

LANDMARKS IN THE EVOLUTION OF REGIONAL SCIENCE

Lecturer PhD **Adrian Liviu SCUTARIU**
"Ștefan cel Mare" University of Suceava, Romania
Faculty of Economics and Public Administration
livius@seap.usv.ro

Abstract:

This article approaches issues of regional science development, science that analyzes the phenomena and processes related to space, distance and location. One can notice the diversity of theoretical approaches, and these can be grouped into: theories of localization, theories of regional growth and development theories. The evolution of this science was not linear, it has experienced both periods of boom and decay, recording remarkable progresses over time. Along with other disciplines, in the frame of regional science stands the regional economy that studies the optimal location of firms and the territorial economic development. The region is the core of these theoretical concerns, and one of the problems of regional development refers to factors that determine the development of a region. Regarding future research directions, regionalization existing in the EU provides regional science a further opportunity to continue its development.

Key words: regional science, regional economy, region, regional development, theories

JEL classification: R10

REGIONAL SCIENCE. INTRODUCTIVE ASPECTS

Since microeconomics studies economic phenomena at the economic entity level and macroeconomics deals with these issues at the national economy level, it is the competence of mesoeconomics to analyze phenomena in the branches and sectors. In its logical and comprehensive approach, the spatial approach aims to meet both micro and macroeconomics requirements and challenges of the mesoeconomics.

Over time, many researchers have contributed to the theoretical framework of regional science. Regional science bases were made by the representatives of the German school of spatial economy (J. von Thünen, W. Launhardt - 19th century and A. Weber, W. Christaller, A. Lösch - 20th century) and the regionalists of the American, French, Scandinavian, Russian, Dutch schools successfully continued the work of their predecessors.

Regional Science focused, right from its appearance, on two elements not approached by economic theory: the distance and the area. Distance was important because of the transport costs which influenced the market price and the location of production factors. Therefore, regional science deals with developing methods and rigorous and systematic techniques of analysis of phenomena and processes in which space, distance and location have a central role [1].

Regional Science Association International (RSAI), which was founded in 1954, has played a major role in shaping regional science (in the 50s) and its subsequent evolution. Since 1956, the Association was formally recognized as a legitimate organization in the social sciences field, and afterwards there were created branches almost worldwide.

Establishment of regional science as a distinct field was based on the adoption, from spatial perspective, of some concepts and methods of economics, geography, econometrics, mathematics, sociology, political science, etc., which gives it a strong interdisciplinary character [2].

THE MAIN GROUPS OF THEORIES OF REGIONAL GROWTH AND DEVELOPMENT

Theoretical approaches were multiple, and we intend to highlight briefly the main theories developed in this field.

While there was an insufficient economic growth at regional level, the classical theory of regional development appeared. Because at regional level the development is uneven, regional development theory tried to explain regional growth processes, as well as the differences that are reported in their frame.

In a first phase, it was considered that the differences among regions are not due to their particularities, but to different rates of economic growth. Currently, it is accepted the idea that endogenous processes of evolution, which are based on qualitative characteristics of regions, have some influence on regional growth.

Understanding regional growth processes involves the necessity of presentation of the main regional development theories: theories of localization, of regional growth and of development.

The first theoretical landmarks of the regional economy, as an essential part of regional science, were recorded in the 19th century. These were the **theories of localization**, underlying understanding of the interaction between space and the local economy. In essence, the theories of localization investigate the location of firms in order to meet demand in the conditions of the lowest costs. In the analysis some macro-regional phenomena are also brought to attention, such as heterogeneous spatial distribution of economic activities, thus paving the way for the analysis of territorial imbalances.

Classical and neoclassical economists of the 18th and 19th century had considered the economic growth process as the being conditioned by the productive efficiency, by the division of labor and by the productivity of factors of production, and according to current **theories of regional growth**, growth means capacity is to increase real production of a region and the ability to maintain it, due to cumulative economic and territorial elements [3]. From these differences of vision come out the importance that currently has the economic adaptability to a changing economic environment.

Development theories have the basic idea of presence of fundamental inequalities between center and periphery, inequalities that lead to a specific dependence of peripheral regions of central ones, which over time can diminish.

One can say that theoretical approaches were quite diverse, this diversity coming from the fact that researchers had different visions and railed at different theoretical currents.

THE PROGRESS OF REGIONAL SCIENCE

Over time, the evolution of regional science has not been marked by linearity, but there were both flourishing periods and less prolific ones.

Regional science recorded an evident progress during 1950-1970, but the situation changed in the 80s, globalization capturing increasing attention to the detriment of regionalization (Figure no. 1).

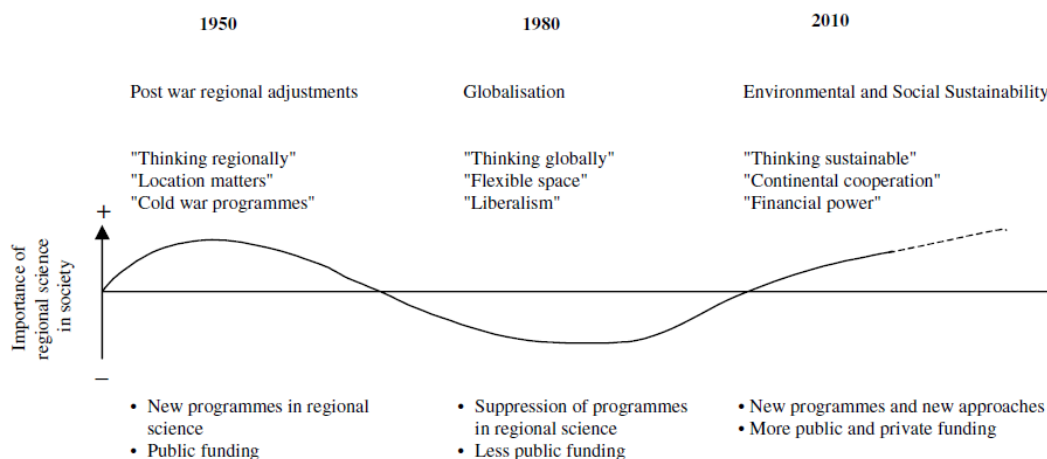


Figure no. 1. The three main periods of regional science

Source: A. Bailly, L.J. Gibson - *Regional science: Directions for the future*, Papers in Regional Science, 83, 2004, p.131

In more than half a century of existence, regional science has sought and largely succeeded to combine in a balanced way combine theoretical and applied research. Since the early years of research in the field, scientists have analyzed the spatial issues, including regional differentiation. Subsequently, other issues were approached, such as: analyzes regarding the location of new facilities for manufacturing and services, regional development initiatives to counter the economic and social disparities, as well as advanced spatial models for improving the efficiency of regional planning activities [4].

According to David Boyce [5], the evolution of regional science includes several periods. He believes that **the foundation of this science was made between 1954 and 1968**. Among those who could be considered regional science pioneers is William Alonso, who first obtained a PhD in regional science.

One of the regional science reference books, *Location and Land Use* (1964), was elaborated by William Alonso, author who has worked under the direction of Walter Isard and Ben Stevens. It should also be noted that Alonso has developed consumer and producer theory in spatial context. The theoretical approaches of Alonso also had influence on the subsequent development of some studies on housing markets.

The next phase, respectively **1969-1989**, is considered to be what Boyce called **the expansion years** and includes two periods, the boom one (1969-1976) and the expansion (diffusion) one (1977-1989) [6]. During the boom period the researchers Peter Nijkamp (Netherlands) and Alan Wilson (England) stands out, and the expansion one is marked by the deployment of World Congresses and by the reconfiguration of RSAI. Also, there are signs of disseminating knowledge and establishing of new major research centers in the field.

Boyce considers that the period **1990-2003** represents **the mature years** for regional science. Among the topics discussed which have had increased attention we mention regional convergence and competitiveness. To note is the fact that the interest for practical aspects was brought again to attention. An important aspect for the evolution of this science was the creation of the journal *Papers in Regional Science*, with a special role in improving the information flow. However, in this period a new generation of researchers appeared, which includes also the distinguished economist Paul Krugman. He helped create the New Economic Geography and was involved in the development process of regional science. It should also be noted that the objective of regional science was not rallying to the main economic current, but rather creating a new discipline in the frame of social sciences [7]. After the elaboration of Isard's work, the researchers Fujita, Krugman and Venables have contributed to the development of localization economy and of the spatial economy. They also analyzed an aspect of the field which had previously been insufficiently approached, namely, the formation and networking of cities, explained through imperfect competition in spatial framework. However, it should be noted that with the new ideas appeared, there have also emerged new directions for future research.

Among the iconic figures, present in all three periods of evolution of regional science, stands out the Dutch researcher P. Nijkamp. He believes that regional science is not a discipline in itself, because it is a set of complementary disciplinary perspectives, centered around the thematic concept of "region" [8]. Throughout the whole development of regional science, a multidisciplinary orientation emphasizes, this being useful to the research approaches in the field. Regional science perspectives are closely linked to multidisciplinary, meaning that the role of some disciplines (e.g. economy, geography, statistics, ecology, political sciences, etc.) will still be determinant in terms of contributions made. A future direction of development of regional science involves creating a convergence between the different theoretical approaches, this being only partially revealed in the new theories of regional growth [9], [10]. Although in the regional economy there are various visions on *space*, there is already a shaping convergence among the main groups of theories.

Publication of journals and books on this topic, but also organization of conferences and summer schools have escalated, contributing to the exchange of ideas and to the development of the field. In this sense, we can mention some of the most important periodicals: *The Journal of*

Regional Science, The Annals of Regional Science, European Research in Regional Science, Regional Science and Urban Economics, Papers in Regional Science.

Strengthening of an academic field could not take place only by editing journals, but it was also imperative the publication of research results in the form of monographs and books. Also, many research institutes, such as Institute for Research in Regional Science, played an important role in the publication of materials in the field.

REGIONAL ECONOMY, REGION AND REGIONAL DEVELOPMENT

Regional science covers a range of disciplines, such as regional economy, regional planning, rural economy, spatial sustainable development, urban economics, urban planning, etc. **Regional economy** has its beginnings in the 19th century (especially the theory of economic activities localization), developing within main currents of economic theory [11]. Regional economy is the division of economics that studies the optimal location of firms and the territorial economic development. Reality shows that the evolution of regional science has recorded moments of recognition and repeated declines, without regional elements to be taken into account in the analysis of economic life (until around 1950) [12].

The aim of regional economy is to investigate at spatial scales the links between regional economic systems and the relations among the components of each system.

The methods and techniques developed for understanding the functioning of national economies were the starting point for analyzing issues that the regional economy is studying.

The main reason for the existence of regional economy is related to the need to provide a theoretical and methodological scientific basis for *the regional strategies and policies*, namely for setting a coherent set of goals and ways to mitigate regional imbalances, as well as for identifying the appropriate measures and instruments for achieving the targets set [13]. The periods of stagnation experienced by the regional science were also felt by the regional economy. However, at present, the regional economy is facing a challenge, namely the possibility to influence the regional science, in order to reduce the divergence between the theoretical and practical approaches [14].

Region is the key element that lies in the center of these theoretical and practical concerns, both in regional science (in general) and in the regional economy. The term **region** has its origins in the Latin word "regionem" and it is present in most European languages, with the meaning of land, geographic area with borders and more or less accurate characteristics [15]. This notion was used by geographers in the early 20th century.

Assembly of European Regions (AER) adopted (in the *Declaration on regionalism in Europe* - 1996) a definition in which the region is considered *a territorial public entity corresponding to the level immediately below that of the state, being administered by a government that has its own political powers* [16].

Aspects of a region were not covered by a comprehensive definition, but the idea of space as a whole is common to all definitions of the region, so that the region is considered a unit comprising a number of neighboring areas.

The term *region* is used for the delimitation of areas belonging to a certain geographical area, both nationally and internationally.

The main problems [17] of regional development refer to the forces that drive the development of a region, to the influence of external decisions on these forces, to the tendency of space towards homogenization or differentiation.

The wide scope of regional development sometimes lead to overlaps with other fields in which there are similarities in terms of content: local development, economic development or territorial planning. Regional development is a relatively new concept, which means not only boosting and diversifying economic activities, stimulating private sector investments, contributing to reducing unemployment and improving living standards, but a whole environment of support and of adaptation of sustainable actions that converge to the fields of competence of the region [18].

From the above aspects we see that regional development is interconnected with a whole series of elements, which gives it a great complexity.

CONCLUSIONS

Regional science deals with developing methods and techniques for analyzing the phenomena and processes related to space, distance and location. Theoretical approaches were quite different, and they can be grouped into: theories of localization, theories of regional growth and development theories. Following the presentation of some aspects of regional science evolution, one can see that this trend was not marked by linearity, but there were both flourishing periods (50s and 70s and the post-2000 years) and less prolific periods (80s - with the occurrence of globalization). However, over time remarkable progresses have been made, and among those who have made notable contributions we can mention W. Alonso, W. Isard, P. Nijkamp and A. Wilson. In the development of regional science, RSAI had an important role. The exchange of ideas was facilitated by organizing scientific events and publishing of books and journals on this topic.

In the frame of regional science, along side other disciplines, the regional economy is of particular importance and studies the optimal location of firms and the territorial economic development. The region is the essential element that lies in the center of these theoretical and practical concerns, and the factors that determine the development of a region is one of the problems of regional development. There is no unique way to define a region, but in all definitions of region the idea of space as a whole is found, so that the region is considered to be a unit consisting of a number of neighboring areas.

Experts believe that regional science has promising prospects for development by approaching current spatial problems, especially in the context of regionalization process in the EU and the multidisciplinary of this science is an important asset. Another aspect to be noted is that policies are often based on theories, situation that applies also in the case of regional development.

ENDNOTES

- [1] D.L. Constantin – *Economie regională*, Editura Oscar Print, București, 1998, p.9
- [2] D.L. Constantin – *Op. cit.*, p.10
- [3] R. Capello – *Regional economics in its 1950s: recent theoretical directions and future changes*, The Annals of Regional Science, 42, 2008, p.755
- [4] A. Bailly, L.J. Gibson – *Regional science: Directions for the future*, Papers in Regional Science, 83, 2004, p.132
- [5] D. Boyce - *A short history of the field of regional science*, Papers in Regional Science, 83, 2004
- [6] A.M. Isserman - *Intellectual leaders of regional science: A half-century citation study*, Papers in Regional Science, 83, 2004, p.99
- [7] W. Isard - *History of regional science and the Regional Science Association International: The beginnings and early history*, Springer, Berlin Heidelberg NewYork, 2003 apud B.S. Waldorf – *Path-breaking books in regional science*, Papers in Regional Science, 83, 2004, p.85
- [8] P. Nijkamp - *Regional science: Multi-disciplinarity 'avant la lettre'*, Papers in Regional Science, vol.83, number 3, July 2004, p.517
- [9] R. Capello – *Op. cit.*, p.762
- [10] Among the new theories that combines elements of the main groups of regional development theories are: the theories of endogenous local development (with elements of theories of development and of localization) and the new economic geography (with elements of theories of location and of growth)
- [11] According to D. Antonescu – *Dezvoltarea regională în România – concept, mecanisme, instituții*, Editura Oscar Print, București, 2003, p.12
- [12] M. Blaug - *Teoria economică în retrospectivă*, Literatura economică internațională, Editura Didactică și Pedagogică, București, 1992 apud D. Antonescu – *Op. cit.*, p.12
- [13] D.L. Constantin – *Op. cit.*, 1998, p.12
- [14] According to R. Capello – *Op. cit.*, p.764
- [15] D. Platon – *Regiunile din unghiul politicilor de dezvoltare ale UE in C. Pârlog, D.L. Constantin (coord.) - Dezvoltare regională și integrare europeană, Lucrările celui de-al Doilea Simpozion Național al*

Asociației Române de Științe Regionale, 4-5 aprilie 2002, București, Editura Oscar Print, București, 2003, p.43

[16] Assembly of European Regions - *Declaration on regionalism in Europe*, 1996, art. 1

[17] According to D. Antonescu – *Op. cit.*, p.12

[18] V. Pușcașu – *Dezvoltarea regională*, Editura Economică, București, 2000, p.14

BIBLIOGRAPHY

1. Antonescu Daniela – *Dezvoltarea regională în România – concept, mecanisme, instituții*, Editura Oscar Print, București, 2003
2. Assembly of European Regions - *Declaration on regionalism in Europe*, 1996, art. 1
3. Bailly Antoine, Gibson Lay James – *Regional science: Directions for the future*, Papers in Regional Science, 83, 2004, pp.127-138
4. Behrens Kristian, Thisse Jacques-François – *Regional economics: a new economic geography perspective*, Regional Science and Urban Economics, 37, 2007, pp.457-465
5. Blaug Mark - *Teoria economică în retrospectivă*, Literatura economică internațională, Editura Didactică și Pedagogică, București, 1992
6. Boyce David - *A short history of the field of regional science*, Papers in Regional Science, 83, 2004, pp.31-57
7. Capello Roberta – *Regional economics in its 1950s: recent theoretical directions and future changes*, The Annals of Regional Science, 42, 2008, pp.747-767
8. Constantin Daniela Luminița – *Economie regională*, Editura Oscar Print, București, 1998
9. Isard Walter - *History of regional science and the Regional Science Association International: The beginnings and early history*. Springer, Berlin Heidelberg NewYork, 2003
10. Isserman Andrew M. - *Intellectual leaders of regional science: A half-century citation study*, Papers in Regional Science, 83, 2004, pp.91-126
11. Năstase Carmen, Popescu Mihai, *The model of cluster in implementing change and creating a favourable environment for enterprises*, Entrepreneurial Strategies and Policies for Economic Growth, 2012, pp. 179-188
12. Nijkamp Peter - *Regional science: Multi-disciplinarity 'avant la lettre'*, Papers in Regional Science, vol.83, number 3, July 2004, pp.516-518
13. Platon Dan – *Regiunile din unghiul politicilor de dezvoltare ale UE*, in Pârlog Cornelia, Constantin Daniela Luminița (coord.) - *Dezvoltare regională și integrare europeană, Lucrările celui de-al Doilea Simpozion Național al Asociației Române de Științe Regionale, 4-5 aprilie 2002, București*, Editura Oscar Print, București, 2003, pp.43-49
14. Pușcașu Violeta – *Dezvoltarea regională*, Editura Economică, București, 2000
15. Richardson Harry W. – *Regional and urban economics*, Pitman Publishing Ltd., London, 1973
16. Scutariu Adrian Liviu - *Aspects regarding the interconnection of regional science with regional development*, The USV Annals of Economics and Public Administration, Volume 12, Issue 1(15), 2012, pp.84-90
17. Scutariu Adrian Liviu - *Cercetarea fenomenului turistic din perspectivă regională*, Teză de doctorat, Universitatea “Alexandru Ioan Cuza” din Iași, 2013
18. Stanciu Pavel - *Studiul pensiunilor turistice din județul Suceava*, Revista de turism-studii și cercetări în turism, Nr. 4, 2007, pp.48-53
19. Waldorf Brigitte S. - *Path-breaking books in regional science*, Papers in Regional Science, 83, 2004, pp.59-89
20. Zaharia Petronela - *Aspects related to the autonomy manifestation in local public administration management*, The USV Annals of Economics and Public Administration, Volume 13, Issue 1(17), 2013, pp. 273-279