The geography of economic activity in the 21st century represents a key concern for business, policymakers, and academics alike (Audretsch and Belitski, 2017; Audretsch et al., 2006; Saxenian, 1994). In order to thrive, places must be capable of consistently generating wealth, jobs, innovation and opportunities in an ever-changing socioeconomic and technological environment (Katz and Wagner, 2014). This environment is currently being sketched out as combination of the changing global value chains (GVCs), new locations and natures of entrepreneurial activities, as well as the arrival of the 4th Industrial Revolution1 (Schwab 2016).

It is abundantly clear that the world of innovation and entrepreneurship is not flat but rather spiky: innovative firms and entrepreneurs tend to agglomerate (Stam, 2009; Feldman, 2001). Moreover, evidence suggests that the impacts of entrepreneurial activity can be mainly felt at the regional level (Acs & Armington, 2004), placing entrepreneurial ecosystems as a key aspect of public policy (Borissenko & Boschma, 2016; Moretti & Thulin, 2013). This is particularly critical in the context of developing/emerging economies which struggle to reach an innovation-driven path for their productive structure and continuous adjustment. Such countries are vulnerable to economic shocks and stagnation cycles, one of which is of particular relevance to this collection of papers: the persistence of post middle-income gap or growth slow-down that prevents the majority of developing/emerging economies to complete the catching-up process with technology leaders. The location of innovation in these nations is strongly skewed towards a few cities and their metropolitan areas.

Innovation and entrepreneurship are believed to be subject to increasing returns to scale as a function of agglomeration economies and the existence of a multidimensional socio-economic environment that fosters heterogeneous location of innovation. Moreover, knowledge intensive entrepreneurship (KIE) is highly dependent on local endowments in terms of knowledge, institutions, resources and demand. Yet, innovation systems differ in terms of "entrepreneurial propensity", i.e. the capacity to generate and exploit innovation-oriented opportunities through the creation of new enterprises or the progressive renewal of incumbent firms. This is the underlying rationale of the concept of innovation ecosystems.

The fact that KIE is deeply embedded in local contexts (Radosevic & Yoruk, 2013) poses fundamental challenges for analysts and policymakers, as one-size-fits-all initiatives and analytical models can be deemed inappropriate for most locations. The economic mechanisms that shape evolutionary trends in entrepreneurship are not of a linear nature and they operate differently in distinct locations with varying historical backgrounds (Boschma & Martin, 2010). The evolution of these ecosystems "reflect decades of economic decisions" (Rosenthal & Strange, 2001, p. 218).

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1 Alternatively known as Industry 4.0, the 4th Industrial Revolution refers to the new waves of innovations consisting of several technologies comprising 3D-printing, IoT, AI, big data, and robotics, and possibly on-demand economy (sharing economy) and renewable energies.
In the context of developed economies, enabling conditions are strongly related to physical proximity, understood as an important feature of urban agglomerations providing access to markets and ideas. Densely populated areas provide larger pools of individuals to engage in innovation, entrepreneurship and creative endeavors (Glaeser, 2011; Feldman and Kogler, 2010; Stam, 2009). Large metropolitan areas are, accordingly, expected to have a disproportionately stronger activity of inventors than smaller cities (Florida et al., 2016; Li et al., 2016; Bettencourt et al., 2007). There is, however, lesser direct evidence and shared understanding for developing/emerging economies (Glaeser, 2014; Fischer et al., forthcoming), especially those struggling to overcome the phenomena described by the terms “post-middle-income trap” and “catching-up” (Lee 2013; Lee, 2016; Lee and Malerba, 2017). Their efforts to address the multi-faceted challenge have attracted increasing attention to the role of technology upgrading in this process (Radosevic Yuruk, 2016). Researchers, policy makers, and practitioners struggle with a number of complex questions, many of which relate on local-global interfaces (World Bank, 2015; Fu et al., 2011; Pietrobelli and Staritz, 2017). More specifically:

- **Linkages to Global Value Chains (GVCs)** impact significantly local firm productivity and growth. How can regional initiatives in emerging economies foster local small and medium sized enterprises (SMEs) and KIE linkages to Global Value Chains? How can they encourage foreign enterprises to establish presence in these regions?
- **Local interactions and socio-economic structure** are key for innovation and knowledge-intensive entrepreneurship. How can cities/regions in emerging economies attract and generate innovation and KIE?
- **Innovation and KIE** are systemic phenomena and include many interactions between local and global agents; they are also connected through feedback loops. What is the role of region/city-level initiatives in building an environment conducive to interactions between multiple agents aiming at achieving innovation-driven growth? What is the role of existing ventures in supporting the early stages of KIE? What is the relative importance of multinational agents in these matters?

This special issue aims at providing insights into these complex questions on local-global interfaces specifically as they relate to emerging economies trying to overcome the post-middle-income gap and to catch up with advanced, innovation-based economies. Preference will be given to in-depth theoretical and/or empirical papers that tackle such questions while acknowledging (at least) the rising context of the 4th Industrial Revolution.

The core challenge to be addressed in this collection of papers can be phrased as:

- **The changing interface between local innovation ecosystems and global techno-economic environments in the context of post-middle-income traps and countervailing long-term catch-up processes through technology upgrading in the unfolding era of the 4th Industrial Revolution.**
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Review process: Double-blind review arranged by the special issue editors

Timing:
First call of papers (immediate) February 2018
Extended abstracts (1500 words) May 2018
First complete drafts September 2018
Final drafts December 2018

Submission:
Extended abstracts should be submitted to the editors by email
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References


Lee, J. D. (2016) “Middle-Income Trap: Transition Failure from Implementation Capability to Concept Design Capability as a Source of the Middle Income Trap” Presentation, HSE International Research Conference on Foresight and STI Policy, National Research University Higher School of Economics, Moscow, Russian Federation, October.


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He has published extensively in international journals on issues of innovation and innovation policy (Research Policy, Scientometrics, Industrial and Corporate Change, Technology Analysis and Strategic Management, J of Common Market Studies, Economic Systems, Science and Public Policy, J of Technology Transfer, Technovation, Structural Change and Economic Dynamics etc.). He is an editorial board member of Science and Public Policy, Journal of Technological Learning, Innovation and Development and associate editor of Industrial and Corporate Change. Prof. Radosevic is the author of 'International Technology Transfer and Catch Up in Economic Development', Edward Elgar, 1999. He is also the co-editor of volumes on knowledge-based entrepreneurship, European innovation policy, industrial networks, EU smart specialization, industrial restructuring, on the knowledge-based economy in central and Eastern Europe, and two volumes on science policy in central and south-east Europe.

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