Accelerating Regional Systems of Innovation?

Understanding the effects of the Technology Business Accelerator Program in the formation of resources and capabilities to innovate in Mexican regions

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Why is it claimed that developing countries need to establish External Linkages?

• Incomplete set of domestic linkages

• Path-dependent character of innovation
External Linkages: a dilemma
• Technology Business Accelerator Program

• Research questions, research strategy, and methodological framework

• Research propositions
Technology Business Acceleration Program (TechBA)
Goal: help the best small and medium Mexican technology companies to access and compete in international markets.

4 locations:
- Silicon Valley, California
- Austin, Texas
- Montreal, Quebec
- Madrid, Spain
How the TechBA program operates?

• Once-a-year selection process

• Pre-acceleration process – 3 months

• Acceleration process – 1 year
Second goal: promote the formation of high value-added clusters in Mexico
• Business accelerator programs: an emerging mechanism for developing countries to foster the innovation capabilities of firms and regions.

• TechBA: an opportunity to explore the relationship between External Linkages and local capability formation.
Research questions, research strategy, and methodological framework
Main research question:

How does a government-led business accelerator program affect the formation of regional systems of innovation in developing countries?
A case study of the TechBA program to understand two processes:

1. The process by which the TechBA program affects the innovation capabilities of companies, through the access it offers to global sources of knowledge and technology.

2. The process by which the TechBA program affects the formation of technical, productive, and organizational resources and capabilities to innovate in Mexican regions.
Research strategy and methodology

• A **qualitative framework** for the design, data collection, and data analysis of the case study.

• Primary data collection technique: **open-ended interviews** complemented with in-site observations.

• **Analytic generalization**.
Research Propositions
First Process

How does the TechBA program affect the innovation capabilities of companies, through the access it offers to global sources of knowledge and technology.
How can we study the transformations in the innovative capabilities of firms?

Two modes of learning involved in innovation processes within firms (Lundvall et al., 2007)

• Science, Technology, and Innovation (STI)

• Doing, Using and Interacting (DUI)
First Proposition: TechBA will NOT do much for the development of the STI-mode of learning within firms.

Second Proposition: TechBA will stimulate the DUI-mode of learning.
Second Process

How does the TechBA program affects the formation of technical, productive, and organizational resources and capabilities to innovate in Mexican regions.
How can we analyze the effect that the TechBA program is having on the formation of innovation systems in Mexican regions?

- Sector of economic activity
- Industrial structure and clustering tendencies of regions
- Absorptive capacity
Conclusion
• External Linkages cannot be simply assumed as positive for the formation of regional innovation systems in developing countries.

• We need to understand the transformations that firms and regions experience through the interplay of global flows of knowledge and technology and local social, productive, and organizational dynamics.
Close: scratching the tip of the iceberg?