Science Parks and Smart Specialisation Strategies in Developing Countries: theoretical and practical implications

Amonpat Poonjan, PhD project

Background and Research Objective

Due to the growing of science parks in developing countries in the past decade and the regional economic development policy as smart specialisation, the question arise whether this idea about smart specialisation can be applied in catching up countries and what role science parks can play in leveraging regional resources to stimulate smart specialisation. The research strategy is twofold examining 1) the role of science parks in applying smart specialisation strategies in catching up countries 2) the role of using foresight as a strategic tool for regional innovation policy making.

Research Questions

In order to attain this research target, the following questions must be answered.
1) To what extent science parks can be a tool to stimulate smart specialisation?
2) What is the concept and characteristic of science parks and how does it link to regional economic development in the context of developing countries? (an empirical study in Thailand will be conducted)
3) How foresight can be used as a tool for policy implication and align the function of the science park with the smart specialisation idea?

Underpin theories and methods

This research is based within the field of regional economic development, economics of innovation and technological change. These theories will be applied to understand how a policy instrument like science parks can be used to stimulate the economic development of regions, especially in the aspect of innovation management, start-up incubation and R&D linkages between University and companies. Empirically, this study will cover the regional science parks of Thailand. The research approach will be developed based on the conceptual understanding achieved through an extant literature review. Moreover, in order to deliver case-relevant policy implications, the empirical studies will be supported by foresight exercises. In sum, the goal is to develop an understanding of science parks’ contribution to smart specialisation and draw policy implication in order to improve the role of science parks in stimulating regional economic development.

Expected results

The expected outcome is threefold. First, it is the aim to add to the conceptual discussion of how science parks are linked to the recently developed concept of smart specialisation. In addition, it is the aim to validate this framework by conducting the empirical study in the context of developing countries. Moreover, regarding foresight, this study will provide input to the further development of science parks in developing countries. Finally, this research targets to shed new light on the role of foresight in regional innovation systems, in order to improve the capabilities and competitiveness of regional economies in less favoured regions.

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