

PhD, Assoc. Prof. Lesya Gazuda

Department of Enterprise Economics, State Higher Education Establishment «Uzhgorod National University» (Uzhgorod, Ukraine) lesyagazuda@gmail.com

### CONVERGENCE IN THE SYSTEM OF THEORIES OF TERRITORIAL DEVELOPMENT

#### KONWERGENCJE W SYSTEMIE TEORII ROZWOJU REGIONALNEGO

### КОНВЕРГЕНЦИЯ В СИСТЕМЕ ТЕОРИЙ ТЕРРИТОРИАЛЬНОГО РАЗВИТИЯ

#### Annotation

The sense and modern scientific approaches to the notion of "convergence" are substantiated in the paper; its role is described in the process of development of territories, in particular of bordering regions and neighboring states as a whole. It is underlined, that that a brand new construction of economic equilibrium and rapprochement of certain economic systems, economic and social policies of different states is formed on the base of convergent relations. It is proved, that convergent processes have to take place both inside of the state and at bordering territories of neighboring states, which form crossborder region and are decisive for processes of integration in general.

*Keywords:* Convergence theories, integration, convergent processes, neighboring states, bordering territories.

#### Streszczenie

W artykule przedstawiono i uzasadniono istotę oraz obecne poglądy ekonomistów badających teorie konwergencji. Uzasadniono rolę konwergencji w zapewnieniu wzrostu gospodarczego w ujęciu regionalnym, w szczególności w regionach przygranicznych i w krajach ościennych. Podkreśla się, że na podstawie stosunków konwergencji tworzy się jakościowo nowa konstrukcja równowagi gospodarczej, następuje wzrost współpracy między systemami gospodarczymi różnych krajów oraz zbliżają się względem siebie polityki gospodarcze i społeczne w różnych krajach. Zostało udowodnione, że procesy konwergencji powinny być koordynowane zarówno wewnątrz państwa jak i w regionach przygranicznych sąsiadujących państw, które tworzą region transgraniczny i stanowią determinanty analizowanych procesów integracyjnych.

*Słowa kluczowe:* teorie konwergencji, integracja, procesy konwergencji, ościenne kraje, przygraniczne tereny.

#### Аннотация

В статье обоснована сущность и современные научные взгляды исследователей теории конвергенции, определена ее роль в обеспечении процесса экономического

## PhD L. Gazuda

JEL B 300

роста территорий, в частности, приграничных регионов и сопредельных стран в целом. Отмечено, что на основе отношений конвергенции формируется качественно новая конструкция экономического равновесия и сближения различных экономических систем, экономической и социальной политики различных стран. Доказано, что конвергентные процессы следует обеспечивать как внутри государства, так и на приграничных территориях соседних стран, которые формируют трансграничный регион и являются определяющими интеграционных процессов в целом.

*Ключевые слова:* теории конвергенции, интеграция, конвергентные процессы, сопредельные страны, приграничные территории

Introduction. The notion of "convergence" has received scientific recognition at 1960-1970 as a part of Convergence theory. It serves for indicating integration processes in the economy, in particular the convergence trends of scientific and technical, social and economic progress of the states and regions. Theories of polarized (cumulative) development are opposite to convergence ones and ground on discrepancy of development indexes for different territories thus characterizing divergence from the position of increasing asymmetry. G.Myrdal, J.Mill. M.Posner. F.Perroux. J.Boudeville, H. Lausen, P.Pottier, J.Thunen, W. Christaller, J. Friedmann represent cumulative theories and theories of divergent territorial development.

Results of study. Mill's reciprocal demand theory includes the notion of "international value", mentioned in his 'Principles of Political Economy', where he proves that export priorities of the states in certain goods exist in case these goods are demanded at foreign markets or at certain condition when the country has no relative advantage for the good. However, J.Mill argued [L. Antonyuk 2004, s. 9]: in case there is a demand for the good produced at internal market, it can be exported at international price. In this respect, the scholar indicated capital to be one of the most important productive factors, as it has valuable impact on expansion of production, thus forming its competitive advantages mostly basing on savings and investments involved. In such way according to this theory, the additional capital is gained, because competitive advantages enable the country to export goods for external markets at

high prices. Moreover, J.Mill suggested the Laws of international competition grounding on two important provisions. Firstly, he underlines that natural aspiration for international productive cooperation enables the equilibrium of benefits, gained according to mentioned specialization. By the second his important statement he proves that conditions of full or partial specialization are derived from inequality of profits gained in the process of production, i.e. divergent processes of territorial development are caused.

Technological gap theory, developed by English scholar M.Posner, is also rather popular [M. Posner 1961, s. 341]. According to his concept, the trade between certain countries is caused by technological changes arising in one of these countries. The country gains relative advantage as the new technology allows producing goods with fewer costs. As the result of such technical innovations, a technological gap arises between the countries having such innovation and those not having them. Posner argues after the innovation has been copied, there are no reasons for external competition from the side of certain good anymore. He uses the term 'innovation flow', which arises afterwards in different countries and productions, to explain the constantly existing competition [Shnypko O. 2003, s. 27].

According to G. Myrdal's Cumulative causation theory [G. Myrdal 1957, s. 34], the action of market forces deepens territorial inequalities of economic growth, which is caused by attractiveness of economically developed territories rather than economically weaker ones. The attractiveness factors include cut of

## «Uzhgorod National University» (Uzhgorod, Ukraine)

transaction and production costs, provided by developed territories. Therefore, the asymmetry levels in development of territories will expand due to increase of production in highdeveloped territories and decrease of it in underdeveloped ones [I. Vahovych, I. Ropotan 2014, s. 7]. The institutional theory by G.Myrdal on combating backwardness by means of structural transformations in the third world countries was especially popular in developing economies. He studied sectorial models of development of economy, and has proved certain contradictions and disproportions. Thus, the use of such qualities of territory as number and structure of population, demographic situation, employment level, natural and climate conditions, square and geopolitical allocation makes it possible to even the asymmetries of development due to mutual substitution of productive factors

J.Boudeville, F.Perroux, H. Lausen, P.Pottier substantiated the theory of 'growth poles' and 'development centers' drawing special attention to dominating sectors of the economy [B.Zablotsky 2007, s. 89-90]. For example, F.Perroux has determined the influence of production branches, in which the main capital is concentrated, and products, which consumed by other productions, on extended development of other branches. He calls dynamically developing branches as 'leading' ones, while the place of their location he names as 'development poles'. At that he underlines the role of the 'space pole' existing in the center of any region, i.e. the towns where powerful potential of development is formed, namely capital and workforce concentrating in the new branch which has important influence on the other branches and on the balanced development of the territory as a whole. Scholars define "leading" industries which are dominating in production of goods and introducing innovations and concentrating productive assets around them (using them effectively), thus forming 'development poles' at certain territory. This strengthens the asymmetry of territorial development.

J.Boudeville while developing the hierarchical classification of 'development poles'

through central places or industrial centers, industrial cities of medium size and diversified industry, and big city agglomerates with developed industrial and social infrastructure subsubstantiates the notion of 'integration poles'. These are, territorially formed growth zones having spatial and territorial qualities, characterized bv mutual influence and interdependence in the process of economic development, functioning as united economic mechanism [B.Zablotsky 2007, s. 90]. This forms polar centers of development and generates divergent processes at the territories in such manner. The transitivity of the territory according P.Pottier also makes it possible to obtain competitive advantages as to the other territories, for the aim of economic growth.

The Theory of allocation of agriculture by Thunen plays an important role in providing balanced development of rural areas from the point of convergence. Thunen has substantiated his theory in the study titled "The Isolated State in its relation to Agriculture and National economy, Thunen concentrates on three main factors and their interrelations in the framework of mentioned theory: distance from household to city (sales area), prices of different kinds of agricultural goods, land rentals [S. Doroguntsov 2007, s. 37]. At that, he underlines that the spatial differentiation of the land use in agriculture within the 'isolated state' is the result of the influence of three factors:

- the list and amount of agricultural production demanded by the city;

- technologies of agricultural production and transportation of produced goods;

- aspiration of each farmer to maximize rentals by producing such kinds of goods, for which the location of his lands relating to sales area will be the most beneficial.

Having studied interaction and influence of the named factors, Thunen defines zones of specialization of production ('classic Thunen's circles'), which mean that every agricultural culture has to be located at certain distance from the city (i.e the sales market), where it could give the best benefit [S. Doroguntsov 2007, s. 37]; [B.Zablotsky 2007, s. 82]. Thunen considered allocation factor to be the most important one that influences costs and profits, especially for agriculture, and influences the specialization of enterprises.

At the same time, W. Christaller in his "Central places in Southern Germany" developed a theory revealing the peculiarities of location of human settlements or "central places" as he calls them. He explains central places to be economic centers providing production to their surroundings. Such central places are represented by either rural locality or dispersed urban localities. The theory explains why certain goods and services can be produced in any location, while others - in medium sized villages, and the third ones - only in large places. The Central places theory helps to outline the general vision whether settlement at certain territory is appropriate or not. The most effective structures of market zones can be developed on its base [S. Doroguntsov 2007, s. 41]. In the result of such specialization, significant gaps will arise in development of territories and the divergence processes will strengthen.

Later the Core-Periphery theory by J. [J. Friedmann 1966] became Friedmann popular stating the minimal interference of governments into the economies of regions. At this, the general objective of regional policy is not to struggle regional disproportions, but to increase the effectiveness of regional economic complex, mostly under the influence of innovative processes taking place in the center (in the core-region), introducing innovations supportive for the development of periphery [Z.Maniv 2007, s. 113-114]. In such way, the state interfered actively in the processes of dissolution of unprofitable (peripheral) territories, exclusively supporting the "center". Thus, the asymmetry between the center and the periphery becomes more apparent and causes divergent processes of territorial development.

Therefore, we see that representatives of theories of divergence hold their point concerning the distinguishing of development centers, which will be attracting productive assets and will be forming growth poles at certain territories. However, these conditions will deepen the asymmetries of development levels and cause disintegrative processes of territorial systems. From the other side, strong divergence in development levels poses a threat to economic security of the state at a whole, it is a great challenge for its integrity and sovereignty, and this requires the search of ways to provide convergence and integration of territorial systems.

The detailed study of "convergence" notion has to be conducted with objective to develop a modern model for economic development, based on convergence processes. It should be mentioned, that scholars are studing the sense of convergence from different positions. They use different frameworks of categories and conthis. namely 'differentiation', cepts for 'disproportion', 'polarization' are used as qualities of divergence, and 'aligning', 'rapprochement' – as qualities of convergence. Providing for close in sense notions are marked with different synonymic terms, the defining of aspects of their use, which reflect the territorial development disparities in the state, are still under discussion.

The Big explanatory dictionary gives the following terms indicating divergence processes: [V.Busel 2003, s. 26, 263, 222, 224, 751]:

- Asymmetry (Greek, *assymefria*) – means the lack or breach of symmetry, absence of size;

- Disproportion (Latin, *dis – negation, proportion – proportion*) – incompliance, discrepancy of parts, and lack of proportion);

- Misbalance – lack of needed correct correlation of something;

- Differentiation – division, segmentation of something into different separate elements;

- Polarization – (*French, polarization, Eng. polarization, Greek polos – axis*) – sharp breakdown into two opposite, polar parts).

M. Dolishniy argues "disproportion' is the most suitable to explain 'territorial inequity of social and economic development of regions", as the state of economy, the structure of which is misshaped under the influence different factors [M. Dolishniy 2006, s. 176]. At this, he defines the following categories:

- Regional differentiation – division or stratification of certain regions or their groups into distinct quality groups as to their economic

# «Uzhgorod National University» (Uzhgorod, Ukraine)

indices;

- Regional asymmetry – lack of symmetry in development levels of regions, that shows as their incommensurability (in particular, asymmetry shows as displacement in relation to the center of the symmetry axis);

- Regional disproportions – correlation of development levels of regions, indicating qualitative differences;

-Regional inequalities – unconformity in development of regions to certain level;

- Regional polarization – difference in development levels of regions related to peculiarities of functioning of regions themselves, as well as with the extent of realization of regional economy principles. It that can be estimated in a quantitative way.

G.Perepelytsya also supports the theories of divergence and states that "Different distance to the center is the quality of asymmetry". Symmetry is a position of subjects, located at the same distance, but from different sides relating to certain surface or line. Therefore, equal distance and equal position are the qualities of symmetry [G. Perepelytsya 2002]. According to A.Polynyov, a crucial retard of certain regions as to the basic social and economic characteristics, that shows the interregional differentiation, decreases the general sustainability of regions to some extent [O. Polynyov 2003, s. 17]. Asymmetry from A.Klimov's point of view is in fact an existing element of all public, in particular social and economic processes; the more scaled and intensive they are, the higher asymmetry of development under equal other conditions will be. The 'asymmetry' notion is usually used for defining formative spatial dissimilarities, elements of differences between territories [A. Klimov, s. 93]. I.Storonyanska considers asymmetry as a measure of interregional differences in levels of economic development (economic activity) and life level (quality) [I. Storonyanska 2006, s. 101-114].

In the opinion of N. Bozhydarnik, asymmetry is a process of differentiation of local and global territorial entities, which takes place under the influence of increasing inequality in allocation of assets, competition of local transnational corporations, realization of complementary split-level policy of eliminating social and economic development disproportions and providing its sustainability [N. Bozhydarnik 2005, s. 189].

V. Masakov describes asymmetry as deviation (or difference) in qualities and parameters of given object (objects) from certain "standard", "norm", "normal" or "typical" state of qualities and parameters for system of similar kind. Norms and standards in such case serve as the scale for estimating [V. Masakov 1998, s. 4].

Concerning the territorial development B.Lavrovskyj defines three types of developasymmetric, balanced or neutral. ment: Asymmetric (misbalanced) type - is a type of regional development at certain period, where region having relative advantage in certain index at the beginning of the period, increases it in future, while regions having relative disadvantage deprave it. Balanced (symmetric) type is a type of regional development where gap of regional indexes decreases. Neutral type is a type of development where correlation of regional indexes stays stable during certain period [B. Lavrovsky 2003, s. 525]. As to the notion of "convergence", it means rapprochement, assimilation and is used in various sciences to explain the processes of rapprochement of different territorial systems, finding a compromise between them [I. Vahovych, I. Ropotan 2014, s. 13]. According to economic dictionary, convergence is a rapprochement of different economic systems, economic and social policies of different states [V.Busel 2003, s. 563]. A.Saharov considers convergence as a rapprochement of different economic systems, elimination of differences between them, determined by the existence of same objective laws of development [A.Saharov 1988, s. 124-134]. O. Rohach says that convergence is a decrease of gap in indexes of economic development among national states [O. Rogach 2003].

Study by N.Mikula is remarkable from the point of convergence of bordering regions. She argues convergence processes need to be provided both inside the country and at bordering regions of neighboring states, that form crossbordering region; this fact is rather important under integration processes [N. Mikula 2009]. A.Galchynskyj considers convergence as well as competition, to be a contest, but is does not take place at a tag of war. Mutual interest is a key factor not only for preserving, but also for increasing the value of the opposite subject of economic interaction, its self-actualization as an alter ego. Thus, if competition is success oriented, then convergence is oriented towards mutual rapprochement. The "winloss" economic transforms into a "win-win" one system [A.Galchynskyj 2014, s.8]. At the same time scholar underlines that convergence has the advantage - it allows to stay what you are, thus supporting the realization of everyone's energetic potential, not only potential of the strongest. Each person is a unique personality, everyone obtains equal natural rights in this world, and everyone has to have certain conditions for self-actualization. Competition is a domain of the strong, while convergence is achievement of everyone. Brand new construction of economic equilibrium is formed on the base of convergence relations. This means the systemically complex non-linear equilibrium of dispersive type, which is characterized by certain qualities [A.Galchynskyj 2014, s. 10]: firstly, by the priority of horizontal (direct and reverse) linkages; secondly, by dominating principle of self-organization of each segment in economic system, which develops on its own base and under autonomous laws; thirdly, by developing relations that cannot be explained by logics of determinism and are post material,

and individualized. It is not the interdependence of productive factors of economy that dominates in certain model of equilibrium, but it is the forming the balance of social, mental and economic elements of social progress, balance between the liberty and creativity of personality, which is always associated with the community. As a result, a brand new threeelement linkage is formed: convergence relations – confidence, formed on its base – social assets.

Conclusions. Generalization of studied approaches to defining the notion of convergence in the system of economic development of territories gives grounds to formulate our own vivision of "convergence". Therefore, we see convergence as a process of reaching equilibrium, that enables gaining symmetry and rapprochement in development levels of territories both in spatial and in time aspects. This leads to integration of single economic space of the state and its regions and prospectively results in formation of single economic space of bordering regions of neighboring states. Taking into consideration the main peculiarities of convergent processes of territorial development, a new model of convergence has to be formed. It should have qualities of synthesis of elements from different territorial systems, when they are approaching, interacting, entering into partnership, but not assimilating each other (as it happens under competition). They are complementing each other by preserving their qualities, specialization and thus providing the equilibrium of the system as a whole.

## **Bibliography:**

1. Antonyuk L. L. International competitiveness of the countries: theory and mechanisms of realization : [Monograph] / L. L. Antonyuk. – K. : KNEU, 2004. – 275 p.

2. Posner M. V. International Trade and Technical Chahge // Oxford Economic Papers. – 1961. – 13. – N 3. – Oct. – P. 341.

3. Shnypko O. S. National competitiveness: sense, problems and mechanisms of realization / Shnupko O. S. – K. : Nauk.dumka, 2003. - 334 p.

4. Myrdal G. Economic theory and under-developed regions. - N. Y. : Harper & Row, 1957, p. 34.

5. Vahovych I. M., Ropotan I. V. Regional convergence in financing sustainable development of Ukraine: Monograph / I. M.Vahovych, I. V.Ropotan. – Lutsk : Volynpoligraph, 2014. – 219 p.

6. Zablotsky B. F. Regional economy: Workbook / B. F.Zablotsky – Lviv : «Novy Svit-2000», 2007. – 548 p.

7. Allocation of productive forces and regional economy : Textbook / S. I. Doroguntsov, T.A.Zayats, Y. I.Pityurenko and others; Editor. Doctor of Sciences in Economics, Prof., Corr.member of NAS Ukraine

# «Uzhgorod National University» (Uzhgorod, Ukraine)

S. I. Doroguntsov. – 2<sup>nd</sup> edition, without changes. – K. : KNEU, 2007. – 992 p.

8. Friedmann J. Regional development policy. - Cambridge : MIT Press, 1966. - 335 p.

9. Maniv Z. O. Regional economy: Workbook / Z. O. Maniv, I. M. Lutsky, S. P. Maniv. – Lviv : «Magnoliya 2006», 2007. – 562 p.

10. Big explanatory dictionary of modern Ukrainian / Formed and edited by V. T. Busel - K. : Irpin: VTF «Perun», 2003. - 1440 p.

11. Dolishniy M. I. «Regional policy on the cusp of XX –XXI centuries. New priorities». «Research Book» Project, K., Naukova Dumka, 2006. – 511 p.

12. Perepelytsya G. M. How to be different and to live in harmony. Theoretical aspects of interstate relations / G. M. Perepelytsya // «Policy and Time».  $- N_{\odot} 4. - 2002$ .

13. Polynyov A.O. Interregional economic differentiation: methods of analysis and state regulation /A. O. Polynyov. – M. : Editorial URSS, 2003. – 208 p.

14. Klimov A. Asymmetry of spatial development of the state and approaches to rehabilitation of underdeveloped territories /A. Klimov// Russian Economic Journal. –  $N \ge 8. - p. 93-97$ .

15. Storonyanska I. Assessment of asymmetry of social and economic development of the regions in Ukraine and grounding priorities of state regional policy/ I. Storonyanska // Regional Economy. -2006.  $-N_{\odot}$  4. -p.101-114.

16. Bozhydarnik N.V. Regional asymmetry in the European Union and mechanisms of regulating it [Text]: dissertation for obtaining degree of Candidate of Sciences in Economics: 08.05.01 / Bozhydarnik Nataliya Volodymyrivna; Lutsk State Technical University. – Lutsk, 2005. – p. 189.

17. Masakov V. M. Legal and economic aspects of interaction of federal Center and subjects of Russian Federation / V. M. Masakov // In collection: «Regional social and economic asymmetry and mechanists of aligning it». – M. : «Insar». – 1998. – p. 4.

18. Lavrovsky B. L. Territorial differentiation and approaches to decreasing it in Russian Federation / B. L. Lavrovsky // Economic Journal of HSE. –  $N_{2}$  4. – 2003. – p. 525.

19. Saharov A. D. Inevitability of changeover. No other way. / A.Saharov // M. : Progress, 1988. – P.124-134.

20. International Finance : Textbook / Ed. O. I. Rogach. - K. : Lubidj, 2003. - 784 p.

21. Mikula N. Problems of developing cross-border cooperation of Ukaine under enlargement of EU : [Monograph] / N. Mikula. – Lviv : Liga Pres, 2009. – 436 p.

22. Galchynskyj A. S. Convergent market – methodology of perspective / A.S. Galchynskyj // The Economy of Ukraine. –  $2014. - N_{2} 1$  (626). – p. 8.

## PhD L. Gazuda