## **Book Review**

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Tech, Smart Cities, and Regional Development in Contemporary Russia by: Bruno S. Sergi Published 2019 by Emerald Publishing Limited, Howard House, Wagon Lane, Bingley, 229pp ISBN 978-1-78973-882-7

Currently, Russia is one of the fastest growing economies in the world. Economic development necessarily entails technological advancement and change. *Tech, Smart Cities, and Regional Development in Contemporary Russia*, edited by Prof. Bruno S. Sergi, draws on the expertise of leading scholars in the field, who analyse and explain these innovations. Prof. Sergi teaches international economics at the University of Messina and 'The Political Economy of Russia and China' as well as 'The Economics of Emerging Markets' at Harvard University. In addition, he serves as the Scientific Director of the International Center for Emerging Markets Research at RUDN University in Moscow. Further, he is an Affiliated Editor of The American Economist and Editor-in-Chief of several economic journals. He also coaches the SEE Tus Economic Experts' Network as well as the NIS Tus Economic Experts' Network.

The individual chapters discuss issues of technology and how they relate to other topics Russia is currently dealing with. Together with Prof. Sergi's other works, the book is particularly relevant for students and researchers of international economics, the Russian economy, and the development of emerging economies. Like his other works, Sergi's book is simply brilliant. It is a fascinating and intriguing read, which should be incorporated into the curriculum of universities around the globe. Even though the findings are specific to the Russian economy, readers can draw intelligible conclusions which apply to other emerging markets.

The first chapter is titled 'The comprehensive plot of socioeconomic development of Russia in the conditions of the technological revolution of the age of globalization' and was authored by Marina L. Alpidovskaya and Dmitry P. Sokolov. It seems reasonable to begin the book with an overview. Further, it makes sense to provide some theoretical background, which serves as grounds moving forward. The authors explore production and how it has developed with increasing technology. It is explained that 'new types of energy and manmade materials appear' [Sergi, (2019), p.1] and 'socioeconomic human living environment becomes more complicated' [Sergi, (2019), p.1]. The authors illustrate how technology and science are increasingly influencing people's daily lives.

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Throughout the chapter, the scientific and technological revolution (STR) and its implications for the economy is examined. Moreover, Alpidovskaya and Sokolov conduct a smart analysis of globalisation, which is particularly interesting. The authors brilliantly portray 'the global systemic crisis of the globalised economy' [Sergi, (2019), p.12], which they characterise as an objective phenomenon. The chapter is a well-written introduction to the work, which presents the socioeconomic development of Russia in a fascinating and intriguing way.

Subsequently, "Innovation projects of technological growth on the platform of public – private partnership" and the "Risks and methods of their minimization" [Sergi, (2019), p.15] are examined by Valentina N. Parakhina, Galina V. Vorontsova, Oksana N. Momotova, Olga A. Boris, and Rustam M. Ustaev. The chapter mainly focuses on public-private partnership (PPP) matters such as the 'implementation of innovational projects of technological growth through' [Sergi, (2019), p.15] PPP. The authors excel in their portrayal of risk management of innovational projects by providing a detailed step-by-step guide of the procedure, which is based on a special algorithm. Their conclusion sums up their previously made arguments and once again stresses the significance of PPP. Throughout the entire chapter, the authors display an abundance of knowledge and expertise, which is effectively underlined by several illustrations.

Thereafter, Igor E. Mizikovsky, Viktor P. Kuznetsov, Ekaterina P. Garina, Elena V. Romanovska, and Nataliya S. Andryashina discuss "Standard control of the consumption of material resources as a factor in the technological growth of industrial enterprises" [Sergi, (2019), p.29]. This chapter focuses on production. In particular, this chapter examines how 'the standard control of the material costs of production' [Sergi, (2019), p.29] influences technological growth within the manufacturing industries. The authors provide data on industrial production and manufacturing industries, which successfully underlines their argument that the Russian industry is currently in a phase of development. The chapter integrates well with the previous ones and adds highly interesting and relevant insights to the discussion.

Chapter 4 examines "Costs and profits of technological growth in Russia" [Sergi, (2019), p.41] and was authored by Bruno S. Sergi, Elena G. Popkova, Aleksei V. Bogoviz, and Julia V. Ragulina. The chapter focuses on technological growth in the modern Russian economy by 'evaluating its effectiveness from the position of costs and profits' [Sergi, (2019), p.41]. Moreover, Sergi and the other authors provide suggestions for managing growth factors. The assessment of costs and profits of technological advancements within the scope of the work seems reasonable, as it fits the statements and analyses made throughout the book, thus far. In particular, both positive and negative aspects are examined in the chapter, which provides readers with a comprehensive overview over the implications of technological growth. The authors display their impeccable expertise throughout the entire analysis, especially in the representation of their results, during which they evaluate the effectiveness of technological growth of the modern Russian economy from the position of costs and profits [Sergi, (2019), p.46].

In Chapter 5 by Irina Turgel and Elizaveta Ulyanova, "Russia's largest regional capitals" are discussed. Their study examines how the roles of the largest cities and Russia's economy have changed at the turn of the 20th and 21st centuries. Large cities are defined as cities with more than one million inhabitants. They stress that these areas are considered administrative centres of large territories. Their analysis is accompanied by a number of carefully selected illustrations, which attest to Turgel and Ulyanova's

expert findings. Their explanation of 'the role of the largest regional capitals in the economic growth of the Russian federation' [Sergi, (2019), p.68] is particularly intriguing. The authors' examination of major regional capitals is compelling, as well as thought-provoking. Turgel and Ulyanova successfully portray how the collapse of the Soviet-Union has impacted the country and its cities.

Chapter 6 presents the results of an empirical study, which assessed "The managerial gap between multinational and domestic companies in Russia" [Sergi, (2019), p.81]. The authors, Natalia Guseva and Olga Tischenko flawlessly insert managerial aspects into the discussion of Russia's economic growth. Guseva and Tischenko's brilliant analysis considers five managerial capabilities, namely communication, leadership, problemsolving, decision-making, conflict resolution, and motivation which are each subdivided into five management practices. The authors provide theoretical framework, which introduces the reader to management models and capabilities. It makes sense to delve into the subject of management as an isolated discipline before discussing its implications for the economy, as readers might not be familiar with management issues. Their methodology is illustrated in a highly detailed, yet comprehensible manner. The authors argue that managerial innovations can be used more efficiently while at the same time demanding fewer financial resources than technological innovations. Guseva and Tischenko bring forward intelligent arguments, which are progressive and relevant in their nature and integrate well into the flow of the work. Particularly intriguing is their offering of their own perspective, which gives advice to Russian companies.

Chapter 7, "Toward a high-tech development model" [Sergi, (2019), p.103] by Elena V. Sibirskaya, Liudmila V. Oveshnikova, Aleksandr V. Bezrukov, Olga M. Pasnykova, and Yulia I. Slepkurova discusses Russia's expanded participation in the world's raw and energy markets and how it has caused high-growth economic rates within the last 15 years. Now that these factors are largely exhausted, Russia is faced with some challenges concerning socioeconomic and sociopolitical life, according to the authors. They suggest Russia "needs to change the raw model of economic growth which poses the threats for stability of social and economic development" [Sergi, (2019), p.103]. Further, the authors predict a 'new industrial revolution', or 'technological revolution', 'based on the transition from mass production of the standardised production to the flexible high-performance production' of individualised products [Sergi, (2019), p.103]. Not only is the topic of this chapter extremely relevant and at the same time interesting, it is also one which has not been discussed sufficiently enough, thus far. The discussion of results is highly detailed. In the conclusion, the authors give a competent and comprehensive list of requirements which must be met in order to advance the period of postremoval of NTI project-planning.

Chapter 8 focuses on "Modeling regional economic growth in Russia" [Sergi, (2019), p.119] and was authored by Elena G. Popkova and Aleksei V. Bogoviz. Throughout the chapter, Popkova and Bogoviz analyse 'disproportions in development of regional economy of Russia' [Sergi, (2019), p.119] and possibilities to overcome said disproportions in order to achieve balance of the economy. The authors use three consecutive stages to conduct their research, which seems to be a reasonable and effective approach. Their evaluation of Russia's regional economy is particularly intriguing and insightful. Popkova and Bogoviz conduct an extraordinary analysis of regional development and give an insightful list of recommendations to balance the economy. Their research is extremely thorough and considers all significant aspects. Their incorporation of mathematical calculations underlines their argument and facilitates

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the reader's understanding of 'underdevelopment whirlpools' [Sergi, (2019), p.144] and how to overcome them. Not only do the authors succeed in proving their hypothesis that "Russia's regional economy is unbalanced and has deep structural disproportions" [Sergi, (2019), p.144], they make the reader's perusal intriguing, as well.

Subsequently, Konstantin V. Krinichansky discusses 'smart solutions for smart cities' by providing 'a snapshot of Russian urban life' [Sergi, (2019), p.151]. In this, Krinichansky delves into the perspective of Russian cities which work on the implementation of smart solutions. Krinichansky demonstrates that smart solutions in Russia are mainly concentrated in informatisation of urban life and energy efficiency, whereas other nations focus on sustainable development and transport. The author argues that due to this reason, Russian models of smart cities are less demand and more supply-driven. Krinichansky's literature review on smart cities is exhaustive and detailed. The following 'analysis of the conditions for the development of smart cities in Russia' [Sergi, (2019), p.163] perfectly builds on the previous literature review. Lastly, the conclusion summarises the findings of the study and testifies to the importance of the conducted study.

Thereafter, Bruno S. Sergi and Shahdad Naghshpour identify "The determinants of economic growth for the newly formed countries of the former Soviet Union and the Socialist Bloc" [Sergi, (2019), p.177]. The chapter, which is titled "Modeling economic growth for the newly formed countries of the former Soviet Union" [Sergi, (2019), p.177], begins by explaining a neoclassical theory and then add recently identified factors to 'find the determinant of the growth in the region' [Sergi, (2019), p.177]. The authors analyse all relevant data during their check for multicollinearity among variables. The chapter discusses the highly relevant topics of newly formed countries from the former Soviet Union and economic growth in conjuncture with human capital, financial development, foreign direct investment, and research and development. Their discussion of labour, capital, and technology within the scope of the literature review is particularly compelling. Their explanations of control variables, data, and models are excellent, and the subsequent analysis is extremely well thought out. The chapter perfectly builds upon the previous chapters and adds new interesting aspects to the analysis.

The final chapter called "Modeling Russian industrial, tech, and financial cooperation with the Asia-Pacific region" by Bruno S. Sergi, Elena G. Popkova, Anastasia A. Sozinova, and Olga V. Festisova "models industrial, tech, and financial cooperation between Russia and the countries of the Asia-Pacific region." [Sergi, (2019), p.195] The authors skilfully use complex economic and mathematical methods "to analyze specific features of such cooperation and determine critical factors in industrial, technological, and financial development." [Sergi, (2019), p.195] Their selection of ten countries for the analysis is balanced between developed and developing countries in the Asia-Pacific region, which guarantees an extensive analysis that considers multiple perspectives. The authors effectively argue in favour of Russia's cooperation with the Asia-Pacific area by stressing that the majority of the country is located in North Asia and their commonness of culture and similar models of socioeconomic development. The authors conduct a thorough literature review, which contains analyses of industrial, tech, and financial development systems. Their analysis is exhaustive, yet captivating. The chapter marks a formidable ending to the entirely commendable work.

Altogether, the work consists of excellent expert knowledge and unites intelligible content with intriguing and informative writing. The authors succeed in their exhaustive

portrayal of the impact of technological development on Russia's economic growth. Every chapter contributes valuable insights to the work, and they all tie perfectly together. We would like to commend Prof. Sergi and all authors for this exceptional piece of literature, which marks a milestone in the research field.

## References

Sergi, B.S. (Ed.) (2019) *Tech, Smart Cities, and Regional Development in Contemporary Russia*, Emerald Publishing Limited, Howard House, Wagon Lane, Bingley.