

# Chapter 81

## The Effects of Innovation Policy on Science-to-Business Collaboration: The Case of Serbia

**Isidora Avram Beraha**

*Institute of Economic Sciences, Serbia*

**Sonja Obrad Đuričin**

 <https://orcid.org/0000-0002-8181-7332>

*Institute of Economic Sciences, Serbia*

### ABSTRACT

*The growing complexity of innovation has led to transition to an open innovation approach. Achieving sustainable economic growth based on knowledge and innovation depends on the efficiency and intensity of interactions between the government, business sector, and academia. Searching for ways to improve the innovation performance of small and medium-sized enterprises is high on the agendas of policy makers in developed and even more in developing countries. Through innovation policy, a favorable environment and stimulating system is created in which innovation activities are realized, information and knowledge are flowed, and cooperation between different actors is established. Academia plays a key role in the open innovation approach and is perhaps the most important partner for small and medium-sized enterprises. The subject of the research is the effects of innovation policy support on science to business collaboration in Serbia, with additional emphasis on the national innovation system and innovation performance of Serbia.*

## **INTRODUCTION**

Along with the unambiguity about the contribution of innovation to economic growth, the concept of open innovation is gaining in importance. The increasing adoption of more open approaches to innovation emerged because of the firms' aspirations to take advantage of collective creativity through open innovation (Chesbrough & Appleyard, 2007). The growing interest in finding new ways of knowledge generation has emerged given that it is the main source of innovation. The search for new sources of knowledge for innovation has removed the barriers to collaboration which is an alternative to the traditional closed perspective of research and development (R&D) (Avalos-Quispe & Hernandez-Simon, 2019). The open innovation concept is based on the use of both internal and external resources to implement innovation activities. According to Chesbrough (2003), open innovation refers to the combination of internal and external knowledge for the creation and commercialization of new products and services. The focus is on the collaboration between various actors in the innovation system. Open innovation allows firms to improve their innovation success by using internal and external ideas, internal and external paths to market, and inflows and outflows of knowledge (Bogers et al., 2018), and enables academia to apply and commercialize the results of conducted R&D activities more efficiently. Achieving sustainable economic growth based on knowledge and innovation depends on the efficiency and intensity of interactions between the three main groups of actors i.e., government, business sector, and academia which is also at the core of the triple helix model of innovation.

In an increasingly competitive market, the success and growth of enterprises are affected by the ability to use both internal and external ideas through collaboration (Suh & Kim, 2012). Establishing a collaborative relationship between the actors in the triple helix model aims at the free flow of knowledge and information. This assumes abandoning the traditional practice in which companies were closed in their innovation processes. Innovation requires much more than the capacity to turn new ideas into commercial products. For innovation activity, it is necessary to provide material resources, appropriate business skills, an adequate intellectual property protection system, and a culture of entrepreneurship. Alexander et al. (2015) emphasize that universities and public research organizations are possible partners for organizations that tend to either partially or entirely replace their traditional roles of in-house R&D functions. Focusing only on internal R&D and the development of internal capabilities and routines is no longer sufficient to cope with increasing costs, shorter product life cycles, and greater technological complexities (Berchicci, 2013). Gaining a competitive advantage in a globalized business environment requires the use of external sources of knowledge. The main role of open innovation is the use of external resources through collaboration. As stated by Suh & Kim (2012), it can be achieved through technology acquisition and transfer, R&D collaboration, joint venture activity, and networking. Open innovation in small and medium-sized enterprises (SMEs) is of particular interest as they often lack the resources to implement the innovation process internally. Despite limited capacities, SMEs continue to use the closed model of innovation i.e., rely on internal sources of knowledge to develop new products and services (Santoro, et al., 2018) which is partly due to a lack of capacity to leverage key networks (Ortega-Argilés, et al., 2009).

The idea that SMEs are more prone to innovation activities and risk undertaking is certainly not new. Owing to their flexible organizational structure and the overlap between the ownership and management functions, SMEs respond more efficiently to increasing competitive pressure. Compared to large enterprises, the advantages of SMEs are reflected in less bureaucracy and stronger ability to adapt to market and technological changes (Đuričin & Beraha, 2016). However, the innovation activity of SMEs

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the product's webpage:  
[www.igi-global.com/chapter/the-effects-of-innovation-policy-on-science-to-business-collaboration/335785?camid=4v1](http://www.igi-global.com/chapter/the-effects-of-innovation-policy-on-science-to-business-collaboration/335785?camid=4v1)

## Related Content

---

### "It Has Been Quite a Journey": Experiences and Evolution in Health Information Systems in Zimbabwe

Njabulo Bruce Khumalo (2019). *Healthcare Policy and Reform: Concepts, Methodologies, Tools, and Applications* (pp. 913-927).

[www.igi-global.com/chapter/it-has-been-quite-a-journey/209163?camid=4v1a](http://www.igi-global.com/chapter/it-has-been-quite-a-journey/209163?camid=4v1a)

### Time to Re-Envision Vision Statements in Education

Mark C. Baildon and Hala Mohammed Arabi (2023). *Restructuring Leadership for School Improvement and Reform* (pp. 125-140).

[www.igi-global.com/chapter/time-to-re-envision-vision-statements-in-education/321992?camid=4v1a](http://www.igi-global.com/chapter/time-to-re-envision-vision-statements-in-education/321992?camid=4v1a)

### One Country, Two Organizations: Mozambique Rescue Front and Mozambique National Resistance Movement

Ali Fuat Gökçe and Armando Carlos Chirindza (2021). *Handbook of Research on Global Challenges for Improving Public Services and Government Operations* (pp. 330-347).

[www.igi-global.com/chapter/one-country-two-organizations/266109?camid=4v1a](http://www.igi-global.com/chapter/one-country-two-organizations/266109?camid=4v1a)

### Using Publicized Information to Determine the Sustainable Development of 3-PL Companies

Kris M.Y. Law, Kristijan Breznik and Andrew W. H. Ip (2024). *Research Anthology on Business Law, Policy, and Social Responsibility* (pp. 1992-2012).

[www.igi-global.com/chapter/using-publicized-information-to-determine-the-sustainable-development-of-3-pl-companies/335815?camid=4v1a](http://www.igi-global.com/chapter/using-publicized-information-to-determine-the-sustainable-development-of-3-pl-companies/335815?camid=4v1a)