

## Chapter 9

# On the Relationship between Informal and Formal Institutions, Foreign Direct Investment, and Innovation in Emerging Markets: The Case of Russia, India, and China, 1990–2014

**Natalya Smith**

*Heelstone Consulting Ltd., UK*

**Ekaterina Thomas**

*Staffordshire University, UK*

### **ABSTRACT**

*This chapter examines innovation in socio-institutional environments of three largest and most diverse emerging markets: Russia, India and China over the period 1990-2014. It considers formal (proxied by corruption) and informal (proxied by trust) institutions and non-linear forces. It also examines the role of Foreign Direct Investment (FDI) in (the likelihood of) fostering innovation and of two research and development (R&D) inputs: R&D expenditures and personnel. A significantly positive direct effect of trust and a negative direct effect of corruption are confirmed, whilst there is a significant non-linear decreasing relationship with trust and increasing relationship with corruption. Interestingly, FDI and R&D expenditures are found to decrease innovation, whilst R&D personnel increase innovation output across the sample.*

DOI: 10.4018/978-1-5225-0276-0.ch009

## INTRODUCTION

Institutions matter for innovation: they help removing obstacles and provide incentives to direct self-interested individuals towards more economically productive activities (Smith & Thomas, 2014a). Consequently, strong institutions help attracting foreign direct investment (FDI) that, in turn, may determine the flow of innovation by facilitating formation, development and diffusion of new knowledge (Lipsey & Sjöholm, 2005; Smith & Thomas, 2014a,b).

Despite innovation remains the key basis of competitive advantage of nations only a few countries have been able to achieve sustainable progress, however (Smith & Thomas, 2015b). Innovation is a lengthy collaborative process, thus it requires ‘innovation-prone environment’ (Smith & Thomas, 2015b). What plays a significant role in this process is the social capital.

Indeed, countries abundant with more social capital have been more innovative (Florida, 2002; Fukuyama, 2003; Smith & Thomas, 2015b). Studying social capital is, therefore, important as it can reflect strength and cohesion of a society. For example, when societies are well connected (through cooperation) and highly trusting, the benefits may spillover into the whole economy.

Equally vital is studying corruption, which can deter innovation, putting innovative firms at a disadvantage (Anokhin & Schulze, 2009; Starosta de Waldemar, 2012). For example, innovators can be particularly vulnerable to extortions from government officials, because of high and inelastic demand for government-supplied goods (such as permits and licenses) (Murphy, Shleifer, & Vishny, 1993).

Corruption undermines the foundations of institutional trust (Anderson & Tverdova, 2003; Cleary & Stokes, 2006; Chang & Chu, 2006) required for the development of innovative activities. It reduces the incentives to invest in innovative ideas by negatively affecting the magnitude of rewards that can be earned from innovation.

The current research, however, has largely ignored the role of institutional environment in unlocking entrepreneurial phenomena (Chiles, Bluedorn, & Gupta, 2007). When attempts were made to examine the impact of institutions on innovation in countries outside the United States, either a case-based approach was adopted or research focused only on regulatory (or formal) environment (Manolova, Eunni, & Gyoshev, 2008).

Despite it is hardly possible to understand entrepreneurial behaviour without locating it in the social context (Friedland & Alford, 1991; Smith & Thomas, 2015b), limited research has investigated the implications of a society’s institutional context for promoting innovation. This gap in extant research has led scholars to admit that institutions have been ignored (Williamson, 2000).

In particular, the complex effect of the institutional environment on innovation is understudied (Welter & Smallbone, 2003). Largely, a lack of appropriate constructs and measures (able to adequately capture the various informal and formal aspects of institutions) has impeded scholarly understanding of the institutions for promoting entrepreneurship (Meyer & Peng, 2005).

This is exactly what this study contributes to the debate. More specifically, it examines innovation in socio-institutional environments of the three largest and most diverse emerging markets: Russia, India and China (further, RICs). It does so by estimating empirically the impact of informal (proxied by trust) and formal institutions (proxied by corruption) on innovation across the countries.

Considering RICs is important for a number of reasons. These countries have been seeking global competitiveness through deployment of fiscal incentives and by leveraging human resources development in the areas of emerging opportunity in high-tech, industries driven by information and communication technology and intellectual capital.

20 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/on-the-relationship-between-informal-and-formal-institutions-foreign-direct-investment-and-innovation-in-emerging-markets/153012](http://www.igi-global.com/chapter/on-the-relationship-between-informal-and-formal-institutions-foreign-direct-investment-and-innovation-in-emerging-markets/153012)

## Related Content

---

### Africa in the Face of the AI Wave and the Fourth Industrial Revolution: Leapfrog Opportunities, Developmental Backlogs, and Impediments

Cyril Chibuzo Ezeani (2022). *Handbook of Research on Connecting Philosophy, Media, and Development in Developing Countries* (pp. 289-304).

[www.irma-international.org/chapter/africa-in-the-face-of-the-ai-wave-and-the-fourth-industrial-revolution/304275](http://www.irma-international.org/chapter/africa-in-the-face-of-the-ai-wave-and-the-fourth-industrial-revolution/304275)

### Awareness of ICT-Based Projects and the Intensity of Use of Mobile Phones Among Smallholder Farmers in Uganda: The Case of Mayuge and Apac Districts

Stephen Lwasa, Narathius Asingwire, Julius Juma Okello and Joseph Kiwanuka (2011). *International Journal of ICT Research and Development in Africa* (pp. 26-38).

[www.irma-international.org/article/awareness-ict-based-projects-intensity/60389](http://www.irma-international.org/article/awareness-ict-based-projects-intensity/60389)

### ICT Skills Training for the Deaf to Enhance Employment Prospects

Cosmas Boniface Mnyanyi (2023). *Impact of Disruptive Technologies on the Socio-Economic Development of Emerging Countries* (pp. 118-132).

[www.irma-international.org/chapter/ict-skills-training-for-the-deaf-to-enhance-employment-prospects/324827](http://www.irma-international.org/chapter/ict-skills-training-for-the-deaf-to-enhance-employment-prospects/324827)

### Service-Level Agreement Negotiation in Cloud Computing Buying Organizations

Teo Lo Piparo, Georg Hodosi and Lazar Rusu (2021). *International Journal of Innovation in the Digital Economy* (pp. 1-16).

[www.irma-international.org/article/service-level-agreement-negotiation-in-cloud-computing-buying-organizations/279596](http://www.irma-international.org/article/service-level-agreement-negotiation-in-cloud-computing-buying-organizations/279596)

### Assistive Technologies as Aids to Family Caregivers in Taiwan

Szu-Yao (Zoe) Wang (2011). *Intelligent Technologies for Bridging the Grey Digital Divide* (pp. 295-304).

[www.irma-international.org/chapter/assistive-technologies-aids-family-caregivers/46741](http://www.irma-international.org/chapter/assistive-technologies-aids-family-caregivers/46741)