Regional Convergence and Innovative Management

Abstract. The lack of territorial economic and social cohesion demonstrates a strong influence on the growth rate of any national economy. It can be explained by permanent allocation of resources from developed regions towards underdeveloped areas. As a result, underdeveloped areas are not forced to enhance their economy since donated money are used to maintain basic life services; and developed regions meet economic slowdown since money needed for the long-run development are transferred. Therefore, there is an issue of how to provide the regional convergence effectively and efficiently without harmful impact on the national economy. The purpose of the research is to outline 5 types of strategies that can be taken by the government in order to provide regional convergence. The offered framework is be helpful in order to classify governmental decisions with respect to regulation of regional economy and forecast consequences and further implications of varying regional strategy. Also, the studies pursue the objective to describe the problem preventing regional growth based on innovations and offer alternative solution of its handling. As it refers to the first step of critical thinking approach, obtained results regarding innovative regional development and growth allow the view on the problem of regional convergence to be shifted towards new methods of facilitating spatial cohesion.

Results. Instruments of providing regional convergence are to be distinguished according to the ideological foundation underlying their development: optimistic or pessimistic. According to optimistic ideological foundation, the purpose of regional convergence can be achieved. According to pessimistic ideological foundation of regional convergence, overcoming territorial disproportions in economic and social development is impossible. Instruments for regional convergence have different scope. As usual, mechanisms are aimed at total regional convergence. It is offered in the article to concentrate on dotty convergence right across the territorial skeleton of the country. Instruments implemented to make regions convergent allow static indexes (indicators or ratios of regional system development) to be converged instead of dynamic parameters of transformational processes. Design of mechanisms for regional convergence depends on what exact indicators have been chosen to assess convergence efficiency. It is appropriate to pay attention to convergence of innovation development right across the regions of Ukraine since the innovation model of economic growth has been recognized as prospective. Convergence mechanisms can be direct and indirect. They imply direct funding for those industries that were selected by the government to be basic in regional development. Stimulating mechanisms facilitate and support special conditions to activate those processes within the regions that are required for regional convergence being achieved. In considering innovations as a key driver of the economy, it was offered the concept of innovations privatization in Ukraine. It implies benefits for the central government if it delegates the right of possession and disposal of intellectual property and the results of its implementation to the local authorities even if research projects were funded by the government.

Conclusion. In Ukraine, the innovative activity system is suffering an excessive centralization, and thus, prevents business from collaborating with research institutions to develop and market innovations. The theoretical results obtained due to the critical thinking approach documents the hypothesis of dotty convergence existing in the sense that at a particular point of time previously selected dots of territorial skeleton should be fixed at the same steady state level of growth and development. Other dots may experience slumps in their growth and development; however, it does not have a harmful impact on the national economy. Over the time these dots should be changed.

Keywords: regional development; dotty convergence; innovative management; spatial depression; spatial disproportions.

JEL Classification: M31, O13, Q13
Introduction. The regional convergence and opposite spatial disproportions were always core items of regional policy that has been developed across countries of the world. Ukraine is not an exception; therefore, the process of encouraging regional economies growth is considered to be affected by the paradigm of regional development that is expected in the country. The regional convergence is referred to as the achievement of such standing of the economy when a level of development of separate territories is approximately identical. In fact, the greater contrasts in development of regions are, then the lower level of growth of the national economy is. It can be explained with the fact that conflicts arisen due to depressive regions existing are often handled at the expenses of developed regions slow down since the later provide a huge amount of donations. However, the concept of convergence implies that all regions of a country equally contribute to the national growth owing to intensive use of their productive capacities.

Thus, the balance of regional development for achieving sustainable growth in the long-run period is a topical issue for Ukraine, as the economy striving to be integrated into European community, as well as for other countries.

Brief Literature Review. In examining the framework composed of the main research results and outcomes relative to the issue of regional convergence, we can reveal that current scientific advances might be classified according to several types. However, in the light of the article, there is a strong relevance in different strategies of territorial economic cooperation or, conversely, economic diversity could be grouped in a way dependent on why and when a convergence of regions and countries is possible.

Regional convergence is determined by the level of development demonstrated by separate territories. Thus, the factors driving spatial development are automatically causes of regional convergence. One of two branches that provide explanations of spatial development and convergence is spatial concept. Its contributors have shown that regional development and, therefore, convergence depend on: the distance between production facilities and final product markets (Thunen, 1992); the distance between production facilities, market and location of raw materials (Launhardt, 1987), which all together significantly influence transport expenses; all costs of production that must be minimized due to locating production facilities as closer to labor force market, source of raw materials as possible (Weber, 1935); however, A. Loesch (1940) made an effort to integrate those concepts and elaborate a simulation model for predicting spatial economic growth and projecting economic regions free of legal geographic boundaries.

In contradiction to the spatial concept of the regional convergence, the dynamic theory of spatial cohesion is represented in the fundamental research work conducted by R. Barro and X. Sala-i-Martin (1992) in which the authors explained the rationale of convergence between underdeveloped and highly developed countries due to the unexpected tendency of faster growth of poor countries. This phenomenon was lately checked by M. Bartkowska (2012) and A. Riedl (2012) for European regions; however, unlike the previous research where GDP and income per capita were taken into account, indicators of human capital showed strong relationship with the growth rate in poor and reach regions. By extension, when elaborating regional policy, it is useful to employee recent findings in respect to productivity disturbances (Leung & Quah, 1996), convergence clusters (Quah, 1996), modern spatial theories of convergence provided by Rey S. and Janikas M. (2005), conditional convergence (Felsenstein & Beenstock, 2008) and peculiarities of EU convergence (Maza & Villarverde, 2011; Petrakos, Kalloras & Anagnostou, 2011).

In recent years, many derivative research works in respect to generic issue of regional growth and convergence have been conducted by Ukrainian authors. Results of those works are extremely important for Ukrainian regional policy as they address topical sub issues observed in the national economy of Ukraine. Among those results are developed principals of shaping a regional space attractive for foreign and domestic investors by N. Navrotska (2013); methods of fostering business to invest into regional economies and, thus, encourage spatial economic growth by Yu. Komar (2013); strategy of enhancing innovative activity aimed at regional development and growth by V. Shevchuk (2010).

Despite deep studies of the problem, we can see the items which are required to be justified and expected to expand theoretic frontiers – that is, particular issues which are of the top importance for transitive economies like Ukrainian one and concern managerial decisions about how to regulate internal business environment in the country to reach regional convergence. The data base appropriate for statistical analysis to formulate concepts and hypothesis of Ukraine’s regional convergence style has not been accumulated over the years of independence. In addition, models to track regional development built with the use of old data might be inadequate and inaccurate as the government regulation more than 20 years ago was principally different. Therefore, beyond the factors and causes of spatial convergence, there are decisive managerial issues vital for the Ukrainian government and other CIS countries authorities. They are focused on choosing a conceptual platform for elaboration of effective regulations and strategies to ensure regional convergence. By extension, topical issues cover innovation processes, which also require a model of collaboration between the government and business to be presented.

The purpose of the research is to outline 5 types of strategies that can be taken by the government in order to provide regional convergence. The offered framework will be helpful in order to classify governmental decisions with respect to regulation of regional economy and forecast consequences and further implications of applying regional strategies. The study pursue the objective to describe the problem preventing regional growth based on innovations and offer alternative solution of its handling. As it refers to the first step of critical thinking
The studies of regional convergence mechanisms demonstrate that efficient overcoming the spatial disproportions is dependent on elaboration of special convergence policy related to innovative progress of regional business environment. Therefore, regional economic convergence in Ukraine requires mechanisms of integrative regulation of processes which allow research inventions to be commercialized and scientific activity to be intensified. The necessity to create economic and legal conditions for scientific groups so that they can establish start-up businesses for further commercialization of the results obtained through research activity cannot be estimated as complete available intangible asset to the regional economy since the overall procedure of spending money gained after innovations having been sold for different purposes. It means that public companies that own considerable production capacity are lack of certain amount of autonomy to manage innovation activity. Therefore, opportunities of structural changes in favor of innovative entrepreneurship enhancement are lost for the regional economy. As a consequence, prospective increase in employment due to creating new jobs, improvement of social standards of living and regional convergence, increase in tax revenues to budgets are also not met.

In our opinion, the government should regulate the economic development through local control over intangible assets, which contains forbidding the state ownership for such type of resources. Despite recent proclamations about the necessity to create economic and legal conditions for scientific groups so that they can establish start-up businesses for further commercialization of the results obtained due to scientific activity, the regulation of technology transfer has still impeded innovation entrepreneurship, which begins with technology transfer and, thus, supports economic development of those countries which innovations are transferred (Figure 1).

Therefore, the government tries to control technology transfer performed by the public companies and institutions as strongly as possible. In return, science and research institutions become passive participants in regional economy, and results obtained through research activity cannot be estimated as complete available intangible asset to the regional economy since they cannot be used. Thus, regional convergence stimulated with innovations in fact suffers from regions disability to guide the development through local control over intangible assets. Therefore, opportunities of structural changes in favor of innovative entrepreneurship enhancement are lost for the regional economy. As a consequence, prospective increase in employment due to creating new jobs, improvement of social standards of living and regional convergence, increase in tax revenues to budgets are also not met.

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assets, the government may have a percentage of the profit gained after innovations being marketed. Incubation conditions in that case refer to a special corridor of values for the government to request funding. At the same time a regional consortium «science-government-business» is responsible for the final evaluation of innovative activity is to be find as a key driver of such balanced changing in dots of spatial growth within the territorial skeleton.

However, in Ukraine the innovative activity system is suffering an excessive centralization and, thus, prevents business from collaborating with research institutions to develop and market innovations. A mathematic formulation of changing the balanced spatial growth dots is a subject of further investigation.

References


Conclusion. The theoretical results obtained due to critical thinking approach document the hypothesis of existing dotty convergence in the sense that at a particular point of time previously selected dots of territorial skeleton should be fixed at the same steady state level of growth and development. Other dots may experience slumps in their growth and development; however, it does not have a harmful impact on the national economy. Over the time these dots should be changed. It means that the dots of growth will be replaced with those dots had been previously in recession. In addition, the mechanisms of stimulating innovative activity is to be find as a key driver of such balanced changing in dots of spatial growth within the territorial skeleton.

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