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## BOOK REVIEW

**Roberta Capello and Peter Nijkamp (Eds.), *Handbook of Regional Growth and Development Theories* – Edward Elgar, 2009**

by **Daniela-Luminita Constantin, Academy of Economic Studies of Bucharest**

“Regional Economics is back on the stage”! This wonderful statement, inspiring pride and confidence, is the starting sentence of the stunning *Handbook of Regional Growth and Development Theories* recently launched by the prestigious Edward Elgar Publishing.

The editors, **Professor Roberta Capello from Politecnico di Milano and Professor Peter Nijkamp from VU University Amsterdam** – two top scholars of the world’s regional science community, offer us a collection of cutting-edge theories explaining regional growth and local development in the twenty-first century.

This comprehensive, original reference work is the result of the conceptual, critical and forward-looking contributions developed by an unrivalled group of regional scientists, who have given an in-depth treatment of the most advanced theories, measurement methods and policy issues in regional growth.

The volume is organized in five parts, reflecting the new, challenging directions of investigation proposed by the authors.

Part I is built around the new concepts of space and growth, which lay the foundations for current regional growth and development theories. Chapter 1, written by **Philip McCann and Frank van Oort**, offers a historical review on theories of agglomeration and regional growth based on evolutionary and institutional economic geographical conceptualisations. The authors show that the fusion of new and old ideas raises new questions, poses new challenges and identify new directions for future research.

Chapter 2, authored by **Roberta Capello**, presents in detail the wide range of notions of space as they can be found in various theories, revealing their interpretative capacity. The need of a convincing model able to combine micro-territorial, micro-behavioural and intangible elements of the development process is discussed, at the same time with macroeconomic models. The chapter concludes that “it is necessary to demonstrate the territorial micro-foundations of macroeconomic growth models” (p.48) considering it a big challenge to regional economists in the years to come.

In Chapter 3 **Gunter Mayer and Michaela Trippel** look at the spatial distribution of regional growth, analysing the implications of different growth theories on the spatial distribution of economic activities and long-term dynamics of regional economy. The views expressed by the neoclassical model, endogenous growth and new economic geography (NEG) are mainly considered.

In Chapter 4 **Kieran Donaghy** provides a selective survey of different aspects of the relationship between trade and regional growth as they are explained by various theories of trade, agglomeration and fragmentation, indicating where the frontiers of research on this subject lie.

In Chapter 5 **Alfredo Minerva and Gianmarco Ottaviano** address the agglomeration benefits and transportation costs from the perspective of endogenous growth theories, focusing on the effects of infrastructure on the costs of exchanging goods and ideas (transportation costs and communication costs, respectively). They provide a unified framework summarising the main insights of NEG on the relation between infrastructure, economic growth and agglomeration.

Part II is devoted to advances in regional development theories, aiming to shed more light on the influence of the production factors endowment. Chapter 6, written by **Jeffrey Cohen and Catherine Morrison Paul**, concentrates on the empirical representation of agglomeration economies, discussion the potential of the econometric models based on production theory to analyse the productive impacts of corresponding externalities in terms of causes, productivity and growth effects.

Chapter 7, authored by **Roberto Camagni**, deals with the relationship between territorial capital and regional development. The concept of territorial capital is developed within a cognitive approach to regional development, which supports the idea that “growth strategies for each region, city or territory must necessarily rely on local assets and potentials and their full and wise exploitation” (p.119).

In Chapter 8 **Alessandra Faggian and Philip McCann** demonstrate there are two quite different sets of human capital impacts on regions: the first, which mirrors the national impact, has an influence on the aggregate productivity in the economy, while the second, which differs significantly from the national impact, can result in a major spatial reallocation of factors. The conclusions show that the regions will flourish when the two impacts coincide and struggle in the opposite situation.

In Chapter 9 **Johannes Bröcker and Piet Rietveld** bring into discussion the complex relation between infrastructure and regional development, highlighting interesting future research directions. For example, they comment upon the temporal perspective, arguing that it is important to distinguish between short-term effects, dominated by construction activities, and mid- and long-term effects, dominated by productivity effects.

Chapter 10, elaborated by **Manfred M. Fischer and Peter Nijkamp**, provides a deep review of the literature devoted to entrepreneurship in relation with those factors that prompt it in the space economy. The authors objectively consider that the literature on this subject has not reached a mature equilibrium, still being in a development stage. The methodological and technical

problems associated with the research on this topic are discussed and robust, forward-looking solutions are proposed.

Part 3 is about development theories, with a particular emphasis on innovation, knowledge and space. In Chapter 11 **David Audretsch and Taylor Aldridge** aim to explain “why the emergence of knowledge as a source of comparative advantage has rendered a shift in the organization of economic activity for both the spatial and enterprise levels” (p.201). They use insights provided by knowledge spillover theory of entrepreneurship for an integrated approach of the organization of economic activity in the geographic space and small firm enterprises.

In Chapter 12 **Daria Denti** reviews the influential and path-breaking contributions of the economic literature devoted to the linkages between R&D and economic performance of countries and regions. Her main conclusion is that the presence of spillovers, as one of the main factors characterising R&D as a commodity, is identified in both theory and empirical research, revealing a wide menu of trajectories through which R&D externalities may influence an economy.

Chapter 13, elaborated by **Börje Johansson and Charlie Karlsson** examines the main models which describe and explain the role of knowledge in regional development and provides an assessment of the empirical studies that analyse the way Knowledge influences growth and development in functional regions. Based on solid arguments the authors distinguish four areas for regional policies that relate to a region’s knowledge resources, namely knowledge policies, household milieu policies, facility policies and firm milieu policies.

In Chapter 14 **Henri de Groot, Jacques Poot and Martijn Smit** explore the theoretical background behind the empirical analysis of the growth in cities and propose a meta-analysis of agglomeration externalities, innovation and growth, pointing at several directions of future research: the sectoral, temporal and spatial heterogeneity of specialisation, competition and urban growth effects, the regional aggregation level at which agglomeration forces are operational, etc.

Chapter 15, authored by **Amitrajeet Batabyal and peter Nijkamp**, aims at a systematic review of the key themes of the literature on sustainable development and regional growth. It is both retrospective and forward-looking, concentrating on fundamental areas of interest such as natural resources, environmental regulation, geographic information systems formation, regional climate change.

Part IV brings into discussion the most advanced methods for measuring regional growth and development. Chapter 16, written by **Ryohei Nakamura and Catherine Morrison Paul**, focuses on the measurement of economic agglomeration in the context of the clustering of regional economic activity. After commenting upon various agglomeration measures proposed in the literature the authors provide alternative methodologies for the direct measurement of agglomeration.

In the following chapter, 17, **Roberto Ezcurra and Andrés Rodrigues-Pose** offer an overview of the main developments in the measurement of the regional divide, with reflections on several methodological issues appeared over the attempts to quantify the magnitude of spatial disparities.

In Chapter 18 **Robert Stimson, Alistair Robson and Tung Kai Shyy** propose a measure of regional endogenous change which is readily calculable from secondary analysis of regional employment data available in the Australian census. The chapter concludes with some reflections on the emergence of a new paradigm for economic development analysis and planning.

Chapter 19, authored by **Cem Ertur and Julie Le Gallo**, deals with the main econometric specifications capturing spatial heterogeneity, followed by examining how these specifications can be extended to allow further for spatial autocorrelation in the models of heterogenous reaction.

In Chapter 20 **Kieran Donaghy** provides a survey on computable general equilibrium (SCGE) modeling in space. Its primary objective is to convey a sense of the scope of the SCGE modeling, accompanied by a discussion on new directions in which SCGE modeling might be taken.

In Chapter 21 **Jan Oosterhaven and Karen Polenske** refer to regional and multi-regional impact analyses and the development of computer programming packages helping the analyses to conduct such studies in a reasonable time. They conclude that “new spatial theories are needed before analysts can make significant advances on applications and that there is no real substitute to survey-based, inter-industry, interregional information and modeling” (p.436).

Part V deals with regional growth and development policies. The first chapter (22) in this part, written by **T.R. Lakshmanan and Ken Button**, focuses on different institutional mechanisms that serve for the coordination of regional economic activities in modern capitalistic economies, with deep insights into the logic and functions of economic institutions. They underline the requirements of the institutions needed by the modern, knowledge-based society at all levels of spatial interest.

In Chapter 23 **Jouke van Dijk, Henk Folmer and Jan Oosterhaven** discuss the rationale, foundations and measurement of regional policy effects from the perspective of several dilemmas, such as “place prosperity versus people prosperity”, “interregional equity versus national efficiency”, etc.. They highlight the interdependence between the framework for the choice of policy goals and policy instruments and the political choice which is dependent upon the institutional and socio-economic setting as well as a series of norms and values.

Then, in Chapter 24, **Maria Abreu and Maria Savona** analyse new regional policies for less developed regions using India as a case study. A special emphasis is put on the policy interventions carried out at regional level for counterbalancing the effects of trade liberalization.

In the final chapter, 25, **Peter Friedrich and Chang Woon Nam** discuss the significance of special economic zones for the public intervention in relation with the economic decline. They

stress the necessity of an improved stage theory to show the processes of development and not merely a characterization of development stages based on some indicators.

The whole book is so brimful of ideas, methodologies and case studies that will certainly stimulate fruitful debates and further insights in the international regional science research arena. It is a source of reference and information for both scholars and students, which deserves widespread circulation and recognition.

I express my humble admiration and congratulations to the editors and all contributors, accompanied by sincere thanks to the Marketing Department of the Edward Elgar Publishing for the gracefully enabled privilege of reviewing this authoritative handbook.