**Special Session S20: Historical Roots of Regional Entrepreneurship and Innovation Co-Organisers:** Michael Fritsch, Maria Greve, Korneliusz Pylak, Michael Wyrwich

## Systems of Innovation in Eastern European countries: Path of Economic Transition

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**Abstract** Against the background of the current political developments in the European neighborhood, including i. a. the Ukraine and Belarus, the question arises as to what role the transformation of the economy and its innovation linkages have played in the newer Eastern European member states. It can be assumed that, among other things, innovation institutions, political traditions, and industrial specialization played a critical aspect of development since the 90s. Moreover, ERDF funding and other transformation funds have contributed to the stabilization of economic and political developments. In particular, it remains to be further elaborated what role innovation frameworks and policy play and whether they have provided a transition boost.

There are some approaches to discuss the role of historical path dependency, innovation institutions, and economics development. For instance, Ville (2011) analyzes historical approaches to creativity and innovation in the case of Australia. He concludes on the relevance of frameworks for innovation and historical events. Fritsch et al. (2018) elaborate the understanding of the role of entrepreneurial culture and start-up behavior. They combine historical self-employment data (entrepreneurial tradition) with different variables related to entrepreneurial attitudes. Their results show that entrepreneurship is positively related also to the level innovation (activity). However, in the European Union, the so-called smart specialization plays a special role. Smart specialization and its strategic development were introduced from 2005 by an EU-high expert group to find an innovation policy instrument to close Europe's productivity and innovation capability gap with the US and Japan. The so-called Smart Specialization Strategy (S3) builds on the theory of innovation economics and was introduced as a European policy approach as "Research and Innovation Strategies for Smart Specialization" (RIS3). Moreover, against the background of the national innovation models, but also the regional innovation systems (RIS), in connection with cluster strategies, the smart specialization approach is highly relevant (Asheim et al., 2011; McCann & Soete, 2020). Since 2014, EU regions have had to develop a RIS3 to be eligible for EU funding, leading to a breakthrough in smart specialization in Europe. The smart specialization research and innovation strategies are applied as a place-based approach, for the identification of new activities at the regional scale that can become domains for regional competitive advantage (Foray et al., 2011; Foray, 2013). This identification process is conducted through

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entrepreneurial discovery rather than top-down planning. By recognizing that there is no onesize-fits-all solution for regional innovation, regions themselves get the edge in strategy development (Trillo, 2016).

The approach chosen here first examines the national innovation systems of the Eastern European economies in the context of the political framework. First, a review of the literature should also present the current state of research. The national innovation systems of the Eastern European member states of the EU (e. g. Estonia, Poland, Slovakia, Croatia) and their neighboring countries (e. g. Belarus, Ukraine) are to be examined. Derived from the literature, second, a current model (growth model) is presented, which represents the basis for the creation of the empirical-econometric analysis. For the purpose of the analysis, third, variables such as R&D, patents, human capital, creativity are taken into account, but also variables of the political system such as openness, corruption and freedom of the press are used to control for the individual peculiarities of the states. The economic development is derived from this system of variables in order to determine various transformation paths. Based on the analysis, the suspected different development paths can then be derived.

The work is part of a three-part research project on the impact of smart specialization and innovation on the transition of Eastern European economies.

Keywords Eastern Europe, economic growth, RIS3, innovation, transition

**JEL-codes** O Economic Development, Innovation, Technological Change, and Growth, O47 Empirical Studies of Economic Growth, R11 Regional Economic Activity: Growth, Development, Environmental Issues, and Changes