## Policymakers

Because high-performance entrepreneurship is a key factor for economic development, encouraging the distribution of entrepreneurial capital is an important strategy that can be leveraged by policymakers. According to the authors, entrepreneurial capital is a combination of certification, access to valuable networks, know-how about growing a start-up, and self-efficacy. Thus, the design of interventions that increase entrepreneurial capital amongst the population of entrepreneurs should be a significant and effective task.



## Business Accelerators

Given the importance of entrepreneurship schooling on start-up performance, business accelerators would benefit from focusing their resources on building entrepreneurial capital amongst their participants. For example, by emphasizing the certification that comes from entering a competitive program and building participants' entrepreneurial self-efficacy. Also, promoting their portfolio start-ups amongst the broader community and heightening their exposure at high-profile events can increase start-ups' awareness among potential investors, customers and partners. Moreover, know-how about building and growing a start-up can be fostered through peer learning, specialized workshops, expert lecturers, and quality advisors.



## Entrepreneurs

A deeper look into “The Effects of Business Accelerators on Venture Performance: Evidence from Start-Up Chile” suggests that cash and co-working space alone are not enough to improve start-up performance. Instead, it is the combination of activities, experiences and learning opportunities that makes the difference. Because these programs are unique to each accelerator, entrepreneurs will benefit from choosing accelerators that foster the acquisition of entrepreneurial capital in a more comprehensive and proven manner; hence, the importance of evidence-based research.

# About the authors



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